



Exploring Student's Experiences on Epistemic Access for Effective Teaching and Learning in Higher Education

Solomon Arulraj David

The British University in Dubai, United Arab Emirates, solomon.david@buid.ac.ae

Shireen Motala

Prof., University of Johannesburg, South Africa, smotala@uj.ac.za

Arul Lawrence A S

Tamil Nadu Open University, India, arullawrence@gmail.com

Pio Albina A

Alagappa University, India, pioalbina123@gmail.com

Access to higher education has been relatively addressed well globally, while student success rate remains a serious concern, given several issues around quality. This study therefore aims to explore the role of epistemic access for effective teaching and learning in higher education and it is keen to account student's experiences and views on regular and distance programmes. A questionnaire using google form was instrumented to gather both quantitative and qualitative data among students and graduates in the state of Tamil Nadu in India. Statistical analysis was used for quantitative data, while thematic analysis was used for qualitative data. The results confirm the theoretical claim that the pursuit of authentic knowledge is adequate when epistemic access is ensured. The study recommends that higher educational institutions offering both modes must fulfil their epistemic duties by ensuring epistemic access to students. In general, the participants in the study agreed that the regular university programmes are more conducive for epistemic access, while distance education has other advantages such as flexibility and affordability. The study contents that both modes have merits and demerits. It is, therefore, necessary that both are available at good qualities for students to benefit from them.

Keywords: epistemic access, teaching, learning, higher education, students' experiences, views

INTRODUCTION

Most countries including India in recent years have relatively expanded higher education due to the emerging economic transformation that requires a highly skilled labour force. Across the world, access to education and higher education have been well

Citation: David, S. A., Motala, S., Lawrence A S, A., & Albina A, P. (2023). Exploring student's experiences on epistemic access for effective teaching and learning in higher education. *International Journal of Instruction*, 16(1), 151-172. <https://doi.org/10.29333/iji.2023.1619a>

addressed, while access to knowledge and accessing authentic knowledge remains unclear. Access to authentic knowledge is otherwise known as epistemic access. Higher educational institutions across the world have relatively created educational opportunities to young people to access the campus and programme, while the emphasis on effective teaching and learning, student success and employability are to be addressed. Access to higher education in India has been strongly addressed through both regular and distance programmes. There have been concerns on quality learning in both modes, however distance education has been widely considered inferior to regular mode by different stakeholders (Lezburg, 2009). This study aims to account university students' experience on epistemic access to higher education in India, particularly exploring the trends among regular and distance programmes. The main research question of the study is what students' views on regular and distance modes are supporting epistemic access to higher education in India. The study uses a systematic literature review to conceptualise and theorise epistemic access and account the trends on access to regular and distance education in India. The research used google forms to gather empirical data using both quantitative and qualitative questions among university students in the state of Tamil Nadu of India. Statistical analysis was used to analyse the quantitative data, while thematic analysis was used to analyse the qualitative data. The findings, in general, indicate that epistemic access is seemingly higher in regular mode than in distance mode programmes, although distance mode has some other advantages such as flexibility, affordability. The respondents indicated that both modes have merits and demerits. It is, therefore, important to make quality higher education available in both modes for students to benefit from them. The study attempts to make relevant contributions to the field 'teaching and learning in higher education' particularly in India. Since the higher education sector in India continues to evolve with emphasis on quality and innovative approaches, the current study contributes to the ongoing conversation on improving teaching and learning in higher education in India. The recommendations made in the study might be relevant for policy makers, curriculum designers, academic, researchers and administrators in higher education, particularly to improve teaching learning practices and student services in higher education in India.

Literature Review

Higher Education is not a luxury, it has become essential as the modern economy and industry expect higher levels of knowledge and skills development. Ross (2003) describes the three drivers for expansion in higher education access in the United Kingdom; the first was purely demographic, the second pressure was economic growth and third was due to the desire for social justice. Access to higher education has been steadily progressing in many countries ever since the massification of higher education (David, 2016). However, the complexities of the debate about access does not stop with access to campus but moves beyond to epistemic access and throughput (David, 2017a). Some of the important questions in relation to epistemic access is, who gets access to higher education, who gets access to powerful and useful knowledge? Which mode offers such knowledge? And how this knowledge helps them to further their life and profession? It is necessary to conceptualise and theorise epistemic access to higher education as it is the central focus of the study. William (2000) interprets accessibility to

information, guidance, funding and financial support, admission procedures, credit for existing skills and knowledge, relevant knowledge and curricula, building (facilities), a variety of courses and modes of study, differing learning processes, a supportive environment, a variety of certification and accreditation mechanisms, a range of vocational and occupational outcomes. Morrow (2007) proposes a systematic leaning as a way forward to ensure epistemic access. He outlines the following solutions to enable epistemic access: remove the constraint of poor disciplinary knowledge and lack of structure and differentiation in the curriculum, remove the constraint of inappropriate level and scope of teaching and inadequate feedback and reflection, remove the constraints of empiricist views of knowledge, and the lack of materials. Biesta (2006) states that this approach, enabling epistemological access through effective teaching practice represents a modern understanding of education. Epistemological access against formal access depends not only on teaching but also on the efforts of the learners. Students who get access to campus / courses are entitled to have access to right knowledge but not guaranteed of gaining the knowledge. Epistemic access is grounded in epistemic values that shape and guide inquiry to discover the truth. It is also argued that epistemic access is not a product that could be sold or bought, not transmitted automatically just because a student has paid the fees, but it must be achieved through rigorous academic activities (Morrow, 2009). The following figure illustrates the epistemic access pathways.

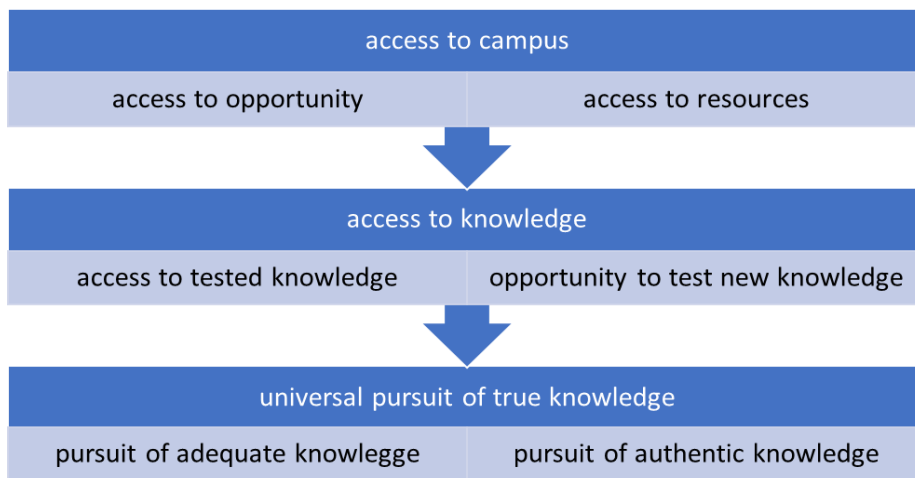


Figure 1
Epistemic access pathways

The first step in the pathways of epistemic access is access to physical campus or virtual learning platforms, which other ways is the access to educational opportunities and learning resources. Opportunity to study, particularly at tertiary level is privilege only some achieve through academic merit / zeal, and through socio-economic dynamics. The access to sufficient and quality learning resources is not the same for all those who have access to education (David, 2017b). The second step in the pathways of epistemic

access is access to knowledge. It is argued that not everyone who gets access to educational campuses and learning platforms gain required knowledge (David & Hill, 2021). They must strive to access the tested knowledge with necessary facilitation and must be able to test their gained and new knowledge. The third step in the pathways of epistemic access is the university pursuit of true knowledge. The universal pursuit of true knowledge is achieved by pursuing adequate and authentic knowledge. This illustration is drawn in the argument of Edmund Gettier, for whom knowledge is justified true belief (Lehrer, 1979).

The theoretical underpinning of the study is driven from relevant notions, such as Muller's epistemic access, Feldman's epistemic obligation, Audi's epistemic duty, Brewer's epistemic openness, Sturgeon's epistemic attitude, Fricker's epistemic justice and Goodin & Spiekermann's epistemic solidarity. Muller (2007) insists that epistemic access is grounded in epistemic values that shape and guide inquiry to discover the truth. Feldman (1988) argues that gaining authentic, adequate, tested, and justified knowledge is important to hold epistemic obligation. Audi insists that our epistemic duty is knowing what is right and avoiding what is not right (Zagzebski, 1997). Brewer recommends remaining in epistemic openness that cognitive science and reality are complex and therefore it is important to remain with epistemic openness beyond perception, reason, and empirical evidence (Martin, 2001). Sturgeon (2008) demands the right epistemic attitude from learners and teachers which is ensured by intellectual humility and cooperative intellectual behaviour. Fricker (2013) suggests establishing epistemic justice by intellectual actualization for the betterment of the society and the world. Goodin & Spiekermann (2005). propose epistemic solidarity by providing intellectual support to peers, doing intellectual teamwork, in which groups can support the alternatives truly in their interest.

Range of views on epistemic access to higher education in the scholarly world are to be explored to reach a stable theoretical standpoint on it. It is important to understand the higher education system as we explore epistemic access in higher education. For Britanica (2020) higher education is education given in post-secondary institutions. Wheelahan (2014) suggests understanding higher education beyond the university system. Barnett (1997) recommends having an integrated view on higher education. Walker (2006) contextualises higher education in post-schooling preparation of students for their professional journey both inland and abroad (Rensburg, Motala & David, 2015). Khalil & Elkhider (2016) argue that applying learning theories (behaviourism, cognitivism, constructivism and connectivism) and instructional design models support effective learning.

Higher educational institutions are considered as formal organisations which operate in a defined manner. Ramirez (2013) indicates that established standards of organisational practices of universities makes them formal organisations. He adds that the nature of universities may also differ from countries based on social and political values (David, 2014). For some universities are often considered as ivory towers that generate and disseminate new knowledge, predominantly share formal theoretical knowledge.

Scholars such as Wheelahan (2014) insist that universities must offer abstract theoretical knowledge, which offers foundation to basic sciences.

Establishing a strong curriculum is essential for ensuring epistemic access, as authentic learning requires adequate and authentic learning resources (David & Hill, 2020). Luckett and Hunma (2014) suggest making the curriculum, pedagogic process, and assessment explicit to facilitate the epistemic access to students. However, one must understand the difference between established vs rigid curriculum. A rigid curriculum often is not upgraded and improved, while an established curriculum is not. Morrow (2009, p.28) refers to an analogy 'trying to change a curriculum is like trying to move a cemetery'. Cemeteries are repositories of tradition, memory, history and have a lot more significance. It is therefore difficult to get rid of them, so is the curriculum for many. Meaningful pedagogic process is rather important to ensure epistemic access. Koole (2010) considers that meaningful classroom interaction and encounters are essential to gain epistemic access in students. Self-regulated learning and personal commitment to learning also supports epistemic access. Gertler (2003) suggests that self-intimacy (conscious state) with knowledge is epistemic privilege. Cross & Atinde (2015) indicate, how disadvantaged students negotiate and ascertain their epistemic access by productive use of their opportunities resulting in the completion of their academic goals. Epistemic access means also completing the learning process meaningfully achieving the learning objectives. Reisberg (2010) refers to Bowen (2009) who points out that there is too much emphasis on access and not enough on finishing. Abello, Alonso-Tapia & Panadero (2020) indicate that the classroom motivational climate has significant impacts on epistemic access. We should acknowledge that different types of learning lead to acquiring of different types of knowledge. Koole (2010) informs that some learning activities lead to access to knowledge, while some leads to competence and other skills. Scholars such as Mahlangu (2019) indicate that students and staff come from different backgrounds to universities and therefore the same approach to access to university is not appropriate. Therefore, universities must have multiple pedagogical approaches to support epistemic access (Zepke & Leach, 2010). Some of the external factors pose demands for higher educational institutions to enhance epistemic access to compete and survive in the emerging educational market. The local and global economic trend has an impact on what is taught and researched in universities (David, 2016). Universities have embraced the ranking trend (David & Motala, 2017) and research collaboration (Rensburg, Motala & David, 2015) to facilitate their process, which may have positive and adverse implications for epistemic access to higher education.

As central to this study, regular and distance mode programmes and institutions have both opportunities and challenges in ensuring epistemic access. Distance education has been growing across the world in recent times. Wang & Liu (2003) point out that the advent of information technologies has paved ways for rapid and enormous growth of distance education. They indicate that learners, educators, institutions, and entrepreneurs are increasingly choosing modernised distance education. Some argue that regular mode helps students to gain frequent access to campus where they tend to benefit knowledge through information learning, such as the possibilities to meet and discuss with other students and staff (Baroudi & David). While some others such as Barak (2011) indicate

that there are several misconceptions about distance education among students and staff. Most of them still hold the past image of distance education, while distance education has evolved rapidly with dynamic options such as online and e-learning. However, Perez, Robbins, Harris, and Montgomery (2020) indicate that students have better opportunities to socialise with other students and staff on campus. Moreover, the social cognitive development is higher when students interact inside and outside the classroom (Bolling, Pfister, Mygind & Nielsen, 2019). High students' attrition is observed in distance programmes. Thompson (2006) recommends the use of established tools to test and trace students' progress to reduce student attrition in distance education. Schuster et.al. (2020) recommend hybrid teaching and learning to support metacognitive skills

Enhancing the quality of distance education is recommended by several scholars. Lezburg (2009) suggests periodical accreditation is essential to ensure the quality of distance education programmes. Leh & Jobin (2002) point out that distance education, particularly through online has rapidly grown in recent times, which are to be regulated with necessary quality mechanisms. Chaney, et.al. (2007) suggests assessing a student's opinion on the quality of distance education. There are several challenges students and staff face in both regular and distance mode. Yılmaz, Külçü, Ünal & Çakmak (2013) account that although distance education embraced digitisation, the users often are not utilising it to the fullest. Celikbilet & Tuylu (2019) indicate the emergence of interactive e-learning. Berge (2002) indicates the barriers that the abilities to deal with distance and online education varies among students, teachers, and institutions. Some argue that most universities have evolved to integrate both regular and distance modes of teaching and learning. Broad, Mathews & McDonald (2004) suggest the effective use of technologies to account distance and online education. Forsyth, Pizzica, Laxton, & Mahony (2010) indicate that distance education in an era of e-learning has emerged as a new challenge for campus-focused institutions. Hariadi et.al (2021) claim that the blended learning improves higher order thinking skills among students.

Higher education in India has been expanded to meet the growing demands. Altbach (2009) considers India and China as two giants that have awakened by transforming their economy. He contests that India in comparison to China has not expanded its higher education. The National Knowledge Commission (NKC, 2006) recommended to raise the number of universities. Agarwal (2007) points out that the growth of higher education in India is unplanned, substandard with limited public investment and resources. Carnoy & Dossani (2013) contend that expansion of higher education in India since the 1990's was driven heavily by privatisation. Agarwal (2007) argues that although private higher education expanded rapidly in the country, it was not well regulated and controlled. Access to private education is facilitated by financial merit rather than academic merit. Chattopadhyay (2009) private higher education failed to support inclusive education. Privatisation of higher education has slowed the social responsiveness of higher education. According to the British Council in India (2014), India has the world's biggest tertiary age population, which makes the higher education sector in India important. Access to higher education has different windows in India. Access to prestigious higher education such as entry to institutions of national importance is highly competitive and meritorious in India. While most private higher

education is often expensive. Public and state funded not for profit higher education institutions often serve to academically average and economically background students. FICCI (2013) recommends expanding affordable access to higher education for all eligible and deserving students through various means.

Distance education has contributed to expanding access to higher education in India. According to the Ministry of Human Resource Development's (2019), All India Survey on Higher Education, there are 993 universities, 39931 colleges and 10725 stand-alone institutions. Among them, there are 16 open universities, and 110 universities offer in dual mode (both regular and distance). There are 37.4 million students enrolled in higher education in India during 2018-2019, of which 10.62% constitutes the enrolment in distance mode. Majority of students enrolled in distance mode are in arts, humanities, and social sciences and at bachelors, masters, and certificate level programmes. Bordoloi (2018) points out that millions of young people in India are empowered by open and distance learning. Gupta, Singh, Pandita & Bhat (2020) indicate that student enrolment in library and information science programmes in distance mode is three times more than the regular mode during the period of 2011 to 2018 in India. Subba Rao (2006) informs that information technology (IT) has been supportive to expand distance learning in India, particularly the use of digital libraries and has expanded in recent times. Some of the distance education programmes in India have been successful. Dash (2019) informs that distance mode students in her study indicated satisfaction on the programme, while informing their challenges mainly on supervision of their research works. Sharma & Srivastav (2021) argue that students' attitude towards learning has greater impact on epistemic access.

METHOD

As the research is keen to understand students' experience on epistemic access in regular and distance programmes in large scale a survey was considered a suitable data collection method. An online survey using google forms was developed. Students who have completed or are currently enrolled in a university level programme in regular or distance mode were invited to take part in this survey with their informed concerns. Blair & Noel (2014) suggests improving higher education practice through a student evaluation system. Browne & Millar (2019) recommend the use of technology to engage a larger number of students in seeking their opinions to improve education.

The data was collected in the state of Tamil Nadu in India, as it has one of the largest higher education systems within India and has the highest number of universities in India offering programmes in both regular and distance modes. As the study wanted to explore and account for the views of university students in the entire state, it chose to include the larger sample size possible. Barlett, Kotrlik & Higgins (2001) suggest choosing 350 minimum samples when the target population is above 10000. Creative Research Systems (2020) recommends 500 samples to study the larger population of a city or a state. In this research, 636 respondents attempted to do the survey, of them 578 respondents completed all the quantitative questions. The quantitative section had about 24 questions with Likert scale, which allowed the researchers to obtain range of responses from the participants. According to Croasmun & Ostrum (2011) Likert scales

help obtain a range of responses from the samples often in five scales. Hinkin (1998) recommends good conceptualisation of the problem before the survey questions, scales are developed.

The researchers carefully chose the survey questions from the necessary understanding drawn from the literature exploration. There was only one general qualitative question at the end of the survey questionnaire in which the respondents were expected to share their experiences on both regular and distance programmes. For the tool reliability, Cronbach's alpha as the measure of internal consistency (α) of the tool was measured and found to be 0.887. According to George & Mallery (2003) thumb rule, the value $>.8$ is good (p. 231). Thus, it is concluded that the research tool on epistemic access is reliable. Around 399 respondents attempted to answer the qualitative question, while 180 of them left some comments of which around 70 comments were meaningful to be included for further analysis. Thematic analysis was used to analyse the qualitative comments from the respondents. Braun & Clarke (2012) consider thematic analysis for systematically identifying, organising, and offering insights into patterns of meaning (themes) across a data set. Standard ethical protocols were observed in data collection, analysis, and reporting.

FINDINGS

Both quantitative and qualitative data were gathered using google form. There were two sections in the quantitative part. Demographic information was gathered in the first section, while the research related data were gathered in the second section. The following table presents the demographic details on the study.

Table 1

Difference in the epistemic access to higher education in terms of gender

Variable	Gender	N	Mean	Std. Deviation	t-value	p-value
Epistemic Access to Higher Education	Male	196	29.9898	11.93185	-1.607	.109
	Female	383	28.4804	9.99995		

It is inferred from the table 1 that male and female do not significantly differ in their epistemic access to higher education.

Table 2

Difference in the epistemic access to higher education in terms of age

Variable	Age Group	Sum of Squares	df	Mean Square	F	p-value
Epistemic Access to Higher Education	Between Groups	3281.716	2	1640.858	15.008	.000*
	Within Groups	62975.240	576	109.332		
	Total	66256.957	578			

*Significant at 0.05 level

It is inferred from the table 2 that the sample group significantly differs in their epistemic access to higher education in terms of age. When comparing the mean scores, the age groups 31-40 (31.80) are better than the age groups of below 20 (28.55) and 21-30 (26.82) in their epistemic access.

Table 3
Difference in the epistemic access to higher education in terms of marital status

Variable	Marital Status	Sum of Squares	df	Mean Square	F	P-value
Epistemic Access to Higher Education	Between Groups	2601.807	2	1300.903	11.772	.000*
	Within Groups	63655.150	576	110.512		
	Total	66256.957	578			

It is inferred from the table 3 that the sample group significantly differs in their epistemic access to higher education in terms of marital status. When comparing the mean scores, the married participants (31.15) are better than the unmarried participants (26.90) and others (28.66) and 21-30 in their epistemic access.

Table 4
Difference in the epistemic access to higher education in terms of nature of work

Variable	Nature of Work	Sum of Squares	df	Mean Square	F	P-value
Epistemic Access to Higher Education	Between Groups	2965.935	2	1482.967	13.496	.000*
	Within Groups	63291.022	576	109.880		
	Total	66256.957	578			

It is inferred from table 4 that the sample group significantly differs in their epistemic access to higher education in terms of nature of work. When comparing the mean scores, the respondents who study and work (31.16) are better than the respondents who only study (26.38) and the respondents who only work (30.74) in their epistemic access.

Table 5
Difference in the epistemic access to higher education in terms of mode of study

Variable	Mode of Study	Sum of Squares	df	Mean Square	F	P-value
Epistemic Access to Higher Education	Between Groups	11277.573	2	5638.786	59.076	.000*
	Within Groups	54979.384	576	95.450		
	Total	66256.957	578			

It is inferred from the table 5 that the sample group significantly differs in their epistemic access to higher education in terms of mode of study. When comparing the mean score, the respondents in regular mode have better epistemic access to higher education compared to the respondents from distance mode and both.

Table 6
Association between the economic status and epistemic access to higher education

Variables	N	df	χ^2 value	p-value
Economic Status Vs. Epistemic Access to Higher Education	597	92	63.192	0.991

It is inferred from table 7 that the sample group is not significantly associated in their epistemic access to higher education in terms of economic status. The above six tables indicate that the respondents from regular mode have better epistemic access to higher

education compared to the respondents from distance mode and both in terms of demographic backgrounds of the participants. Descriptive analysis was done for all the 18 questions in five domains, such as learning resources, pedagogic practices, values of the modes, student services and others. Table 1 presents the descriptive statistical analysis on the questions related to learning resources.

Table 7

Descriptive statistical analysis on the questions related to learning resources

Questions Related to Learning Resources	Regular	None	Both	Distance	Mean	SD
Which of the two modes offers good learning resources (such as physical and online library resources)?	74.6% (432)	1.2% (7)	18.5% (107)	5.7% (33)	1.35	.839
Which of the two modes allows you to meet the lecturers frequently to consult and take learning support?	84.6% (490)	.9% (5)	9.8% (57)	4.7% (27)	1.34	.835
Which of the two modes offers frequent lectures and campus visit?	85.1% (493)	1.2% (7)	8.6% (50)	5% (29)	1.55	.980
Which of the two modes offers a good mentoring, supervising, feedback supports?	77.4% (448)	2.1% (12)	15% (87)	5.5% (32)	1.49	.940

Four specific questions were linked to learning resources, such as library resources, consulting academics, frequent lectures/campus visits, mentoring, supervising, and feedback support. Majority of the respondents from as low as 74.6% to as high as 85.1% considered regular mode providing good learning resources, which clearly indicates that the respondents largely value regular mode providing better learning resources thus supportive to epistemic access compared to distance mode. Interestingly considerable respondents as high as 18.5% valued both modes providing good library resources. It is also important to note that 2.1% of respondents did not consider both modes as good for good mentoring, supervising and feedback support. Table 8 provides the descriptive statistical analysis on the questions related to pedagogical processes.

Table 8
Descriptive statistical analysis on the questions related to pedagogic processes

Questions Related to Pedagogic Process	Regular	None	Both	Distance	Mean	SD
Which of the two modes offers a comprehensive curriculum?	69.1% (400)	1.4% (8)	24.5% (142)	5% (29)	1.65	1.009
Which of the two modes integrates good pedagogic practices?	78.1% (452)	1.9% (11)	14.9% (86)	5.2% (30)	1.47	.927
Which of the two modes provides good, blended learning experiences (both online and face to face learning)?	69.1% (400)	2.4% (14)	22.8% (132)	5.7% (33)	1.65	1.013
Which of the two modes includes a variety of assessments (such as formative and summative)?	74.1% (429)	.9% (5)	20% (116)	5% (29)	1.56	.974
Which of the two modes provides you more learning activities and practical?	85.3% (494)	1.2% (7)	9.7% (56)	3.8% (22)	1.32	.800
Which of the two modes allows you to develop in depth knowledge?	76% (440)	1.2% (7)	18.1% (105)	4.7% (27)	1.51	.945

There were six questions related to pedagogical processes. They were mainly exploring the mode that better offers comprehensive curricula, integrates good pedagogic practices, offer blended learning experiences, include variety of assessments, provide diverse learning activities/practical, and allow to develop in depth knowledge. Most of the respondents as low as 69.1% for comprehensive curricula to as high as 85.3% for practical, indicate regular mode providing better pedagogic practices, suggesting it as better supporting epistemic access. On an average around 20% of the respondents consider both modes for good pedagogic practices. Only about 5% in an average value distance mode for good pedagogic practices. It is important to observe that 2.4% of the respondents inform that none of the modes offer good, blended learning. Table 9 offers the descriptive statistical analysis on the questions related to value of the modes.

Table 9
Descriptive statistical analysis on the questions related to value of the modes

Questions Related to Value of the Modes	Regular	None	Both	Distance	Mean	SD
Which of the two modes is most cost effective?	57% (330)	1.4% (8)	10.9% (63)	30.7% (178)	2.15	1.374
Which of the two modes has value for money?	66.7% (386)	3.3% (19)	18.3% (106)	11.7% (68)	1.75	1.122
Which of the two modes has a good market value?	82.6% (478)	1.6% (9)	11.7% (68)	4.1% (24)	1.37	.848

Three questions were related to the value of the regular and distance modes. They include the cost effectiveness, value for the money and exchange value in the job market. In terms of the cost effectiveness although 57% of the respondents considered regular mode, 30.7% valuing distance mode is relatively high compared to the responses

in other questions. For the value for the money question although there were 66.7% respondents, 18.3% respondents considering both modes is interesting to observe. While for the question exchange value of the mode in the job market, a high turn of 82.6% respondents value regular mode. Thus in terms of the value of the mode in general regular mode is on high preference, with an exception on the cost effectiveness. Table 10 presents the descriptive statistical analysis on the questions related to student services.

Table 10
Descriptive statistical analysis on the questions related to student services

Questions Related to Student Services	Regular	None	Both	Distance	Mean	SD
Which of the two modes provides better student services?	77.7% (450)	2.1% (12)	15.2% (88)	5% (29)	1.47	.925
Which of the two modes has good other campus facilities (such as canteen, sports, clubs, etc.)?	85.3% (494)	2.1% (12)	9% (52)	3.6% (21)	1.31	.782
Which of the two modes is more flexible and help you to balance work, study, and family?	43.5% (252)	3.1% (18)	19.2% (111)	34.2% (198)	2.44	1.343

There were three questions related to student services, such as better student services, good campus facilities, and flexibility in terms of work, study, and life balance. For the first two questions respondents favoured regular mode, making regular mode relatively suitable for epistemic access. While for the third question in terms of the mode that is flexible to balance work, study, and life 34.2% respondents chose distance and 19.2% chose both modes, together making the regular mode inferior for this option. Table 11 offers descriptive statistical analysis on all the other questions.

Table 11
Descriptive statistical analysis on the other questions

Other Questions	Regular	None	Both	Distance	Mean	SD
If you were to take another course yourself which of the two modes, you would prefer most?	63.2% (366)	2.4% (14)	9.8% (57)	24.5% (142)	1.96	1.309
If you were to recommend to your friends and family which of the two modes, you would recommend most?	72.4% (419)	1% (6)	16.9% (98)	9.7% (56)	1.64	1.073

Two other questions, such as the mode the respondent prefer for their future studies, and the mode that they recommend for others. In both cases, most of the respondents preferred regular modes, making regular mode most conducive for epistemic access. It is interesting to observe that 24.5% respondents considered choosing distance mode for their future studies, while 16.9% considered both modes to recommend to others.

Analysis of the Qualitative Data

There was only one general qualitative question at the end of the survey questionnaire in which the respondents were expected to share their experiences on both regular and distance programmes. Around 399 respondents attempted to answer the qualitative question, while 180 of them left some comments of which around 70 comments were meaningful and unique to be included in the transcript for further analysis. The comments that were repetitive were excluded for further analysis. Thematic analysis was used to analyse the qualitative comments from the respondents. The study used Braun & Clarke's (2006) six phase approach to thematic analysis: familiarising with the data, generalising initial code, searching for themes, reviewing potential themes, defining, and naming themes, and producing the report. The responses were categorised into following five themes: learning resources, pedagogic practices, value of the mode, student services, and others.

Several respondents shared meaningful comments related to learning resources. Some of the respondents pointed out that in regular mode, they can gain better access to learning resources. R31 indicated that 'in regular mode, students can access practical knowledge through labs and facilities'. R140 mentioned that 'in regular students can access learning materials in an authentic manner'. R158 informed that 'research resources are good in regular institutions with proper library facilities to access'. However, R55 expressed that 'even in regular mode, not enough resources are provided, mostly in sub-standard private institutions'. Some of the respondents indicated that meeting lecturers is frequent and fast in regular institutions. R105 pointed out that 'it is better to provide good guidance and supervision in regular mode'. R180 indicated that 'I could get more support from the professors in regular mode as I could meet them frequently'. R165 mentioned that 'it was difficult to arrange meetings with professors in distance mode'. Some of the respondents informed that learning content and materials are not frequently updated, mostly in distance mode programmes. R152 reported that 'learning resources and content are less frequently upgraded in distance mode'. Some of the respondents indicated the emergence of online learning resources and e-learning platforms and how they are used by both regular and distance mode institutions. R27 mentioned that online learning and virtual classroom will be widely used in future by many. While R79 indicated that technology is not often well used to enrich distance mode of learning.

Many respondents shared relevant comments related to pedagogic practices. In general, many respondents feel that regular mode provides good pedagogical experiences. For R28 'only in regular in-depth knowledge could be learnt'. R102 indicated that 'face to face learning is more authentic and real'. R99 informed that 'regular mode helps for holistic development'. For R31 'group learning activities are only possible in regular mode'. Some of the respondents informed that in regular mode, they can interact better. R10 informed that 'students can clarify their doubts immediately in regular mode as they can interact with instructors'. R12 indicated that 'only in regular, students get direct experience, helping for mutual exchange of ideas, thoughts'. For R52 'regular mode supports clarity in learning with possibility to interact and discuss'. Some of the respondents pointed out that regular mode supports certain skills better. R26 indicated

that 'regular mode gives us opportunity to socialise with other students'. For R30 'regular mode allows me to learn co-curricular activities'. R48 mentioned that 'regular mode is good to develop hands on experience and subject expertise'. R120 informed that 'regular mode helps build good conceptual clarity'. Some respondents recommended regular mode for better learning experience. R67 recommended regular mode for research-based degrees. R96 indicated that 'it is easy to monitor learning progress in regular mode'. R160 informed me that 'I spent more time learning in the regular mode compared to the distance mode. The more time spent, the more I learnt'. R7 suggested that 'both instructors and students in either mode must fulfil their learning duties to achieve learning objectives'. Interestingly, R32 indicated that 'we can't underestimate the student who learns through distance mode. As some might be able to use it better to gain knowledge'. While R25 indicated that 'distance mode of learning requires independent learning skills'.

Many students shared their views on the value of the mode. Most of them expressed that distance mode is financially affordable. For R39 'only distance is affordable for financially weak students'. R44 indicated that 'I studied in both modes. For me, both are almost same in gaining knowledge, but different in fees and facilities'. R125 informed that 'distance mode is economic and convenient' and for R115 'in terms of cost and time, distance is better'. Many respondents pointed out that distance mode is flexible and convenient for working professionals. F26 mentioned that 'distance mode is suitable and beneficial to working professionals'. For R47 'distance mode is flexible for those who prefer flexibility'. R174 indicated that 'I could only complete my postgraduate degree in a distance mode as I did not want to leave my work to study'. However, R60 informed that 'many students lose focus when trying to work and study together'. For R77 'when one doesn't find the course in their home country, choosing to study online and distance mode from another country or region is fine'. Some of the respondents such as F25 indicated that 'students at postgraduate level may follow distance mode as they are matured'. F23 recommends regular mode for professional courses. R37 informed that 'regular mode establishes a sense of responsibility to learn'. For R29 'regular mode allows students to learn ethical and moral values from instructors'. R120 informed that 'most students finish on time in regular mode'. Some of the respondents shared their thoughts on the disputed value of distance mode degrees in job the market. R148 indicated that 'I can only get a good job with a regular degree. As degree from distance mode is not much valued in the job market'. R163 informed that 'I am in human resources, and I know how distance mode degrees are valued in the job market in India'. R177 mentioned that 'I have degrees from both regular and distance mode. But I only got a job through my regular degree'. R60 suggested that 'distance mode must be more user-friendly and provide job skills'. R116 pointed out that 'both modes are valuable and successful if one works hard and smart'.

Some of the respondents shared their opinions on student services of the two modes. Some of them such as R9 expressed that 'distance mode helps students from remote locations to benefit when regular institutions are not in the vicinity'. R43 indicated that 'for married women who are home makers, distance mode is much better for work life balance'. Some of them suggested that it is also important to take into consideration of

family situations and social status. As mostly poor and low middle-class students study in distance mode (R34.) for R53 'as regular mode is expensive, mostly in private institutions, distance mode is preferred'. Some of the respondents informed the importance of attending face to face lectures. For R143 'visiting university campus gives us the sense of learners and real learning'. For some, such as R155 'students' facilities in most universities are bad. Some private universities offer decent student facilities, but the cost is high'. R165 argued that 'distance mode is more student friendly as we plan our study at our own convenience and space'. And for R170 'distance mode has helped me to acquire more degrees as it was easy to manage distance learning with my work in an affordable manner'.

Several respondents shared many other views related to the study that are different from the above four themes. Many of them commented on the quality of distance programmes. R24 informed that 'most distance programmes are substandard. Quality of the distance programme must be regulated'. While R54 informed that 'I am neither satisfied in regular not in distance mode in terms of quality'. Some of the respondents such as R28 indicated that 'distance mode gives us independence and freedom to learn by ourselves'. Some such as R29 expressed harsh opinions on those choosing distance mode 'those seeking only the degree choose distance education'. Some of the respondents found certain advantages in distance mode. R36 indicated that 'for those bread winners, distance mode is the way out as they have to study and work'. R132 recommends 'distance is good for additional degrees'. R146 considers 'distance mode allowed to earn while learning. And it gives both financial and epistemic access in life'. Some of the respondents recommend regular mode for certain benefits. R8 suggests that 'science subjects can only be delivered through regular mode'. R45 recommends regular as suitable for young people and distance for adults'.

Some others indicated that both have merits and demerits (R138). R38 indicated that both modes are important as they serve different users with varying needs. R50 recommends evening and weekend classes for working professionals instead of distance mode. Some of the participants expressed their concerns on the quality of both modes. R65 pointed out that 'as education becomes commercialised, true quality is questionable, what we see is fake quality'. R79 suggested that 'distance mode should be of equal importance for the quality to improve'. R122 expressed that 'some of regular mode programmes are worse than distance mode programmes'. While R167 pointed out that 'the quality measures in distance mode learning are not strong compared to the regular mode'.

DISCUSSION AND CONCLUSION

Most of the respondents in general, shared their personal experiences, which could be subjective. However, it is interesting to account such views to understand the general trends. The findings from both quantitative and qualitative data suggest that students seem to share more positive experience in regular mode compared to distance mode programmes and institutions. In terms of learning resources, most of the respondents had positive experience in regular mode compared to the distance mode, while some of them appreciated the emergence of dynamic e-learning platforms as potential opportunities

for distance mode. Many respondents indicated positive experiences in pedagogic practices in the regular mode compared to the distance mode. Some of the respondents expressed the declining quality of pedagogic practices in both modes. Several respondents shared positive views about distance mode being supportive to balance work, study, and life. Many respondents pointed out that degrees from regular mode have better exchange value at the job market, while some of the respondents highlighted the cost-effective, flexible, convenient aspects of distance mode as advantageous. Majority of the respondents pointed out that student services are relatively better in regular mode, while some of them expressed negative experiences on student services in both modes. The other views shared by respondents had mixed feelings on both modes. Some of the respondents cautioned about the declining quality in both modes, particularly in private institutions as they are not able to get the value for the money.

The findings from the similar studies and the current empirical study are more comparable, except that the context where the empirical study was carried out, where distance education has not evolved dynamically, thus making it difficult to compare with other global best practices. The results seemingly confirm the theoretical claim that the pursuit of authentic knowledge is adequate when epistemic access is ensured. The study recommends that higher educational institutions must continue to focus on expansion and inclusion, while strategically address quality and student success. It also suggests that institutions offering both modes must fulfil their epistemic duties by ensuring epistemic access to students. The study also recommends that entry to tertiary level programmes must be restricted based on strong academic merit and zeal. The current study has several relevant implications. The findings of the study offer relevant insights to the ongoing debate on access and epistemic access to higher education. The study findings showcase the trends in student experiences on both regular and distance mode programmes, which may help policy makers, curriculum designers, academic and researchers to gain necessary understanding on the nature, quality, and user experiences of the two modes. The study acknowledges some of the limitations of the research. In future studies, the number of participants could be increased by promoting the study in multiple locations. If possible, future studies could use other qualitative methods such as interviews or focus groups to gather more in-depth information from the respondents. Future studies may also consider observation of lectures and campus visits for more real time data gathering. The opportunities and challenges of both regular and distance modes of education, especially during the times of uncertainty, disaster, war, pandemic such as COVID-19, could be also studied in different contexts for relevant benefits.

In general, most participants expressed that there is a lack of epistemic access in both modes (largely at distance) in the context where the study was carried out, although there is a deep sense of desire for it among all stakeholders. The study claims that mere opportunity to access the desired institution and programme is not a guarantee to gain authentic knowledge to fulfil epistemic access to higher education. As informed by most of the respondents that both modes have merits and demerits, it is necessary that both modes are available at good qualities for students to benefit from them appropriately. The study contents that pursuit of authentic, adequate, tested, justified knowledge happens when epistemic access is ensured by all relevant stakeholders in the higher

education sector. The study asserts that seeking student's experience and views on epistemic access support the understanding of user experience in higher education.

REFERENCES

- Abello, D., Alonso-Tapia, J., & Panadero, E. (2020). Classroom Motivational Climate in Higher Education: Validation of a Model for Assessment. *International Journal of Instruction*, 14(2), 685-702.
- Agarwal P (2007) Higher Education in India: Growth, Concerns and Change Agenda. *Higher Education Quarterly*, 61(2), 197-207.
- Altbach PG (2009) The Giants Awake: Higher Education Systems in China and India. *Economic and Political Weekly*, 44(23), 39-51.
- Barak M (2012) Distance education: towards an organizational and cultural change in higher education. *Journal of Enterprising Communities: People and Places in the Global Economy*, 6(2),124-137. <https://doi.org/10.1108/17506201211228930>
- Barlett JE, Kotrlik JW, & Higgins CC (2001) Organizational Research: Determining Appropriate Sample Size in Survey Research, *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.
- Barnett R (1997) *The Idea of Higher Education*. Bristol: Society for Research into Higher Education & The Open University Press.
- Baroudi, S., & David, SA. (2020). Nurturing female leadership skills through peer mentoring role: A study among undergraduate students in the United Arab Emirates. *Higher Education Quarterly*, 74(4),458-474. <https://doi.org/10.1111/hequ.12249>
- Berge ZL (2002) Obstacles to distance training and education in corporate organizations. *Journal of Workplace Learning*, 14(5), 182-189.
- Biesta G (2006) *Beyond learning: democratic education for a human future*. London: Paradigm Publishers.
- Blair E & Noel KV (2014) Improving higher education practice through student evaluation systems: is the student voice being heard? *Assessment & Evaluation in Higher Education*, 39(7), 879-894. DOI: 10.1080/02602938.2013.875984
- Böhm A, Davis D, Meares D & Pearce D (2002) *Global student mobility 2025: Forecasts of the global demand for international higher education*. IDP Education, Australia.
- Bolling M, Pfister GU, Mygind E & Nielsen G (2019) Education outside the classroom and pupils' social relations? A one-year quasi-experiment, *International Journal of Educational Research*, 94, 29-41. <https://doi.org/10.1016/j.ijer.2019.02.014>
- Bordoloi R (2018) Transforming and empowering higher education through Open and Distance Learning in India. *Asian Association of Open Universities Journal*, 13(1), 24-36. <https://doi.org/10.1108/AAOUJ-11-2017-0037>

Braun V & Clarke V (2012) Thematic Analysis. In Cooper, H. (Eds.), *APA Handbook of Research Methods in Psychology: Vol. 2. Research Designs*. Washington DC: American Psychological Association.

Braun V & Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>

Britannica (2020) Higher Education. <https://www.britannica.com/topic/higher-education>

British Council in India (2014) *Understanding India: The future of higher education and opportunities for international cooperation*. https://www.britishcouncil.org/sites/default/files/understanding_india_report.pdf

Broad M, Matthews M & Mcdonald A (2004) Accounting Education Through an Online-Supported Virtual Learning Environment. *Active Learning in Higher Education*, 5(2), 135-151. doi:10.1177/1469787404043810

Browne L & Millar DK (2019) Increasing student voice and empowerment through technology: not just listening to the voice of the learner but using their digital capabilities to benefit a whole college community, *Journal of Further and Higher Education*, 43(10), 1433-1443. DOI: 10.1080/0309877X.2018.1491956

Carnoy M & Dossani R (2013) Goal and Governance of Higher Education in India. *Higher Education*, 65, 595-612.

Çelikbilek Y & Tüylü A.N A. (2019). Prioritizing the components of e-learning systems by using fuzzy DEMATEL and ANP, *Interactive Learning Environments*, DOI: 10.1080/10494820.2019.1655065

Chaney BH et.al. (2007) Development of an Instrument to Assess Student Opinions of the Quality of Distance Education Courses. *American Journal of Distance Education*, 21(3), 145-164. DOI: 10.1080/08923640701341679

Chattopadhyay S (2009) The Market in Higher Education: Concern for Equity and Quality. *Economic and Political Weekly*, 44(29), 53-61.

Creative Research Systems (2020) The Survey System, <https://www.surveysystem.com/sscalc.htm>

Croasmun JT & Ostrum L (2011) Using Likert-Type Scales in Social Sciences. *Journal of Adult Education*, 40(1), 19-22. <https://eric.ed.gov/?id=EJ961998>

Cross M & Atinde V (2015) The Pedagogy of the Marginalized: Understanding How Historically Disadvantaged Students Negotiate Their Epistemic Access in a Diverse University Environment. *Review of Education, Pedagogy, and Cultural Studies*, 37(4), 308-325. DOI: 10.1080/10714413.2015.1065617

Dash BM (2019) Perception towards quality and effectiveness of social work education through open and distance learning: A study in Delhi. *Asian Association of Open Universities Journal*, 14(1), 64-83. <https://doi.org/10.1108/AAOUJ-06-2019-0023>

- David, S. A. (2014). Economic Globalisation and Higher Education Transformation: Comparing the Trends in the States, Kerala, and Tamil Nadu of India. *J.Soc Sci*, 38(3), 283-292. <https://doi.org/10.1080/09718923.2014.11893258>
- David, S. A. (2016). Social Responsiveness of Higher Education in India: Embracing or Embarrassing Access, Equity and Social Justice. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(4), 181-193. <https://dx.doi.org/10.21659/rupkatha.v8n4.20>
- David, S.A., (2017b). Knowledge convergence towards economic polarisation: undergraduate students' postgraduate course choice in the UAE. *International Journal of Knowledge Management Studies*, 8(3/4), 316-328. ISSN: 1743-8268
- David, S.A. (2017a). Internationalisation of higher education in the UAE and the implications for undergraduate student's institutional choice for postgraduate studies. *Transitions: Journal of Transient Migration*, 1(2), 235-250. https://doi.org/10.1386/tjtm.1.2.235_1
- David, S.A., & Motala, S. (2017). Can BRICS Build Ivory Towers of Excellence? Giving New Meaning to the World Class Universities. *Research in Comparative and International Education*, 12(4), 512-528. <https://doi.org/10.1177/1745499917740652>
- David, S.A., & Hill, C. (2020). Curriculum innovation for postgraduate programmes: perspectives of postgraduate learners in the UAE, *International Journal of Innovation and Learning*, 28(3), 297-316. DOI: 10.1504/IJIL.2020.109838
- David, S.A., & Hill, C. (2021). Transforming teaching and learning in tertiary education: postgraduate students' perspectives from the UAE. *Education + Training*, 63(4), 562-578, <https://doi.org/10.1108/ET-05-2020-0122>
- Feldman R (1988) Epistemic Obligations. *Philosophical Perspectives*, 2, 235-256. <https://www.jstor.org/stable/2214076>
- FICCI (2013) *Higher Education in India: Vision 2030*. New Delhi: Federation of Indian Chambers of Commerce and Industry's Higher Education Summit.
- Forber P (2011) Historical Reconstruction: Gaining Epistemic Access to the Deep Past. *Philosophy & Theory in Biology*. Volume 3, August 2011.
- Forsyth H, Pizzica J, Laxton R & Mahony MJ (2010) Distance education in an era of eLearning: challenges and opportunities for a campus-focused institution. *Higher Education Research & Development*, 29(1), 15-28. DOI: 10.1080/07294360903421350
- Fricker M (2013) Epistemic justice as a condition of political freedom? *Synthese* 190(7), 1317-1332. <https://www.jstor.org/stable/41931810>
- George D & Mallery P (2003) *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Gertler B (2003) (Ed.), *Privileged Access: Philosophical Accounts of Self-Knowledge*. New York: Ashgate Publishing.

- Goodin R & Spiekermann K (2005) Epistemic Solidarity as a Political Strategy. *Episteme*, 12(4), 439-457. DOI:10.1017/epi.2015.29
- Gorard S & Smith E (2004) An International Comparison of Equity in Education systems. *Comparative Education*, 40(1), 15-28.
- Gupta J, Singh S, Pandita R & Bhat SK (2020) Enrolment scenario of LIS education in India through distance mode: a study. *Global Knowledge, Memory and Communication* ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/GKMC-09-2019-0110>
- Hariadi, B., et.al. (2021). Higher Order Thinking Skills Based Learning Outcomes Improvement with Blended Web Mobile Learning Model. *International Journal of Instruction*, 15(2), 565-578. <https://doi.org/10.29333/iji.2021.14238a>
- Hinkin RT (1998) A Brief Tutorial on the Development of Measures for Use in Survey Questionnaires. *Organizational Research Method*, 1(1), 104-121. <https://doi.org/10.1177/109442819800100106>
- Karen D (2002). Changes in Access to Higher Education in the United States: 1980-1992. *Sociology of Education*, 75(3), 191-210.
- Khalil, M.K., & Elkhider, I.A. (2016). Applying learning theories and instructional design models for effective instruction. *Advances in physiology education*, 40, 147-156. doi:10.1152/advan.00138.2015.1471043-4046/16
- Koole T (2010) Displays of Epistemic Access: Student Responses to Teacher Explanations. *Research on Language & Social Interaction*, 43(2), 183-209.
- Leh ASC & Jobin A (2002) Striving for Quality Control in Distance Education. *Computers in the Schools*, 19(3-4), 87-102. DOI: 10.1300/J025v19n03_08
- Lehrer K (1979) The Gettier Problem and the Analysis of Knowledge. In: Pappas G.S. (eds) *Justification and Knowledge. Philosophical Studies Series in Philosophy*, 17, 65-78. https://doi.org/10.1007/978-94-009-9493-5_4
- Lezberg AK (2009) Quality control in distance education: The role of regional accreditation. *American Journal of Distance Education*, 12(2), 26-35. DOI: 10.1080/08923649809526992
- Luckett K, Hunma A (2014) Making gazes explicit: facilitating epistemic access in the Humanities. *High Education* 67: 183–198. <https://doi.org/10.1007/s10734-013-9651-7>
- Mahlangu VP (2020) Rethinking student admission and access in higher education through the lens of capabilities approach. *International Journal of Educational Management*, 34(1), 175-185. <https://doi.org/10.1108/IJEM-04-2019-0135>
- Martin MF (2001) Review: Epistemic Openness and Perpetual Defeasibility. *Philosophy and Phenomenological Research*, 63(2), 441-448. DOI: 10.2307/3071077
- Ministry of Human Resource Development (2019). All India Survey on Higher Education 2018-19. https://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE%20Final%20Report%202018-19.pdf

- Morrow W (2009) *Bounds of Democracy: Epistemological Access in Higher Education*. Cape Town: HSRC Press.
- Morrow W (2007) *Learning to Teach in South Africa*. Cape Town: HSRC Press.
- Nagda BA, Gurin P & Lopez G E (2003) Transformative Pedagogy for Democracy and Social Justice. *Race, Ethnicity and Education*, 6(2), 165-191.
- NKC (2006) *National Knowledge Commission Report: Recommendations for Higher Education*. New Delhi: National Knowledge Commission.
- Perez RJ, Robbins CK, Harris LW Jr & Montgomery C (2020) Exploring graduate students' socialization to equity, diversity, and inclusion. *Journal of Diversity in Higher Education*, 13(2), 133–145. <https://doi.org/10.1037/dhe0000115>
- Ramirez FO (2013) World Society and the University as Formal Organization. *Journal of Education SISYPHUS*, 1(1), 124-153.
- Rensburg, I., Motala, S. & David, S.A. (2015). Internationalisation of Higher Education: A South African Perspectives. *Frontiers of Education in China*, 10(1), 91-109. <https://doi.org/10.3868/s110-004-015-0006-8>
- Rensburg, I., Motala, S. & David, S. A (2016). Research Collaboration among Emerging Economies: Policy and Economic Implications for BRICS Nations. *International Journal of Economic Policy in Emerging Economies*, 9(4), 344-360. DOI: 10.1504/IJEPEE.2016.081406
- Schuster, C., *et al.* Transfer of metacognitive skills in self-regulated learning: an experimental training study. *Metacognition Learning*, 15, 455–477 (2020). <https://doi.org/10.1007/s11409-020-09237-5>
- Sharma, A.M., & Srivastav, A. (2022). Study to Assess Attitudes towards Statistics of Business School Students: An Application of the SATS-36 in India. *International Journal of Instruction*, 14(3), 207-222.
- Slaughter (1997) *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore: The John Hopkins University Press.
- Sturgeon S (2008) Reason and the Grain of Belief. *NOUS*, 42(1), 139-165. <https://www.jstor.org/stable/25177157>
- Subba Rao S (2006) Distance education and the role of IT in India. *The Electronic Library*, 24(2), 225-236. <https://doi.org/10.1108/02640470610660396>
- Thompson E (2006) Can the Distance Education Student Progress (DESP) Inventory be Used as a Tool to Predict Attrition in Distance Education? *Higher Education Research & Development* 18(1): 77-84. DOI: 10.1080/0729436990180106
- UIS (2015) International Standard Classification of Education Fields of education and training 2013 (ISCED-F 2013) – Detailed field descriptions. Montreal: UNESCO Institute of Statistics.

UIS (2016) *Global flow of tertiary level students*. Montreal: UNESCO Institute of Statistics.

Walker M (2006) *Higher Education Pedagogies: A Capabilities Approach*. Berkshire: Society for Research into Higher Education & The Open University Press.

Wang C & Liu Z (2003) Distance Education: Basic Resources Guide. *Collection Building*, 22(3), 120-130.

Wheelahan L (2014) Babies and Bathwater: Revaluing the Role of the Academy in Knowledge. In Gibbs, P., and Barnett, R. (2014). (Ed.), *Thinking about Higher Education*. pp.125-138. London: Springer.

Yılmaz B, Külçü Ö, Ünal Y & Çakmak T (2013). Distance education on digitization: evaluation of an application in Turkey. *Aslib Proceedings*, 65(4), 336-357. <https://doi.org/10.1108/AP-11-2011-0049>

Yorke M & Longden B (2004). *Retention and Student Success in Higher Education*. The Society for Research into Higher Education & Open University Press, London.

Zagzebski L (1997). Virtue in Ethics and Epistemology. *American Catholic Philosophical Quarterly* 71(Supplement): 1–17. DOI: 10.5840/acpapro19977110

Zepke N & Leach L (2010). Appropriate Pedagogy and Technology in a Cross-cultural Distance Education Context. *Teaching in Higher Education*, 7(3), 309-321. DOI: 10.1080/13562510220144806