



INCLUSIVE TEACHING PRACTICES IN HIGHER EDUCATION: STAFF AND STUDENT PERCEPTIONS AT A PAKISTANI UNIVERSITY

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KEYWORDS	ABSTRACT
accessibility; inclusive teaching; Universal Design for Learning; disability; higher education; Pakistan	It is assumed that universities in Pakistan are expected to make teaching accessible to students with disabilities, but it is not known to what extent teaching meets the expectation. This study was conducted to explore the perceptions of Heads of department, teachers and students of one university in the town of Rahim Yar Khan, Pakistan regarding teaching practices that promote accessibility and inclusion. The design of this study was an explanatory sequential mixed method. A questionnaire was completed by 25 Heads of department, 125 teachers and 375 students, and interviews were held with Heads of department. Five practices were rated: Universal Design for Learning, accommodation for differing learning styles, inclusive language, inclusive methods, choice in the way that learning is demonstrated, and response to challenges posed by a disability. The average score was 3.35 out of 5. Approximately half of the responses were positive (53%), a quarter were negative and a fifth were undecided. The five practices were rated at a very similar level and there were no significant differences between the responses of Heads of department/teachers and students. Inclusive teaching was felt to be present but was not well developed. The “undecided” responses suggest that there is uncertainty, but the study can’t tell whether this is due to limited visibility, mixed experience, or something else. The results inform staff development and better communication of support.
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Introduction

This paper explores the reality of daily life teaching in one Pakistani University in relation to the country's disability commitments. In July 2011, Pakistan ratified the United Nations Convention on the Rights of Persons with Disabilities (Committee on the Rights of Persons with Disabilities, 2020).

Article 24 of the Convention recognises the right of persons with disabilities to education. It requests States Parties to guarantee access to tertiary education on an equal basis with other people, and to make reasonable accommodations as necessary (United Nations, 2006). HEC Pakistan has developed a National Policy for Disability Students in Universities in 2021. The policy mandates the establishment of an Accessibility Committee in each institution, Appointment of Disability Coordinators, reasonable accommodation in examinations and conducting teacher training programmes for accommodating students with disabilities. (Higher Education Commission, 2021) It also requires that the university websites and learning management systems achieve level AA of the Web Content Accessibility Guidelines.

A policy, however, does not tell us what happens in a lecture room. Teaching is a major interface between students and their University and choices of materials, assessment and communication can either expand or limit access to learning. The research on inclusive education in higher education indicates that it was a concept that was born in school and subsequently transferred to the university, and that its implementation at the university level is not easy (Moriña, 2017). In Spain, a study with students with disabilities and support staff (Lopez-Gavira et al., 2021) identified teaching staff as the focus of inclusion both in terms of attitudes and in terms of the adaptations they make to methods, assessment, and resources.

Thus far in Pakistan, evidence is largely directed toward barriers. Review of national literature revealed that the attitudes of peers and teachers were negative, teaching methods were not appropriate for students with disabilities, staff are not trained in disability and there is a lack of assistive devices (Hussain et al., 2020; Nasim et al., 2023). The study conducted at a university in Bahawalpur among physically impaired students also found that there is a lack of suitable study material, lack of physical access, and lack of knowledge of stakeholders about the rights of people with impairments (Mohsin et al., 2024; Saleem et al., 2024). These are studies that tell you what you don't have. They provide less information on the actual implementation of inclusive teaching practices and a university community's perceptions of these practices. This paper fills that void. The aim of this is to identify perception of Heads of department, University teachers and students regarding the use of teaching practices that support accessibility and inclusion in one university in Rahim Yar Khan. The study was guided by two research questions:

Research Questions

1. To what extent do Heads of department, teachers and students perceive that teaching practices at the university support accessibility and inclusion?
2. Are there differences in these perceptions between Heads of department, teachers and students?

Study Contribution

The study has two contributions. First, it includes evidence from Rahim Yar Khan, a district that was not included in the literature examined, at a time when universities are supposed to implement the 2021 national policy. Second, it found a consistent pattern of response: on each item approximately half the responses indicated that inclusive practice was in place and between 19% and 23% were undecided. The not decided answers may suggest that inclusive practice is not always evident to

pupils and staff, but the survey cannot conclude if this is because of a mixed experience, limited knowledge or a reluctance to criticise. The paper is organised as follows. The following section discusses the literature on inclusive teaching in higher education and the rationale of the questionnaire. The methodology is then explained, results are reported, and they are discussed with respect to previous studies. The paper closes with implications for practice and policy, the limitations of the study and a short conclusion.

Literature and context

In this section, we first clarify the notion of 'accessible and inclusive teaching', introduce the key framework for the questionnaire, which is Universal Design for Learning (UDL), and review previous research related to the role of teaching staff.

Inclusion as a Process in Higher Education

Ainscow (2007) states that one of the greatest challenges for education systems is inclusion and evidence of what is happening in practice can help promote change. This is a helpful perspective for the purposes of the current study, since we seek to create just such local evidence for one institution. At university level, according to Moriña (2017), the principles of inclusive education first were developed for younger learners. The increasing number of students with disabilities in the later part of their schooling puts pressure on universities to be inclusive in their policies, strategies and processes. This paper focuses on the accessibility of teaching, materials and assessment for students. Inclusion is wider. It is about students' full engagement in learning and sense of belonging.

Universal Design for Learning

According to CAST (2024), UDL is a teaching and learning approach that benefits everyone. The framework is laid out in three themes in its current set of guidelines: engagement, representation, and action and expression. In this paper the term frame implies a planning process that begins with teaching for a broad student population rather than merely with a process of adjusting later for specific students. This translates to providing multiple opportunities for students to gain interest, to get information, and to demonstrate learning.

This seems to be a valued approach to students with disabilities. Black et al. (2015) asked the University students about the teaching method that helped them in learning. Students with and without disabilities had some differences in their preferences and both groups found the principles of Universal Design for Learning and instruction useful. An interview study conducted in Spain by Lopez-Gavira et al. (2021) found a similar conclusion, as usage of UDL was viewed as benefitting all learners, not just those with a disability. This study is based on the five practices. These include Universal Design for Learning in general, ways of accommodating students' learning styles, inclusive language and teaching practices, ways students can demonstrate learning, and teacher response to student disability challenges. The fourth practice is the closest to the action and expression principle.

The second item relates to support for diversity of learning styles. We have retained the language from the questionnaire, but we do state that the concept of tailoring teaching to a particular style of learning is not adequately supported by evidence. A review of this research revealed that Pashler et al (2008) could not identify a single study that satisfied the criteria to evaluate the notion, and the few studies that did were inconsistent with the notion. In this paper, therefore, we interpret the item as referring to the variety of teaching to accommodate different needs and preferences, not to matching teaching to a set style, which is more aligned with the principles of UDL.

The contribution of Teaching Staff

Earlier research shows that the attitudes and preparation of teaching staff make a large difference to the experience of students with disabilities. Martins et al. (2018) conducted an interview with academic and non-academic staff in a Portuguese university. They were generally positive in their attitudes towards the inclusion of students with disabilities, but disability was still sometimes interpreted as a deficit. Positive attitudes on their own, however, are not enough to ensure inclusive practice. Awareness of rights is a related concern. Girli et al. (2016) conducted a study on 1,766 students with no disability in a university in Turkey and found that majority of the students thought that people with disabilities were discriminated against more than the rest of the population in Turkey, but majority was not aware of the disability legislation. The study by Mohsin et al. (2024) also reveals a lack of awareness of rights of students with impairments among stakeholders in Bahawalpur.

Preparation is a second issue. Fossey et al. (2017) reported that teaching staff in an Australian university had positive attitudes towards students with mental health problems and acquired brain injury. However, many had not been trained in this aspect and felt under-supported in making changes, and the writers echo previous calls for improved staff training. Moriña and Carballo (2018) developed and tested a training program about inclusive education and disability for 20 university teachers in Spain. The teachers needed strategies for curriculum and teaching modifications, information on disability laws and resources, and how to create accessible materials. There are similar needs indicated in the Pakistani literature. Hussain et al. (2020) suggest training teachers and faculty members in special and inclusive education and Mohsin et al. (2024) suggest making it compulsory for teachers and staff to receive training on disability rights.

The student-teacher connection is important, too. In the interviews conducted with 119 members of the teaching staff from ten Spanish universities, they explain how they considered the students' feelings and their relationship with them, which helped the students maintain their motivation and stay in the university (Moriña, 2019). This finding is important to the fifth practice in our questionnaire, where teachers are asked what they do when students reveal difficulties related to their disability.

Disclosure, invisible disability and technology

Numerous supports provided by a university require first disclosure of a disability. This study by Grimes et al. (2019) was conducted among undergraduates of a regional Australian university, where a subset of students with disabilities and/or learning challenges emerged that had not disclosed to the university. For those students, disclosure was a choice that they revisited countless times and struggled with. Grimes and colleagues recommend that universities become more knowledgeable about the individuals and adjust their regulations, procedures, and curriculum to meet their needs. Students with disabilities that are not obvious may require other types of accommodation than students with physical handicaps. Mullins and Preyde (2013) conducted interviews with a group of students who have dyslexia, ADD/HD or mental health issues at a Canadian university. They report that physical barriers have been largely solved and the various adaptations required for students with invisible disabilities had been given less attention by researchers.

There's an additional level with technology. Seale et al. (2015) reported that disabled students at a UK university possessed social and cultural resources for technology use, but some proved to be inappropriate for university settings. Students also frequently failed to utilise all the support that was offered. The authors appeal to universities to reconsider their approach of organising technology-related support.

The National Policy Context

Higher Education Commission (2021) policy specifies duties on two levels for 2021. Each university will establish a permanent Accessibility Committee, which will include faculty and one student. The Vice Chancellor or Rector appoints two of the members of this committee, who are not students, to be Disability Coordinators, the details of whose position will be available in the prospectus, website and students' handbooks. Complaints are heard by coordinators first, and then by the committee. Entrance tests accommodations include extra time, readers or scribes, oral exams, and a private testing area.

The policy is to ensure that staff member(s) inform students at the beginning of each course that they are required to contact the teacher or the Disability Coordinators early, so that arrangements can be made. It also requests faculty to not make any assumptions that if one student experiences a difficulty, then the next student experiencing the same type of disability will as well, and to deal with this sensitively and confidentially. Although these duties were not measured directly in our questionnaire, there is some indirect evidence on teaching practice in the period to which the policy applies.

All these studies point towards the need for a teaching framework which considers the diversity from the beginning, of staff who are willing and prepared, and of communication that does not leave students to seek support on their own. The bulk of this evidence is from Europe, North America and Australia. The studies mentioned above on Pakistan and South Africa indicate that students with disabilities who can make it to the University in South Africa still experience persistent problems (Mutanga, 2018). The evidence in Pakistan that is missing is a picture of which inclusive practices

are already in use and how widely they are seen. The next section describes how this study sought to provide one.

Methodology

This section describes the design of the study, its participants, the instruments, the ethical procedures and the analysis.

Design

Mixed methods research with explanatory sequential design was used. This design involves gathering and analysing quantitative data before qualitative data, to explain the quantitative findings (Creswell & Plano Clark, 2018). The quantitative strand was in the form of descriptive survey and qualitative strand was in the form of interview. More weight was given to the quantitative strand in the design. We included Heads of department, teachers and students because everyone in the groups sees teaching from a different perspective. Heads of department are responsible for practice within a department, teachers plan and teach the courses, and students live the practice.

Context and participants

The study has been conducted at Khwaja Fareed University of Engineering and Information Technology Rahim Yar Khan, Pakistan. The population was the Head of Departments, Teaching Staff and the students of the departments in the university. There were 25 Heads of department, 125 university teacher and 375 students making a total of 525 respondents. Convenience and simple random sampling were used in the sample selection.

Instruments

Questionnaires tailored to the needs of Heads of Department, teachers and students were prepared. Each used a five-point scale ranging from strongly disagree (1) to strongly agree (5). One factor of the questionnaire is teaching practices and has five items: implementation of Universal Design for Learning, accommodation of diverse learning styles, inclusive language and teaching methods, choice in how learning is demonstrated and response to disability related challenges.

Content validity of the questionnaires was verified by subject experts. Content validity was good for the teaching practices factor (scale-level CVI = 0.96, with 10 experts). Five items had a good internal consistency (Cronbach's alpha = .85, $n = 525$). An interview protocol was developed for Heads of department. It had the same themes as the questionnaire and was used following the survey to get more insight into the results of the survey.

Ethics

All participants gave informed consent, and their data confidentiality was ensured during the study.

Analysis

SPSS version 24 was used to analyse questionnaire data. Frequencies, percentages, means and standard deviations were computed for every item. No item on this factor had any missing data, with all 525 respondents answering all five items. The mean score of the five items was used as a factor score for each respondent. Pearson correlations between the five items, corrected item-total correlations and the value of alpha if each item were deleted were computed to investigate the interrelationships among the items. Factor scores of Heads of department, teachers and students were compared by one-way analysis of variance and repeated for each item. To facilitate interpretation, the answers to "agree" and "strongly agree" were combined as a positive response and "disagree" and "strongly disagree" were combined as a negative response. Read the item as leaning towards agreement, above the midpoint of 3. As an ordinal scale, these means are interpreted as a general sense of the direction of responses, and the distribution of responses is more important than small differences between the means.

Findings

The overall pattern of responses to the five teaching practices and connections among them are reported, then the three groups of respondents are compared, and lastly, what the interviews added is presented.

Perceptions of teaching practices

The mean and standard deviation for distribution of responses to each item is provided in Table 1.

Table 1 : Factors that influence perceptions of teaching practices that support accessibility and inclusion (percentage of respondents, N = 525)

No	Item	SDA	DA	UD	A	SA	Mean	SD
1	Universal Design for Learning implementation	12	16	20	34	18	3.32	1.26
2	Diverse learning styles accommodation	13	13	21	33	20	3.35	1.29
3	Inclusive language and methods	10	17	22	33	18	3.32	1.23
4	Choice in learning demonstration	8	16	23	33	20	3.39	1.20
5	Response to disability challenges	10	17	19	35	19	3.36	1.24
	Overall	10	16	21	34	19	3.35	1.24

Note. SDA = strongly disagree; DA = disagree; UD = undecided; A = agree; SA = strongly agree. Percentages are rounded to whole numbers.

The mean response was 3.35 (SD = 1.24) across the five items and the mean factor score per respondent was also 3.35 (SD = 0.99). 53% of the responses were positive (agree or strongly agree) and 26% were negative and 21% were undecided. The item has a very small range (3.32-3.39), and the respondents have put the 5 practices on a nearly equal level. The highest mean was for

choice in how learning is demonstrated ($M = 3.39, SD = 1.20$) and closely followed by response to disability-related challenges ($M = 3.36, SD = 1.24$), with 54% of the responses being positive. The lowest means were for implementation of Universal Design for Learning and implementation of inclusive language and methods (both $M = 3.32$). The range from the top to the bottom was less than 1/10 of a point, too small to indicate that any one practice is stronger or weaker than the others.

The range of positive responses was 51%–54%, with five items. Each item had between a quarter and one-quarter and a third of respondents as being negative – that is, on each of the practices, a quarter of respondents did not view it as present. The share of undecided responses ranged from 19% to 23%.

Relationships Between the Five Practices

Table 2 shows how the five items related to one another.

Table 2: Correlations between the five teaching practice items, with item statistics ($N = 525$)

Item	1	2	3	4	5	Corrected item total r	Alpha if item deleted
Universal Design for Learning						.67	.82
Diverse learning styles	.53					.65	.83
Inclusive language and methods	.58	.53				.70	.81
Choice in learning demonstration	.55	.54	.56			.67	.82
Response to disability challenges	.50	.51	.57	.52		.64	.83

Note. Pearson correlations; all $p < .001$. Cronbach's alpha for the five items = .85.

Each item had a moderate correlation with each of the other items ranging from .50 to .58 with a mean of .54. Corrected item-total correlation for each item ranged from .64 to .70, and each item also correlated well with the others on the scale. Each one if removed would have reduced alpha slightly (from .85 to between .81 and .83), which indicates that all five items added to the scale. Respondents who reported seeing one practice in place were likely to report seeing the other practices in place as well.

Comparison of Respondent Groups

Table 3 compares the factor scores of the three respondent groups.

Table 3: Teaching practices factor scores by respondent group

Group	n	Mean	SD
Heads of department	25	3.31	1.01
Teachers	125	3.48	0.86
Students	375	3.31	1.02
All respondents	525	3.35	0.99

Note. The factor score is the mean of the five items for each respondent. One-way analysis of variance: $F(2, 522) = 1.46, p = .232, \eta^2 = .006$.

There were only small differences between the three groups, with teachers rating slightly higher than Heads of department and students, but these differences were not statistically significant, $F(2, 522) = 1.46, p = .232$. Less than one per cent of variation in scores was explained by membership in groups. The pattern of responses is similar. Overall, for the five items, 59% of teachers' ratings were positive and 20% were negative. Of the students, 51% were positive, 28% negative and Heads of department were not far from this pattern (51% positive, 27% negative). Approximately 20% of the answers in each group were undecided.

Table 4 shows the results for each practice within each group.

Table 4 : Item means (and standard deviations) by respondent group, with one-way analysis of variance for each item

Item	Heads of department (n = 25)	Teachers (n = 125)	Students (n = 375)	F(2, 522)	p
Universal Design for Learning	3.08 (1.29)	3.46 (1.13)	3.29 (1.30)	1.37	.256
Diverse learning styles	3.20 (1.26)	3.46 (1.16)	3.33 (1.33)	0.65	.525
Inclusive language and methods	3.20 (1.35)	3.44 (1.08)	3.29 (1.26)	0.83	.438
Choice in learning demonstration	3.52 (1.12)	3.54 (1.05)	3.34 (1.25)	1.40	.246
Response to disability challenges	3.56 (1.08)	3.51 (1.10)	3.29 (1.29)	1.82	.163

At the item level, there were some differences in which practices the groups rated highest, though none of these differences was statistically significant (Table 4). Heads of department rated the implementation of Universal Design for Learning (UDL) lowest of any group ($M = 3.08$) and rated response to disability-related challenges highest of any group ($M = 3.56$) and a relatively high level of rating for choice in how learning is demonstrated ($M = 3.52$). All five practices were rated by teachers as being between 3.44 and 3.54. Students with a rating of 3.29 – 3.34 on all five practices had the least dispersion of ratings across the practices.

Interview Findings

The interviews were used to shed light on the reasons that ratings were not higher for Universal Design for Learning. The interviewees reported different degrees of implementation in academic departments. They stated that they were becoming more aware of the principles of UDL, but that implementation of UDL principles was inconsistent. One faculty member with experience reported: "While there is knowledge about UDL, it takes a lot of time and resources to use UDL effectively throughout the course." Interviewees also spoke of flexibilities in their teaching. These ranged from pacing the instruction to fit a range of learning speeds to offering course content in multiple formats to assessing in multiple ways.

Discussion

This section addresses research questions and reflects on the contribution of the research to previous research. Three points are highlighted: the moderate extent of inclusive practice, the uniformity of ratings among practices and groups, and the substantial proportion of 'undecided'.

Inclusive Practice is Present but Moderate

Respondents' answers to the first research question indicated that the university's teaching practices were of a moderate level of support for accessibility and inclusion. Approximately half of all responses were positive and one quarter negative with no item attaining a mean of 3.39. While not as dire a picture as the barriers reported in previous Pakistani studies (Hussain et al., 2020; Mohsin et al., 2024), the two types of evidence cannot, however, be directly compared. They were studies about the experience of students with disabilities as well as about physical and material barriers, while the content of our questionnaire was an enquiry about teaching practice, addressed to a wide range of staff and students. This is not a strength but a partial presence of inclusive teaching.

The character of the interview account is in line with the international literature on staff preparation. Interviewees were familiar with Universal Design for Learning, but struggled to implement it throughout an entire course due to lack of time and resources. Similar disparities between positive staff attitudes and support for making adjustments, and limited training were reported by Fossey et al. (2017). Moriña and Carballo (2018) report that the teachers in the programme studied by them sought practical advice and not just awareness. Perhaps we are in a similar situation as staff at this university; awareness and understanding has increased at a greater rate than the skill and support required to apply it in practice.

This contrasts with the national policy. The policy calls for faculty to consider using books in alternate format, and generally indicates that a course does not need to be adapted, but rather a change in the way the materials are presented may suffice (Higher Education Commission, 2021). This is often the case for individual accommodation. However, the interviewee was talking about how to use UDL throughout the entire course, which is a much bigger project. Advice which sees inclusive design as a minor change can consequently be interpreted as requiring less time from teachers.

Similar Ratings Across Practices and Groups

All the five practices received a rating at nearly the same level and the five items had good internal consistency ($\alpha = .85$). Moderate and relatively equal item correlations were found (Table 2). One interpretation is that the respondents were unable to make a clear distinction between individual practices and instead had a general impression of how inclusive the university is. This is helpful in planning. It implies that a wide inclusive teaching approach is more likely to lead to improvement than working on one practice.

In response to the second research question, there was no significant differences between the views of Heads of department, teachers and students. As would be expected, teachers rated the practices somewhat higher than students, but the difference was not great and may be due to chance. Previous research indicates that positive staff attitudes do not necessarily lead to student improvements (Fossey, et al., 2017; Martins, et al., 2018). There does not seem to be a clear difference of this kind in our data, but the small separation (in the expected direction) might be worth exploring in further research with a larger number of Heads of department.

Also worth noting is the item level pattern among Heads of department, however, the pattern is based on only 25 Heads and the differences between groups were not significant for any item. They were the least positive group when it came to the implementation of Universal Design for Learning, but the most positive group when it came to teacher response to student disclosure of disability-related challenges. Heads of department are responsible for practice throughout a whole department, and they may be more likely than individual teachers or students to notice variations in the implementation of design-based approaches. This reading falls under the interview report of departmental differences in implementation. It also indicates that Heads of department believe that there is a distinction between acting well for individual students and planning for diversity initially for courses. Another point of interest is that the proportion of pupils who achieved a negative score was slightly less than 3 out of 10. Although the average student view is moderate, there is a large minority of students who do not see inclusive practice in their courses, and it is to these that the policy should be addressed.

The Undecided Responses

The most consistent pattern in the data is the percentage of undecided, which ranged from 19% to 23% for each item. A response of "undecided" may be due to lack of knowledge, mixed experience or reluctance to criticise and our data do not distinguish these alternatives. The responses of undecided are, for the purposes of this paper, proposed to be, at least in part, the result of a problem of visibility. A practice that is offered only when a student asks for it will not be seen by many students. The research about disclosure can help to explain why. Students with disabilities or learning challenges who do not identify to the university have been identified by Grimes et al. (2019), and Mullins and Preyde (2013) state that 'adjustments for students with invisible disabilities have received less research attention than for physical access'. Students who do not disclose, and staff who are not told, may not be aware if such practices exist or not where they are dependent on disclosure. The national policy already requires staff to request that students notify the teacher and/or Disability Coordinators at the beginning of the course, to decide (Higher Education

Commission, 2021). Steps of this type should cause the undecided portion in future surveys to shrink, if the explanation of the visibility is right.

Contribution

The study of Pakistani literature revealed that the emphasis has been on the problems of students with disabilities and the focus has not been on the practice of inclusion. This study makes three contributions. Inclusive teaching exists at this university, although it is only partially in place (50% of the responses were positive and 25% were negative. There was not a particular weak spot, as perceptions were in line across practices and across Heads of department, teachers and students. But also 19%-23% of the answers to all the items were undecided, which we see as a problem of visibility as well as of provision.

Implications for practice and policy

Based on the findings, suggestions for the university and national policy are provided in this section. Staff development is the most straight-forward response to the interview evidence. Training should be more than raising awareness of UDL.

It should provide guidance for teachers in providing practical support for the design of material, activities and assessment for a diverse group of students. This aligns with the requests of teachers from other settings (Moriña & Carballo, 2018) and the national policy's teacher training programmes (Higher Education Commission, 2021).

Peer mentoring, where colleagues share strategies that they have found to be successful in their own classes, might be helpful in this training. In addition to providing a touch point for students, Disability Coordinators mandated by the national policy may also serve as a resource for teachers needing adjustments advice.

Departments could also acknowledge the time required to redesign the courses and assessments as the evidence from the interviews indicates that time and resources are a practical constraint. Departments might also negotiate procedures for providing opportunities for students to demonstrate in more than one way within the scope of the programme requirements. I

It should be noted that such guidelines would be for the purpose of supplementing, not supplanting, individual examination accommodations. For example, teachers could announce at the beginning of each course the types of support and flexibility possible (as per the national policy) and how students can get it.

Institutions may also encourage students to provide periodic input on the accessibility of the teaching and materials, thus reducing the undecided group over time. The national policy stipulates that learning management systems and web-based services must conform to Web Content Accessibility Guidelines (Higher Education Commission, 2021), level AA. Seale et al. (2015) argue that technology is not sufficient, and that universities must also coordinate technology related supports for students to ensure they utilise technology.

The Higher Education Commission may wish to add guidance to its policy on inclusive course and assessment design, in addition to individual accommodation. This would enable universities to move away from individual requests to planning for diversity from the outset.

Limitations

There are some limitations in the study. It was carried out in one university, and the results may not be applicable to other universities in Pakistan. Data are perceptions of teachers that they report and not observations of teaching. This group of Heads of department was small ($n = 25$) so comparisons between this group are limited. Unfortunately, the information for this analysis did not include whether the respondents had a disability or not and so it is not possible to report the views of students with disabilities separately. There was an element of self and peer assessment in the responses of teachers and Heads of department, which could have led to a more positive response. The teaching practices factor has just 5 items, of which one is problematic in terms of its use of the language of learning styles, and the meaning of undecided responses could not be determined from the data. The number of Heads of department is small and conclusions at item level cannot be drawn. Lastly, the qualitative strand is briefly reported. The second item is also worthy of attention, because of its wording. Future versions of the questionnaire could ask whether the teachers use a variety of methods and materials to meet different needs, instead of asking about teaching to learning styles, as there is little evidence for this (Pashler et al., 2008). This would maintain the intent of the item and make it more congruent with the principles of UDL. The students with disabilities could also be considered a separate group of students and observation or document analysis might be used to investigate the practice of assessment choice.

Conclusion

The purpose of this research was to find out the perception of teachers and students of one university of Rahim Yar Khan regarding the teaching practices which help in accessible and inclusive education. These practices were viewed as moderately established as viewed by respondents. About half of all responses were positive, a quarter were negative and a fifth were undecided, and the five practices were rated at almost the same level. There was a consensus between the heads of department, teachers and students. The percentages for the 'undecided' category do not necessarily mean that inclusive teaching is not occurring in these settings, but rather may reflect limited visibility or mixed experiences or other factors with respect to the existence of inclusive teaching. Results provide evidence to help improve inclusive practice throughout courses and to clearly inform students at the beginning of a course about the support that is available.

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