Sociological Teaching

V.1, N.1 | jan./jun.
2022

International Sociological Association
Sociological Teaching

Sociological Teaching

Editorial

Editor-in-Chief

Marcelo Pinheiro Cigales - University of Brasília, Brazil.

Editorial Board

Katherine Lyon - University of British Columbia, Canada.
Amurabi Oliveira - Federal University of Santa Catarina, Brazil.
Annette Tezli - University of Calgary, Canada.
Deepak Kumar Verma, Dr B R Ambedkar University of Social Sciences, India.
Stephanie Medley-Rath, Indiana University Kokomo, USA.
Sharmla Rama, University of KwaZulu-Natal, South Africa.

Scientific Council

Carlos Benedito Martins (UnB/Brazil)
Cristiano das Neves Bodart (UFAL/Brazil)

Layout

Fabio Monteiro de Moraes (UFAL/Brazil)

Summary

Editorial **01-02**

Presentation **03-04**

Digital Teaching in Times of Covid-19: Risks and Opportunities **05-26**
Andrea Breitenbach

The Digital Divide: Teaching and Learning at the University of KwaZulu-Natal during the Covid-19 Pandemic **27-41**
Sultan Khan

Remote Teaching and Sociological Reflexivity: A few Insights from Brazil **42-52**
João Marcelo E. Maia

Students in the spotlight: Using collaborative autoethnography to build a community of learning in the Corona crisis **53-74**
Isabel Steinhardt

The Sociology of a Covid-19 Virtual University **75-100**
Carlos Mariam Seedat-Khan and Aradhana Ramnund-Mansingh

Sociological Teaching

Presentation

These articles were originally published in the *Pedagogy Series,* housed on the ISA's *Social Justice and Democratization Space* in January 2021. We are republishing it in order to standardize all the articles in the Sociological Teaching journal.

Dear colleagues,

Welcome to the first issue of the ISA's new *Pedagogy Series,* a triannual publication facilitating transnational exchange of research and reflections on sociology teaching and pedagogy in sociology. This publication is a collaboration between the ISA's *Social Justice and Democratization Space* – a dynamic portal for a global community of sociologists – and the ISA's new thematic group, *Sociological Teaching. Sociological Teaching* brings together international sociologists who have a research interest in the Scholarship of Teaching and Learning, specialize in teaching sociology, and incorporate sociological insights into their teaching practices.

This first issue features scholars' analyses of and reflections upon the transition to teaching sociology remotely due to the COVID-19 pandemic. Contributions in this January issue come from sociologists working in South Africa, Brazil, and Germany. The five articles shine a light on numerous facets of this challenging time, including the digital divides constraining and enabling student learning opportunities, sociology pedagogies suitable to the remote context, and the gendered nature of COVID-19 labour.

The first two papers, written by Andrea Breitenbach and Sultan Khan respectively, grapple with layered digital divides shaping access to remote education in diverse national contexts. Breitenbach considers how students' remote education is influenced not only by digital access, but by digital acceptance and competency informed by socio-demographic factors. Drawing upon survey data from Germany

and the United States, Breitenbach demonstrates how certain groups of students struggle more with the switch to digital teaching than others. Khan situates the digital divide within national context to consider how this divide structures access to Information and Communication Technology (ICT) at the institutional level within post-liberation South Africa. Khan presents a case study of the University of Kwazulu-Natal and its COVID-19 response, with reference to deepening ICT inequities between historically advantaged white universities and disadvantaged Black universities in the nation, informed by legacies of colonialism and Apartheid.

Written by João Marcelo E. Maia and Isabel Steinhardt respectively, the third and fourth papers focus on the pedagogical implication of remote teaching for sociology educators. Reflecting on persistent inequities in Brazil's higher education system, Maia uses the unexpected experience of emergency online teaching as a reflexive opportunity to build on Halasz and Kaufman's (2008) call for educators to approach sociology *as* pedagogy. In Germany, Steinhardt details the challenges students face in digital education and how she addressed some of these challenges through course design, centering collaborative autoethnography as a process for creating a digital community of learning.

The final article is a critical piece contributed by Mariam Seedat-Khan and Aradhana Ramnund-Mansingh. The authors unpack the implications of gendered shifts in teaching labour for women faculty in South Africa due to COVID-19. They systematically document considerations for promoting gender equity in academia in a time when gender inequities appear to be deepening.

Thank you very much for your readership and support for this new ISA publication.

From the Editors

Sociological Teaching

Digital Teaching in Times of Covid-19: Risks and Opportunities

Andrea Breitenbach
Researcher and teacher at the Department of Social Sciences of the University of Marburg/ Germany.
E-mail: andrea.breitenbach@staff.uni-marburg.de

Abstract

COVID-19: It started in one place in January 2020 and has since reached the whole world. The global pandemic has been spreading and changing our lives since. The COVID-19 crisis has also changed many things within the world of higher education. In-person teaching was no longer possible; instead, almost all courses were offered in digital formats. This sudden change poses enormous challenges for universities, students, and teachers. This paper discusses the advantages, disadvantages, and opportunities offered by digital teaching. Based on central assumptions of the 'second digital divide,' it examines whether certain groups of higher education students are more affected by the switch to digital teaching than others. Findings from national and international studies were used, as well as a survey from the University of Marburg (Germany). They show that there is a relationship between various socio-demographic factors and the evaluation of digital teaching. For example, university students with highly educated parents more often rate digital courses as a good substitute for face-to-face teaching than students with less educated parents. A brief overview highlights the problems faced by teachers in the transition to digital teaching. This paper ends with a discussion of the opportunities that arise from the digitalization of teaching and the wishes of students and teachers with regard to future teaching.

Keywords: Digitalization of teaching, COVID-19, digital teaching, second digital divide, social inequality, higher education, non-traditional students

Introduction

The digitalization of teaching at universities began several decades ago. Although numerous virtual universities are already offering online-only courses, most bricks-and-mortar universities are still providing primarily face-to-face courses. That has now all changed due to the COVID-19 crisis. Students and teachers have suddenly been confronted with digital teaching formats, whether they wanted them or not.

With the almost complete conversion to digital teaching, major challenges for universities, teachers and students have arisen, as well as opportunities for future teaching. This paper deals with the advantages and disadvantages of digital teaching. The focus is on students' perspective, while the teachers' view is only touched upon in passing. In this context, the question arises as to whether certain groups of higher education students are more affected by the switch to digital teaching than others. According to the assumptions of the 'second digital divide', both the social background and socio-economic context of the students should play a role. It can also be assumed that the heterogeneity of the students will influence how they use digital media. Students with children, commuters, etc., have different needs concerning digital teaching and, would therefore evaluate it differently.

In this paper, central aspects that influence digital learning are addressed. Theoretically, these can be assigned to the area of social inequality. The time before the COVID-19 crisis and the time afterwards are a sub-issue in each case. Aspects such as the prerequisites for using digital media will be explained, and then digital teaching since the COVID-19 crisis will be evaluated – focusing not only on disadvantages and problems, but also advantages. How teachers have dealt with digital teaching since the crisis started is then briefly presented. The results of international and national studies serve as a basis for the investigation. In addition, the findings of a survey on digital teaching are presented. This work concludes with a reflection on the opportunities for digital learning that have resulted from COVID-19.

1 Theoretical background

The COVID-19 crisis affected universities in all 191 countries around the world to which COVID-19 has spread. Since the lockdown, schools and teachers are using

almost digital tools to ensure the continuation of teaching and learning. However, not all countries and students have been affected equally. Here, central aspects from a sociological point of view that have an impact on digital learning are presented. These include various forms of the digital divide and other factors, such as the heterogeneity of students. From a theoretical point of view, these aspects belong to the field of social inequality, but, to date, they have rarely been related to this field in the academic literature (van Dijk, 2006).

The unequal access of different population groups to information and communication technologies, i.e. the digital divide or digital inequality, is a fundamental problem for digital teaching. This access is, in turn, influenced by other aspects, such as socio-economic factors. When research into the digital divide started, the focus was on access to the internet or digital media. This approach was complemented by the research of DiMaggio and Hargittai (2001). Hargittai (2002) described "*five dimensions along which divides may exist:*

1. *technical means (software, hardware, connectivity quality);*
2. *autonomy of use (location of access, freedom to use the medium for one's preferred activities);*
3. *use patterns (types of uses of the Internet);*
4. *social support networks (availability of others one can turn to for assistance with use, size of networks to encourage use); and,*
5. *skill (one's ability to use the medium effectively)"*

Internet skills are classified as a 'second digital' divide by Hargittai (2002).

In the following section of the paper, the technical equipment of the population will be discussed, exemplarily internet access. The implications of the second digital divide are then discussed, in terms of students.

Technological digital divide

According to Unesco (2020), 86% of the population in developed countries had access to the internet before the COVID-19 crisis compared to only 47% in developing countries. In India, the proportion was around 35% in 2016, although this country has an impressive digital infrastructure for a developing country. In the African

continent, broadband hardly exists beyond urban hotspots (Hill & Lawton, 2018). However, even in developed countries such as Italy, a gap is visible. According to the Unesco chair on Population, Migration and Development, about 25% of families in Italy do not have broadband internet connection, including 20.6% in Trentino (northern Italy) and 35.7% in Calabria (southern Italy) (Unesco, 2020).

Access to the internet, especially broadband internet, depends, among other factors, on economic resources. For this research, the USA will represent North America, and Germany will represent Europe. According to the Digital Economy and Society Index (DESI) (European Commission, 2020), Germany is in the middle of Europe in terms of digital technologies. In 2019, 88% of low-income internet users in Germany had broadband internet access, compared to 98% for high income users (DeStatis Statistisches Bundesamt, 2018, p. 10). In the USA, the number in 2016 was 58.2% for low-income compared with 96.5% for high-income (United States Census Bureau, 2018, p. 7). However, it is not only economic resources that play a role, but also factors such as education. In Germany, the share of pure internet use was 80% for people with lower level of education and 96% for those with high level of education (DeStatis Statistisches Bundesamt, 2018, p. 14). In 2016 in the USA, 55.7% of users with lower level of education had a broadband connection compared with 93.1% of users with high level of education (United States Census Bureau, 2018, p. 8). With regards to access to digital media, it can generally be said that there are still major inequalities worldwide.

The findings can be applicable to students: the digital divide is influenced by factors such as the socio-economic situation or socio-cultural background of students. Pupils and students with fewer socio-economic resources can only participate to a limited extent in digital learning. Good technical equipment and fast internet access depend on economic resources, but not exclusively. Empirical studies have shown, for example, that educational background and gender have an influence on equipment (computers, internet), but also on the use of digital media. The higher the income and level of education of parents, the more likely it is that young people have access to these types of media (Pietrass, 2007, p.1). The effects of gender and geographical location (urban versus rural) are slowly decreasing (Chinn & Fairlie, 2007; Pietrass, 2007; Unesco, 2020).

Second digital divide

Hargittai (2002) coined the term 'second (level) digital divide' and argued that online skills, in particular, play a role in the digital divide. This means that it is not only important to gain access to digital media, but also to have the ability to find and process information. In the literature, the term digital literacy is sometimes used for this ability. More recent studies, such as those by Niesysto and Nieysto et al. (2009, 2009), expand the approach of Hargittai (2002) and argue, following Bourdieu's theory, that not only is access to digital media unequally distributed, but that differences exist in the quality and intensity of use. Thus, they conclude that the use of digital media is strongly related to the users' initial conditions and their social context in real life. Family milieus and the educational capital available have a particularly strong influence on different forms of media acquisition among children and young people. Further information on the topic of the 'second digital divide' is found in empirical studies by Büchi et al. (2015), van Dijk (2006), Ignatow and Robinson (2017) and Scheerder et al. (2017).

People with disabilities

This group still has unequal access to digital media. Although digitalization can contribute to inclusion, new barriers are emerging for people with disabilities. However, people with disabilities do not form a homogeneous group. Depending on the type of disability, their needs vary such that someone with a learning disability has different needs compared to those of a blind person (Hargittai, 2002; Niesyto, 2009; Niesyto *et al.,* 2009). According to Who (2011), more than 15% of people worldwide have a disability, of whom 2–4% have significant functional disorders. In low-income countries, the proportion is slightly higher, at around 18%, than in high-income countries, where it is around 12%. The situation of people with disabilities is rarely addressed in media pedagogical publications. Nevertheless, this group should receive more attention. The use of computers and the internet is taken as an example. According to Vicente and López (2010), people with disabilities use computers and the internet much less than the rest of the population. There are many reasons for this,

such as a lack of technical innovations by the information and communication technologies industry. But other issues, such as financial resources and employment status, also play a role.

Heterogeneous life situations

Another aspect for the use of digital media is the heterogeneity of higher education students, which has risen sharply over the past decades. The heterogeneity manifests itself in highly divergent knowledge requirements but also in other areas, for example, heterogeneous life situations (commuters, students with children etc.). This creates new challenges for universities and, at the same time, for students and teachers. This group plays a minor role in discussions on the digitalization of teaching. Especially for learners in heterogeneous life situations, digital teaching concepts are rarely found; there are hardly any special courses for non-traditional students, such as employed people, commuters and people with children, although this group is continuously growing. Although virtual universities already exist, face-to-face universities only offer hybrid courses or the inverted classroom to a limited extent (Dolch & Zawacki-Richter, 2018; MacDonald, 2018).

2 Digital teaching – the students' perspective

Which prerequisites for the use of digital media did higher education students already have before the COVID-19 crisis? We will investigate this question here and show the problems and disadvantages, as well as the advantages, that have arisen from the COVID-19 crisis. Numerous papers, in the form of working papers, online contributions and others, serve as a basis. Empirical studies on the impact of the COVID-19 crisis on studies and university teaching are rare to date, as COVID-19 has only been spreading for a few months. Again, among developed countries, the USA represents North America and Germany for Europe in the findings presented here. For countries with fewer economic resources, we hypothesize that the situation is likely to be different.

Before the COVID-19 crisis

Prerequisites for the use of digital teaching include not only the students' technical equipment but also that of the universities. Based on the ECAR study (Study of Undergraduate Students and Information Technology), which is an annual survey since 2004 of about 10,000 students at US universities, it has been shown that the number of students owning a laptop has increased over the years: From around 45 % in 2004 to 91% in 2018 (Borreson Caruso, 2004, p. 2; Galanek *et al.,* 2018, p. 7). High-speed internet access was available to 65% of university students, although the quality of university internet access varies widely. In Germany, the numbers are comparably high (Gierdowski, 2019; Steffens *et al.,* 2018). On the part of the universities, the range of digital courses and tools also plays a role for the use of digital teaching. It would go beyond the scope of this paper to describe this point.

The fact that it is not only technical equipment that affects access to and use of digital courses has already been discussed previously. A selection of other factors such as work, given that 69% of students in the USA in 2018 had a part-time job during their studies, of whom 57% worked between 10 and 29 hours per week. In Germany, 68% of students had a part-time job in 2016. Of all students in face-to-face full-time study (around 92% of all students), 68% worked up to 10 hours per week and 23% worked from 11–20 hours (Galanek *et al.,* 2018, p. 27; Middendorff *et al.,* 2017, p. 60, 168). But other aspects, such as parenthood or impairments, are factors influencing the use of digital courses: In 2017, about 25% of college students in the USA were parents of at least one child while in Germany, this was about 6% of all students in 2016 (Higheredtoday - American Council on Education, 2020; Middendorff *et al.,* 2017, p. 25). In Germany, 23% of students (2016) had physical, mental or sensory impairments. Eleven per cent of students stated that their studies were made more difficult in the long term due to their disability (Middendorff *et al.,* 2017, p. 175). Six per cent of students in the USA had a physical disability or learning disability, according to the 2019 ECEAR study (Gierdowski, 2019, p. 20). Of this group, only about half (53%) rated the support of their technology needs by HEIs as positive.

But what does the use of digital media at universities look like? A distinction must be made between the types of digital media used. Persike and Friedrich (2016)

used data from the CHE University Ranking to examine current students in Germany. They divided digital media into five groups, including traditional media (learning platforms, emails or PDFs etc.), social (chat, forums and social networks etc.), and interactive media (educational games, web conferences etc.). Around 30% of the students surveyed restricted themselves predominantly to the use of classic digital media, and only 21% of the students used a wide range of available digital media in their studies. There were significant differences depending on the subject studied: in computer science, 31% were 'digital all-rounders'; however, in physics, only 13% were. Sociology was not represented in the survey, but, in political science, 30% were classic users and 20% 'digital all-rounders'. It should be noted, however, that the type of digital media made available by the universities and the quality of these media were not taken into account.

Another aspect is the digital competence of students. In Germany, Senkbeil et al. (2019) found that 20% of first-year students did not have the level of basic digital literacy necessary for taking up studies. The results were based on a test (multicohort sequence design) carried out in the course of the NEPS (National Education Panel). Among the advanced students (sixth semester), as many as 53% did not have the digital skills required at that time. Among other things, there were disciplinary differences between the subjects. Students of languages and cultural studies had the lowest levels of competence, followed by law, economics and social sciences, while students of engineering had the highest levels of competence. Senkbeil et. al. (2019) also present results for North America with the ETS iskills assessments (Educational Testing Service). Comparable results to Germany were found for advanced students. Among prospective students, about 50% failed to meet the requirements.

The acceptance of digital media is also an important factor for the use of digital media. In the USA, the use and acceptance of online media in higher education is much higher than in Germany. When asked which teaching formats are used (multiple answers were possible) in the ECAR study at universities in the USA (2019), more than 50% of teachers shared that they use digital media, such as the inverted classroom, at least occasionally. Sixty-four per cent rated their digital skills as very good. More than 50% of the teachers enjoyed teaching in the form of blended learning scenarios. Among the students, about the same number (53%) favoured

blended learning scenarios, and 70% were in favour of face-to-face teaching. Students who were either employed, older than 25 years, living in partnerships or commuting preferred courses that were mostly or entirely online (Galanek *et al.,* 2018; Galanek & Gierdowski, 2019; Gierdowski, 2019).

Unfortunately, there are hardly any recent scientific studies that provide information on the socio-economic or socio-cultural background of students and media use at universities. Similarly, there are hardly any studies on the use of digital media in sociology, although Benson et al. considered this important many years ago: "However, systematic descriptive data on current practices by sociologists are not readily available. Irrespective of the ecology of use, digital technologies may have profound effects on the processes of teaching and learning" (Benson *et al.,* 2002, p. 142).

Since the COVID-19 crisis

Two hundred leaders of renowned universities from 53 countries took part in a survey by Times Higher Education (THE) in May 2020. Of the 200 universities, 189 stated that they were conducting at least a quarter of their courses online during the 'corona term'. Over 50% of the universities had offered all courses in digital format. The question of which of the various disciplines made the transition to online teaching and learning easy was most frequently answered in the affirmative by economics (42%), while medicine and dentistry were the most difficult to digitize. The social sciences came third with 39%. Among the teaching formats offered, video conferencing was most used (54.9%), followed by asynchronous teaching in the form of presentation slides (15.2%) and teaching videos (11.6%; Aristovnik *et al.,* 2020).

A selection of findings from studies on digital teaching during COVID-19 can be found below, they mainly refer to the following studies:

'Global Student Survey' is an international study in which more than 31,000 students from over 100 countries worldwide were surveyed online between May and June 2020. For the USA, the sample comprises 385 people and, for Germany, 368 (Aristovnik *et al.,* 2020).

'DigiLehreStud' is the first round of an online survey on digital teaching at the University of Marburg (Germany) in the Department of Social Sciences from June to July 2020 in which 305 students participated (Breitenbach, 2020b).

'PotsBlitz' is an online survey from the University of Potsdam (Germany) on digital teaching in the times of COVID-19 in which 3,795 students and 701 teachers from all faculties participated (Universität Potsdam, 2020). However, it should be noted that the results may not be representative due to the small sample size of some surveys.

Disadvantages and problems with digital teaching

Job loss: this aspect only indirectly affects digital teaching. Students mainly work simultaneous with their studies in order to finance them, as other financial resources are not sufficient. This means that many students are dependent on a part-time job. On an international level, 61.7% said they had lost their jobs because of the COVID-19 crisis but a breakdown by country is not available. In Germany, the number of students who lost their jobs is around 35% (Aristovnik *et al.,* 2020, p. 5; Juso Hochschulgruppe, 2020). This means that the situation for students with fewer economic resources is worsening, which intuitively will have a negative impact on their academic outcomes. This also applies to existential fears, which were mentioned more often by students in connection with losing their jobs.

Workload: the digitalization of teaching during COVID-19 has had a particularly strong impact on the workload of students. More than 42% of all respondents to the Global Student Survey stated that their workload had increased compared to their loads before the COVID-19 crisis. Students in Europe (58%), Germany (76%) and North America (54.7%) are strongly affected. The studies by the University of Potsdam and the University of Marburg have come to similar conclusions (Breitenbach, 2020b; Universität Potsdam, 2020).

Quality of the courses offered: around 20% of students worldwide stated that the quality of teaching had suffered due to the shift to digital teaching. According to the respondents, the attitude of the lecturers is the main factor that decides whether a switch to digital teaching is successful or not, and the subjects of medicine and dentistry have had the most difficulty in digitizing (THE, 2020). The majority of the social scientists surveyed (multiple responses possible), who were not satisfied with digital teaching, named the poor quality of digital teaching (58.8%) as the reason for their dissatisfaction. Digital teaching could not replace presence, was the main

reason (76.5%) for expressing negative opinions. However, the poor quality of teaching also led to fewer courses being taken than planned (Breitenbach, 2020b).

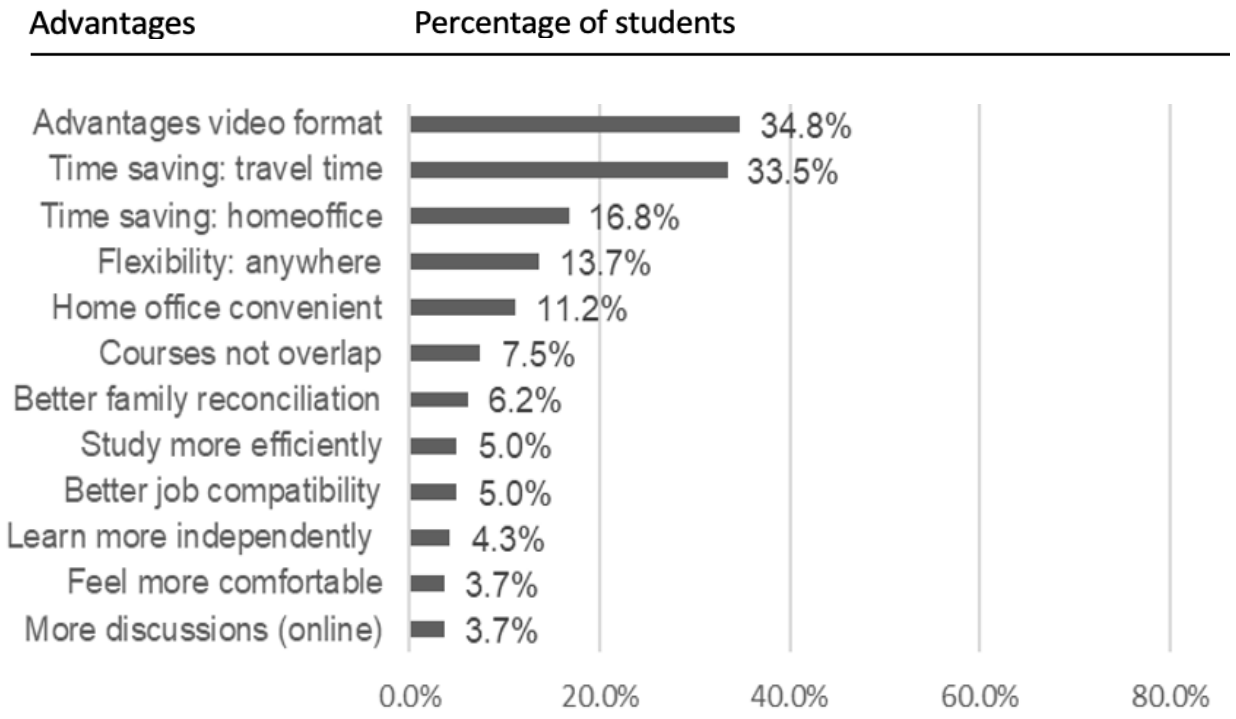
Isolated learning: there are many negative aspects of isolated digital learning. For example, self-motivation, self-discipline and self-initiative become more important, which means that one has to adapt one's learning habits efficiently in order to minimise stress and the feeling of work overload (Aristovnik *et al.,* 2020, p. 23). Students taking part in the Potsdam (29%) or Marburg (both German universities) survey were less able to organise themselves. This was partly due to the lack of technical equipment, as well as problems caused by taking care of children or family dependents, etc., on their own (Breitenbach, 2020b; Universität Potsdam, 2020). The open questions on the disadvantages of digital teaching point to the fact that 13.9% of those surveyed have increasingly postponed work (Breitenbach, 2020b).

Mental stress: the extent to which students are burdened by digital teaching could be determined using data from the 'Global Student Survey' (Aristovnik *et al.,* 2020, p. 15). The most frequent manifestations of stress were anxiety (45.2%), followed by frustration (39.8%), anger (39.1%) and hopelessness (25.9%). Mental stress was also frequently mentioned in the open questions of the Potsdam and Marburg studies (8.2%; Breitenbach, 2020b; Universität Potsdam, 2020).

Other important findings relate to exchanges and communication: The reduced contact between students was perceived as particularly problematic, as it could not be compensated for by online communication or the use of social media. Over 70% found contact with fellow students in the digital semester more difficult than before COVID-19, and communication in the seminars and with teachers was also made more difficult by digital teaching. These points were particularly mentioned in modules that rely on class discussions, such as in the social sciences (Breitenbach, 2020b).

Neither the 'Global Student Survey' nor other studies have provided sufficient information on the problems faced by student with disabilities. Many universities refer to standards for digital accessibility, but much more information is not yet available. In the Marburg study, 16.7% of students were disabled. The maindisadvantages mentioned in this group were in terms of excessive workload, lack of discussion and exchange in courses. Problems with the internet were mentioned and the quality of online teaching was often rated lower than face-to-face teaching. (Breitenbach, 2020b).

Table 1. Advantages of digital teaching



Advantages of digital teaching

The advantages of digital teaching largely coincide with those of studies on digital teaching formats in general. For this reason, they are only presented in bullet points. Nevertheless, it is important to keep an eye on the advantages as well as the disadvantages when discussing the future of digital teaching at universities. Only the Marburg study asked a question about the advantages of digital teaching. The question is an open question, whereby multiple answers were possible. For the sake of clarity, the responses are presented graphically, with only the advantages with the most responses being represented.

Flexibility is one of the most frequently mentioned advantages, especially the possibility of learning at any time or place. Surprisingly, there are even students who participate more often in discussions when courses are held online. Remarkable results can be found among students with

disabilities with regard to the delivery of classes in video format. They stated more often than other students that they see advantages in it. This may be due to the fact that, in Marburg, many of the disabled students have a visual impairment.

Flexibility with regard to the place of learning was also often mentioned by them as an advantage. Otherwise, the answers hardly differ from those of other students.

As expected, students who commute long distances see the home office as an advantage in terms of time savings and convenience. Flexibility in terms of the place of study and time management is also frequently mentioned. They also see better compatibility of family and studies as an advantage of digital teaching. The results are less clear for employed students. They seem to prefer certain advantages of the video format, such as the independent acquisition of content. They also see travel time savings and time savings through the home office as advantages. Only a few respondents have children of their own or care for family members, so no conclusions can be drawn about this group on the basis of the data (Breitenbach, 2020b, 2020c).

Correlations

According to the assumptions of the 'second digital divide', both the social and socio-economic context play a role in dealing with digital media. It can be assumed that the heterogeneity of students also has an influence. Non-traditional students, such as commuters or those with children, should have different needs for digital teaching and evaluate digital teaching differently. To this end, two questions of the Marburg study were analysed: 'Do you think that digital teaching offers and tools can sufficiently replace face-to-face teaching in the COVID-19 crisis? (= replace face-to-face) and 'I have the feeling that by using digital teaching offers and tools (e.g. video conferencing, teaching videos), I can master the challenges of my studies during Corona' (= mastering challenges). The following variables are included in the analyses as independent variables: commuters, students with a part-time job, with disabilities, with a migration background, with slow internet, the education of parents and gender. Other variables, such as the amount of time spent on care and single parents, could not be taken into account. Children and family members cared for only accounted for a few students on a larger scale, and nobody claimed to be a single parent. A table is used to show the results of correlations (Spearman). Only significant results ($p<0.05$) are described in detail.

All significant results indicate slight correlations based on the coefficient: there is a correlation between employment and mastering challenges (-0.141).

Table 2. Correlations of two questions from the Marburg study

	Replace face-to-face teaching 1=very good; 7=not good	Mastering challenges 1=strongly disagree; 7=strongly agree
Part-time job (hours)	0.109	-0.141*
Commuters (minutes)	-0.206**	0.086*
Disabilities (yes/no=ref)	-0.033	-0.246***
Migration background (yes/no=ref)	0.066	-0.079
Slow internet(yes/no=ref)	0.259***	-0.168*
Education mother (school type)	-0.155*	-0.030
Education father (school type)	-0.163*	-0.052
Gender (f/m=ref)	-0.070	-0.058

*p<0.05; **p<0.01; ***p<0.001 (2-tailed)

The more hours students were working before the COVID-19 crisis, the more likely they are to suspect that they are not up to the challenges. This could be because these students have fewer financial resources (which is why they work) and are therefore more affected by the COVID-19 crisis.

The more time students spend commuting, the more likely they are to think that digital teaching can replace face-to-face teaching sufficiently well (-0.206) and the more likely they are to think they can meet the challenges (0.086). Disabled students tend to be unable to cope well with the challenges to their studies posed by the digital courses on offer (-0.246). Students with slow internet access assume that digital tools cannot replace face-to-face teaching well (0.259) and that they are not as good at meeting the challenges (-0.168) as compared to the face-to-face teaching. The educational background of the mother and father plays a role: the higher the education of the mother or father, the more likely it is that the children believe that digital teaching can acceptably replace face-to-face teaching (-0.155/-0.163). The results indicate that there is a correlation between the evaluation of digital learning opportunities and various socio-demographic characteristics. However, further analyses based on larger samples and the checking of third-party variables are necessary to draw further conclusions.

3 Digital teaching – the teachers' perspective

How do teachers deal with digital teaching? On what problems do they focus? These questions were investigated with a survey of teachers. For this purpose, all teachers in the Department of Social Sciences were asked to participate in the first part (time point) of an online survey, in which 36 interviews were realised. The survey ended only a few days ago, which is why this paper will essentially only deal with two aspects and will not present international studies. In addition, the findings of the Potsdam study and an online survey by the University of Kiel (May 2020, response: 377 complete interviews) among teachers of all faculties are included. Gender differences are an important issue. However, the data do not allow for meaningful analyses, as the results are not representative (small sample size (Marburg); convenience sample (Kiel)). Therefore this aspect is largely excluded, although initial empirical studies suggest significant gender differences due to COVID-19. Previous findings of various national and international studies show that women, in particular, are much more negatively affected by the COVID-19 crisis than their male colleagues, for example, in terms of scientific publication output.

Workload: the majority of teachers report an enormous increase in the workload related to teaching. According to the Potsdam study, over 81% consider the workload to be very high or high in reference to regular semesters. Similar results are found in the Kiel and Marburg studies. Marburg and Potsdam teachers were also asked about the change in general workload, which, in their opinion, has increased exorbitantly. In this context, Marburg teachers refer to the sharp increase in emails from students as one reason for increase in workload. Gender effects were examined in the Kiel study, but no differences between women and men could be identified. Slight differences in the workload caused by online teaching were found for teachers who take on care tasks (for children or relatives) in the Potsdam study (Breitenbach, 2020a; Klonschinski, 2020, p. 8; Universität Potsdam, 2020, p. 10).

Research: a sharp reduction in research activities and output accompanies the increased workload. The majority (Kiel 57.3%; Marburg 62.5%) stated that they had done significantly less research in the last two months. Almost as many of those questioned in the Marburg study (54.2%) were unable to carry out their

research as planned. The fact that the quality of research has suffered was mentioned by 45.9% of the Potsdam respondents. As reasons for the impairment of research activity, the teachers mainly cited the burden of the switch to digital teaching, childcare, lack of access to literature and the research field (Breitenbach, 2020a; Klonschinski, 2020, pp. 16-20).

Another point should be mentioned – the high level of teachers' commitment in the transition to digital teaching. How many teachers have partially or completely converted their courses is not apparent from the studies. Digital teaching is not as well developed in Europe as in the USA, where about half the teachers use digital courses and tools from time to time. As a result, the majority of teachers have had to familiarise themselves with a new skill in a short time. Hardly any of the Marburg teachers had experience with interactive media such as online courses. Only two people claimed to have worked with instructional videos before COVID-19, and none with the inverted classroom. Nevertheless, the majority of the teachers prepared themselves for digital teaching in the following ways: 80% used video tutorials, 68% were supported by colleagues, 56% by the university computer centre and 20% made use of specialist literature (Breitenbach, 2020a).

4 Opportunities

What needs do students and teachers have for teaching and learning in the future? Which opportunities do they see from COVID-19? The IAU online survey received 576 replies from 424 universities and other HEIs in 111 countries. Many of the respondents see the experience from the COVID-19 crisis as a good opportunity to learn from this exceptional situation. They have tried out new digital forms of teaching and would like to continue to offer more flexible learning opportunities, blended or hybrid learning and mixed synchronous and asynchronous learning. (IAU, 2020, p. 26). Since the quality of digital teaching has been criticised by students in some studies (see above), teachers should make use of support and further training courses as required. The same applies to students who often have too few digital skills. Digital courses and the use of tools should be regularly evaluated and, if necessary, revised.

The universities could invest more in technical infrastructure and the expansion of digital services. This applies both to the digitalization of administrative processes and access to digital teaching material or libraries (IAU, 2020, p. 26). The majority of teachers (58% Potsdam; 77.3% Marburg) would like to offer more online or digital teaching in the future, but they also stressed that face-to-face teaching should not be abandoned. Similar tendencies are evident among students (Breitenbach, 2020a, 2020b; Universität Potsdam, 2020). The Marburg students attach particular importance to synchronous teaching (online formats) and asynchronous but interactive media. Classical digital media (PDFs, learning platforms) play a subordinate role, while they would prefer to see the use of instructional videos, quizzes and the inverted classroom for the post-COVID-19 period. Teachers increasingly indicate that they would like to use the inverted classroom, instructional videos and online (office) consultation hours post COVID-19, but digital quizzes or tests only to a limited extent (Breitenbach, 2020a).

Another aspect relates to the reduction of mobility on the part of students and teachers in the wake of the COVID-19 crisis. Students and teachers travelled to a lesser extent: students could hardly participate in exchange programs anymore, while teachers had to forgo attending conferences. This has led to the increased use of alternative tools, such as video conferences. In the future, these alternatives could be used to a greater extent to reduce the burden on the environment by reducing individual transport.

Conclusion

In this paper, central aspects influencing digital learning were addressed, such as the technical equipment, but also influences arising from the social inequality between students. One focus is on the challenges that have arisen for teachers and students due to the transition to digital teaching. The findings of international and national studies show the diverse effects of the abrupt switch to digital teaching on learning. Problems and disadvantages, as well as advantages, have been identified. The following figure shows the students' perspective. For this purpose, the open answers of the Marburg study were categorised (see figure 1).

Figure 1. Word cloud: Advantages and disadvantages of digitisation

Whether certain groups of students are more affected by the switch to digital teaching than others was investigated using bivariate analyses. Differences were found in the evaluation of digital teaching depending on various socio-demographic characteristics or heterogeneity characteristics. For example, students from more highly educated parents consider digital teaching to be a good substitute for face-to-face teaching more often than others. People with disabilities state more often that they cannot cope with the challenges of studying during COVID-19. However, further studies are needed to draw far-reaching conclusions. Nevertheless, it has become clear how important it is to pay attention to the social context of the students and to include appropriate questions in surveys.

The discussion about the negative consequences of the COVID-19 crisis should not ignore the opportunities that have emerged. As the authors of the IAU study point out,

> this unplanned and unprepared experiment in distance teaching and learning has led to capacity building of staff and faculty who have learned and tested new tools and systems to enable distance teaching and learning. lt is therefore possible that a shift in mindset is happening or that this experience has opened a new horizon of opportunities for teaching and learning" (IAU, 2020, p. 26).

The COVID-19 crisis should be used as an opportunity for better teaching, to meet the different needs of learners. Both students and teachers would like to use more digital teaching courses in the future; a mixture of synchronous and asynchronous teaching seems desirable in this context. Students attach particular importance to interactive media, such as instructional videos, the inverted classroom, quizzes or formative tests. Special attention should be paid to students with disabilities by making available materials accessible to them.

In the current situation, however, it is necessary to consider the problems of students and teachers. One issue mentioned by both groups is the enormous increase in workload. It would be desirable to credit the hours of work involved in the creation and supervision of digital courses and virtual courses. In order to support students, care should be taken when planning future courses to ensure that they do not have a higher workload than the courses before COVID-19. For students with slow Internet access, for example, offline materials, such as material on USB drives and on-loan laptops, could be provided.

References

Aristovnik, A; Keržič, D; Ravšelj, D; Tomaževič, N; Umek, L. (2020). *Impacts of the COVID-19 Pandemic on Life of Higher Education Students*: A Global Perspective. Preprints 2020. Advance online publication. https:// doi.org/10.20944/preprints202008.0246.v2

Borreson Caruso, J. (2004). *ECAR Study of Students and Information Technology, 2004*: Convenience, Connection, and Control. ECAR. http://www.edtechpolicy.org/AAASGW/Session11/2004_techstudent.pdf

Benson, D. E.; Haney, W.; Ore, T. E.; Persell, C. H.; Schulte, A.; Steele, J.; & Winfield, I. (2002). *Digital Technologies and the Scholarship of Teaching and Learning in Sociology*. Teaching Sociology, 30(2), 140. https://doi.org /10.2307 /3211379

Breitenbach, A. (2020a). *DigiLehreLehrende*: Online Umfrage zur digitalen Lehre in Zeiten von Corona. 1. Erhebungszeitpunkt Lehrende.

Breitenbach, A. (2020b). DigiLehreStud: Online Umfrage zur digitalen Lehre in Zeiten von Corona.1. Erhebungszeitpunkt Studierende.

Breitenbach, A. (2020c). *Inverted Classroom in der Statistik Lehre* (1. Auflage). Norderstedt: BoD – Books on Demand.

Büchi, M.; Just, N.; & Latzer, M. (2015). *Modeling the second-level digital divide*: A five-country study of social differences in Internet use. New Media & Society, 18(11), 2703–2722. https:// doi.org/10.1177/1461444815604154

Chinn, M. D.; & Fairlie, R. W. (2007). The determinants of the global digital divide: A cross-country analysis of computer and internet penetration. Oxford Economic Papers, 59(1), 16–44.

DeStatis Statistisches Bundesamt (2018). *Wirtschaftsrechnungen. Private Haushalte in der Informationsgesellschaft – Nutzung von Informations- und Kommunikationstechnologien*: Fachserie 15 Reihe 4. Retrieved from https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/IT-Nutzung/Publikationen/Downloads-IT-Nutzung/private-haushalte-ikt-2150400197004.pdf? blob=publicationFile

DiMaggio, P.; Hargittai, E. (2001). *From the 'Digital Divide' to 'Digital Inequality'*: Studying Internet Use as Penetration Increases. Working Papers (No. 47). Retrieved from Princeton University, Woodrow Wilson School of Public and International Affairs, Center for Arts and Cultural Policy Studies website: https://ideas.repec.org/p/pri/cpanda/workpap15.html.html

Dolch, C.; & Zawacki-Richter, O. (2018). *Are students getting used to Learning Technology? Changing media usage patterns of traditional and non-traditional students in higher education.* Research in Learning Technology, 26(0). https:// doi.org/10.25304/rlt.v26.2038

European Commission (2020). https://ec.europa.eu/digital-single-market/en/desi. Retrieved from https:// ec.europa.eu/digital-single-market/en/desi

Galanek, J. D.; & Gierdowski, D. C. (2019). *ECAR Study of Faculty and Information Technology*. Retrieved from https://library.educause.edu/-/media/files/library/2019/12/facultystudy2019.pdf?la=en&hash=F0F8AF83BD870239A7E5CD285FBDBE157AA51135

Galanek, J. D.; Gierdowski, D. C.; Brooks, C. (2018). *ECAR Study of Undergraduate Students and Information Technology*. Retrieved from https://library.educause.edu/resources/2019/10/2019-study-of-undergraduate-students-and-information-technology

Gierdowski, D. C. (2019). *ECAR Study of Undergraduate Students and Information Technology*. Retrieved from https://library.educause.edu/ resources/ 2019/10/2019-study-of-undergraduate-students-and-information-technology

Hargittai, E. (2002). *Second-Level Digital Divide*: Differences in People's Online Skills. First Monday, 7(4). https://doi.org/10.5210/fm.v7i4.942

Higheredtoday - American Council on Education (2020). *Building Family-Friendly Campuses*: Strategies to Promote College Success Among Student Parents. Retrieved from https://www.higheredtoday.org/ 2017/06/12/building-family-friendly-campuses-strategies-promote-college-success-among-student-parents/

Hill, C.; & Lawton, W. (2018). *Universities, the digital divide and global inequality*. Journal of Higher Education Policy and Management, 40(6), 598–610. https://doi.org/10.1080/1360080X. 2018.1531211

IAU (2020). International Association of Universities (IAU). *Global Survey on the Impact of COVID-19 on Higher Education around the World*. Retrieved from https://www.iau-aiu.net/ IMG/ pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf

Ignatow, G.; & Robinson, L. (2017). *Pierre Bourdieu*: theorizing the digital. Information, Communication & Society, 20(7), 950–966. https://doi.org/ 10.1080/1369118X.2017.1301519

Juso Hochschulgruppe (2020). *Studieren während der Covid-19 Pandemie*: Studie im Auftrag der Juso-Hochschulgruppen, Durchführung Jacqueline Niemietz (FU Berlin). Retrieved from https://juso-hochschulgruppen.de/content/uploads/ 2020/07/Studieren-w%C3%A4hrend-der-Covid19-Pandemie_Analyse.pdf

Klonschinski, A. (2020). *Forschen und Lehren während der Corona-Pandemie – Auswertung einer Befragung unter Mitarbeiter*innen der CAU Kiel*. Retrieved from https://www.phil.uni-kiel.de/de/fakultaet/beauftragte/GB-PhilFak/aktuelles/auswertung-befragung-corona

MacDonald, K. (2018). *A Review of the Literature*: The Needs of Nontraditional Students in Postsecondary Education. Strategic Enrollment Management Quarterly, 5(4), 159–164. https://doi.org/10.1002/sem3.20115

Middendorff, E.; Apolinarski, B.; Becker, K.; Bornkessel, P.; Brandt, T.; Heißenberg, S.; Poskowsky, J. (2017). *Die wirtschaftliche und soziale Lage der Studierenden in Deutschland 2016*. 21. Sozialerhebung des Deutschen Studentenwerks durchgeführt vom Deutschen Zentrum für Hochschul- und Wissenschaftsforschung. Deutsches Zentrum für Hochschul- und Wissenschaftsforschung, Bonn, Berlin: Bundesministerium für Bildung und Forschung (BMBF).

Niesyto, H. (2009). *Digitale Medien, soziale Benachteiligung und soziale Distinktion*. MedienPädagogik, 17(Soziokulturelle Unterschiede), 1–19. https://doi.org/10.21240/mpaed/17/2009.06.23.X

Niesyto, H.; Meister, D. M.; Moser, H. (2009). *Medien und soziokulturelle Unterschiede*. MedienPädagogik, 17(Soziokulturelle Unterschiede), 1. https://doi.org/10.21240/mpaed/17/2009.09.11.X

Persike, M.; & Friedrich, J.-D. (2016). *Lernen mit digitalen Medien aus Studierendenperspektive*. Sonderauswertung aus dem CHE Hochschulranking für die deutschen Hochschulen. Arbeitspapier/ Hochschulforum Digitalisierung. 17. Berlin. Retrieved from https://hochschulforumdigitalisierung.de/sites/default/files/dateien/HFD_AP_Nr_17_Lernen_mit_digitalen_Medien_aus_Studierendenperspektive.pdf

Pietrass, M. (2007). Digital Literacy Research from an International and Comparative Point of View. Research in Comparative and International Education, 2(1), 1–12. https://doi.org/ 10.2304/rcie.2007.2.1.1

Scheerder, A., van Deursen, A.; van Dijk, J. (2017). Determinants of Internet skills, uses and outcomes. A systematic review of the second- and third-level digital divide. Telematics and Informatics, 34(8), 1607–1624. https://doi.org/10.1016/j.tele.2017.07.007

Senkbeil, M., Ihme, J. M.; Schöber, C. (2019). Wie gut sind angehende und fortgeschrittene Studierende auf das Leben und Arbeiten in der digitalen Welt vorbereitet? Ergebnisse eines Standard Setting-Verfahrens zur Beschreibung von ICT-bezogenen Kompetenzniveaus. Zeitschrift Für Erziehungswissenschaft, 22(6), 1359–1384. https://doi.org/ 10.1007/s11618-019-00914-z

Steffens, Y.; Schmitt, I. L.; Aßmann, S. (2018). *Mediennutzung Studierender*: Über den Umgang mit Medien in hochschulischen Kontexten. Systematisches Review nationaler und internationaler Studien zur Mediennutzung Studierender. https://doi.org/10.13154/rub.106.95

Times Higher Education (2020). *THE Leaders Survey*: Will Covid-19 leave universities in intensive care? Retrieved from https://www. timeshighereducation. com/features/ leaders-survey-will-covid-19-leave-universities-intensive-care

Unesco (2020). *Universities tackle the impact of COVID-19 on disadvantaged students*. Retrieved from https://en.unesco.org/news/universities-tackle-impact-covid-19-disadvantaged-students#:~:text=According%20to%20the%20UN's%20International,the%20population%20of%20developed%20countries.&text=Given%20that%20COVID%2D19%20is,%2C%20timely%20responses%20are%20needed.%E2%80%9D

United States Census Bureau (2018). *Computer and Internet Use in the United States*: 2016. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2018/acs/ACS-39.pdf

Universität Potsdam (2020). *Ergebnisbericht zu PotsBlitz "Online-Lehre 2020" im SoSe 2020*. Retrieved from https://pep.uni-potsdam.de/media/ PotsBlitz/Berichte/PotsBlitz_Gesamtbericht.pdf

Van Dijk, J. A.G.M. (2006). *Digital divide research, achievements and shortcomings*. Poetics, 34(4-5), 221–235. https://doi.org/10.1016/j.poetic. 2006.05.004

Vicente, M. R.; López, A. J. (2010). *A Multidimensional Analysis of the Disability Digital Divide*: Some Evidence for Internet Use. The Information Society, 26(1), 48–64. https://doi.org/10.1080/01615440903423245

WHO (2011). *World report on disability*. Retrieved from https://www.who.int/ disabilities/world_report/2011/report/en/#:~:text=About%2015%25%20of%20the%20world's, a%20figure%20of%20around%2010%25

***Originally published in**: january 2021*

Sociological Teaching

The Digital Divide: Teaching and Learning at the University of KwaZulu-Natal during the Covid-19 Pandemic

Sultan Khan
Associate Professor in Sociology at the University of KwaZulu-Natal.

Abstract

The Covid-19 pandemic affected all facets of life around the globe. Institutions of higher learning have not been immune to the pandemic, risking the interruption of the academic year. In a bid to save the academic year, institutions have been forced to look at how teaching and learning can take place without compromising their academic credibility and quality of instruction. Digital teaching and learning can be seen as a way of surmounting the restrictions placed on accessing education for full-time students, especially amongst those originating from low-income households and living a distance away from the university. In the more developed parts of the world, access to Information and Communication Technology (ICT) is much more advanced although there are some variations in the levels of access. Notwithstanding, it is much more accessible as compared to their counterparts in developing countries. This digital divide places universities in a precarious position in developing countries. This paper examines how ICT can be used effectively to facilitate teaching and learning in these uncertain times. It focuses on how South African universities moved to embrace ICT resources post-liberation and the creative use of this to advance their teaching and learning within their institutions. However, within the country there is a digital divide between historically advantaged white universities and the Black disadvantaged ones due to the legacy of colonialism and Apartheid. The University of KwaZulu-Natal is used as a case to illustrate traumatic experience of a merger between two disparate universities (the University of Natal,

comprising redominantly whites, and the University of Durban – Westville, which was historically established for Black students), the university seized the opportunity for ICT development within its teaching and learning programmes. This paper examines how this merged institution braced itself over the years to invest in ICT infrastructure and resources, which it used for emergency teaching and learning during the Covid-19 pandemic.

Keywords: Digital Divide, Covid-19, Information and Communication Technology in higher learning, online teaching in the Global South

Introduction

The COVID-19 pandemic that gripped the globe required millions of learners and institutions to adjust their teaching and learning programmes or risk the serious interruption of the 2020 academic year. Such a disruption would mean that an entire generation of the global population would have a setback of a year (or perhaps more) of productivity in various socio-economic and political spheres of life. The inability of institutions of higher learning to reproduce skilled labour to meet future market demands can have far-reaching consequences, especially in the absence of certainty on when the pandemic will abate.

Given the inequality between developed and developing countries, the response to the pandemic within tertiary institutions will vary in respect to using teaching and learning technology as a tool to reduce the impact of the pandemic on educational throughput. Developed countries with better educational resources are likely to be in an advantageous position to manage the impact of the pandemic and provide a safety net on ensuring the academic program continues uninterrupted as compared to their less developed counterparts. Less developed countries have many infrastructure deficits to provide a conducive technological environment for advancement to the world of digitisation to support the most contemporary teaching and learning tools.

Globalisation and rapid digital advancement requires developing countries to keep pace with the information network in order for it to advance their country's social, political and economic interests. Therefore, developing countries need to invest in Higher Education Institutions' (HDIs) human capital through transition to digital tools to

promote teaching and learning that is globally and locally competitive, cost effective and accessible. Given the poor state of the economy in developing countries, investment in information and communication technology (ICT) as an emergency measure during the COVID-19 pandemic becomes precarious.

In the South African context, post-democracy, institutions of higher learning came under pressure to make the transition from traditional forms of teaching and learning to ICT-driven ones. Various policy documents informed this transition to ICT-driven teaching and learning modes. Whilst such a move in institutions of higher learning is lauded by educational policy makers, concern has been expressed by the academic fraternity, especially those originating from a disadvantaged history on whether all South African universities could afford this transition given the wide gap between historically advantaged universities under Apartheid and those that have been disadvantaged.

This paper examines the integration of ICT in teaching and learning globally, and how it responds to student-centred learning. Thereafter the digital divide in ICT modes of learning between developed and developing countries is presented. This is followed by a discussion on digitisation of teaching and learning in South African Higher Education Institutions (HDIs). Finally, the paper examines how the transition to ICT teaching and learning at the University of KwaZulu-Natal is used to rescue the academic year from the consequences of the COVID-19 pandemic, which is plaguing the world.

1 Integration of Information and Communication Technology (ICT) in Teaching and Learning

Information and Communication Technology has been part of human development since the 1840s through the advent of the telegraph and the telephone leading to present day global electro-magnetic communication systems. ICT can be said to be a precursor to globalization which has made the world inter-connected. The move to ICT in different spheres of life has been around before the Covid-19 pandemic.

With globalisation, digital technologies have become major drivers in the socio-political and economic spheres of society which needs to be considered when transitioning to ICT development.

The reorganisation of social and economic relations, interdependencies and interconnectedness within and between nation states has become a powerful force that demands advancement and adaptation to the changing nature of the world. This requires meeting the demands for transformation within the ICT sector or risk the consequence of being under-developed. In the 21st Century, digital literacy (DL) has become essential in order to advance in the different sectors of society. As a corollary to this, globalisation would need digital technologies that facilitate universally accessible, reliable and inexpensive communication (Njenga, 2018:1).

To address the demands made by globalisation, educational institutions are called upon to prepare students to face the challenges and opportunities of a global workforce. Researchers and stakeholders alike argue that at all levels of education, the future success of young people and university graduates depends on being technologically competent in order to use a variety of technological tools and being globally competent in order to work with diverse and geographically dispersed people and act on globally significant issues (Kopish and Marques, 2020:45).

In the field of higher education, the introduction of ICTs in the form of eLearning has transformed the teaching and learning experience as compared to traditional forms. Such a transition is influenced by several pedagogical factors. Sife et al (2007:57) assert that eLearning provides greater information access; greater communication via electronic facilities; structured learning time; increased cooperation and collaboration, cost-effectiveness for educational institutions (e.g. by reaching different students and in greater numbers) and pedagogical improvement through simulations, virtual experiences, and graphic representations. In this respect, teachers and learners can choose more appropriate applications, which are flexible in time, in place, personalized, reusable, and adapted to specific domains and more cost-efficient (Sife et al 2007:57).

There is an intergenerational gap in the use and application of ICT. The current generation of ICT users may be dubbed the Net, Cyber Generation or Information society. This is because students today enter higher education with a wide range of digital technologies, which did not exist previously. Even though they do exist, not all have developed skills to use the technology effectively.

The transition and adaptation to a new range of ICT provides them with an advantage of being technically proficient using a range of technological platforms in their learning journey. Compared to traditional forms of teaching and learning, the current generation do things differently. It is in this context that higher education practices need to transform to meet the needs and competencies of these new cohorts of students and those to follow in the future. Hence, the learning environments should accommodate by providing a conducive environment for these 'more technology-driven, spontaneous, and multi-sensory' learners (Brown and Czerniewicz, 2010:357-358). Even though today's students are users of ICT, it may be argued that they are not necessarily producers of digital content and as such they are not all that different from previous generations.

2 ICT Teaching and Learning in Developing Countries – The Digital Divide

Unlike in their less developed counterparts in developed countries, ICTs have a long history and, over time, expanded in all facets of life. Given the disparity in the distribution of ICT resources around the globe, the concept digital divide gained currency in the 1990s amongst different stakeholders such as scholars, policy makers and advocacy groups. The concept is used to describe the growing gap, or social exclusion, between those who have access to the new services of the information society, and those who do not. Yet for millions of people in the world's poorest countries, there remains a "digital divide" excluding them from the benefits of ICTs (Saheb, 2005). Women, children and youth, the aged and those living in rural environments were ICT infrastructure is either non-existent or poorly developed, are confined to the margins of digital technology.

The reason for underdeveloped ICTs in developing countries may be attributed to a number of factors. Lack of access to education or training, fiscal constraint to buy required equipment, problems obtaining the required communications links or services to get online, are some of the challenges. Accessing the Internet with efficiency requires the quality of connection and support services, processing speed and other capabilities of the computer to be of a standard that is globally competitive. Unlike the developed nations, developing ones do not have the necessary resources to invest in and develop ICT Infrastructure to reap the enormous benefits that

participation in the information age brings. Developing countries are trailing at a much slower pace compared to their developed counterparts. These trends are due to the many socio-economic and political challenges faced by governments, political leaders, and business entrepreneurs in developing countries (Saheb, 2005) which militates against any benefits that may be derived from national development through ICT use in development programmes and projects.

Ponelis and Holmner (2015:164) assert that the skills for the knowledge economy are built at institutions of higher learning. At these institutions, education ensures that sufficient skills are imparted to learners so that they may become active participants in the economy and make a meaningful contribution to society. Ponelis and Holmner (2015:164) note that the tertiary student population in Africa tripled from 2.7 million in 1991 to 9.3 million in 2006. Additionally, in sub-Saharan Africa (SSA), post-secondary education has grown faster than in any other region with fewer than 200,000 students enrolled in SSA universities in 1970, a number which rose to over five million in 2010 and has been increasing by 10–15% annually since then. It was projected that the entire continent would have between 18 million and 20 million students by 2015. Despite the rapid growth in the student population at institutions of higher learning only 6% of this age cohort were enrolled in 2008, compared to the global average of 26%. Furthermore, only 11% of African university students are studying subjects with potentially high employability (Ponelis and Holmner, 2015:164). These trends suggest that student absorption rate at institutions of higher learning is precarious in developing countries due to financial exclusion as a result of a variety of poverty related issues. Lack of physical infrastructure, skills, political instability, unemployment, pandemics, corruption, single parents, and child headed households exacerbates the effects of poverty in the African continent. Taking for example Ethiopia with 65 million people is the second largest population in Africa; it has no electricity, which is a key component for access to ICT resources. On the other hand, South Africa being the most technologically advanced country in the continent has been experiencing intermittent power cuts, which has implications for the efficiency with which ICT programmes and platforms are used (Tamrat and Teferra, 2020). Notwithstanding persistent poverty levels and infrastructure deficits, those that are successful in

securing access to education at institutions of higher learning are challenged by the lack of ICT infrastructure in these institutions. Across the continent ICT infrastructure has been restricted due to the lack of investment, policies and systems that promote its growth and usage. In institutions of higher learning, access to ICT resources cannot be implemented and used if the African continent does not have infrastructure to support it so that students could sufficiently develop digital competencies. Sife et al (2007:57) asserts that African universities, which should be in the forefront of ensuring Africa's participation in the ICT revolution, are themselves unable and ill-prepared to play such a leadership role in the continent due to the information infrastructure of African universities being poorly developed and inequitably distributed.

Developing countries, even though they are in a position to advance in teaching through ICT tools, are also constrained to pay for software licenses and copyright fees. The cost of these licenses is prohibitively expensive and as such, universities cannot sustain paying for them. The software tends to be produced in developed countries and by the time developing countries have access to it and master the technology behind it, new versions of the software are produced to replace the old. Similarly, online books, journals, periodicals, data bases and the like, unless there is open access, pose a major constraint to bridge the digital divide between developed and developing nation states.

3 Digitisation of Teaching and Learning in South African Higher Education Institutions

The educational landscape in South Africa has a long and painful history since colonialism and later Apartheid spanning over 350 years. During colonialism, many missionary schools were established on the assumption that the majority of disenfranchised Blacks were barbarians that needed to be civilised through mission school education with a Christian ethos. At a community level, the very wealthy also established schools, aided by the state. However, during apartheid racialized educational institutions were established by the government based on one's racial background. Institutions of higher learning were not spared racialized forms of learning.

Separate institutions of higher learning were established by the Apartheid government for Whites, Coloureds, Indians and indigenous Africans. Black institutions of higher learning were under-resourced with deficits in infrastructure, skills and teaching and learning tools. Given the appalling state of Black higher education in the country, the Freedom Charter (1956) which was the mandate for political change for the ANC gave due recognition to the importance of education. The Freedom Charter gave precedence for the liberation movement to "open the doors of learning for all".

Upon South Africa's liberation in 1994, transformation of the higher education landscape received priority attention to bridge the gap between historically disadvantaged institutions (HDIs) and those that were historically for white learners and academics. Letseka et al. (2018:125) observe that African people constitute about 80.8% of the country's total population while whites constitute a meagre 8.8%, yet whites constitute over 80% of the university professoriate. With disparity in government funding and underdevelopment in these HDI's, attention focused on transforming the sector so that it becomes equitable, competitive and meeting the labour demands of the country.

Post-apartheid, the African National Congress (ANC) led government inherited many socio-economic and political challenges to surmount from Apartheid's legacy. In as far as the education sector was concerned, the government expressed a strong commitment to the use of ICTs in education so that it could produce a skilled labour force to support its post-apartheid Reconstruction and Development Programme (RDP) (Department of Education, 2004:13). Former President Thabo Mbeki announced that if South Africans are to participate in the knowledge economy, every effort must be made to prevent social exclusion. He underscored the importance of ICTs for social and economic development at numerous South African and international fora. He noted: "We must continue the fight for liberation against poverty, against under-development, against marginalisation" and "…information and communication technology … is a critically important tool in that struggle" (Department of Education, 2004:10).

A number of policy documents were formulated to support ICT advancement in higher education. The role of ICTs in education is evident in South African national and institutional policy documents such as The National Plan for Higher Education

(Department of Education 2001), The National Research and Development Strategy (Department of Science and Technology, 2002a), the National Research and Technology Foresight ICT Report (Department of Science and Technology, 2002b), and the White Paper on e-Education informed the policy direction for ICT development in the education sector (Department of Education, 2003). These policy documents argue that using ICTs will variously add value to education, improve teaching and learning, encourage innovation and contribute to transformation (Czerniewicz and Brown, 2005:2).

Like most parts of the world, the South African education and training system had to respond to the pressures and challenges posed by the information revolution-taking place in the globe (Department of Education, 2004:13). Since the ICT policy came into place, South African higher education institutions expended large sums of resources on infrastructure, tools, skills and software to maintain a competitive edge on knowledge production, exchange and collaboration in the global academy and the region despite ever-increasing resource constraints. South Africa's status as a middle economy country with its very wide wealth disparities means that the university combines its access to sophisticated technology with a need to address very serious issues of social and economic disadvantage (Gray, 2007:35).

3 Rescue of Teaching and Learning during the COVID-19 Pandemic at the University of KwaZulu-Natal

The University of KwaZulu-Natal was born out of a merger in 2004 with the Historically Advantaged (HA) white university (Natal) and the Indian university (Durban-Westville) which fell into the category of Historically Disadvantaged (HD) universities in the country. Merging of the two universities was motivated by the need to address the historical inequities in higher education, consolidation of resources, rationalisation and to promote African scholarship. It branded itself to be the institution of choice for African scholarship. Since the merger, the University of KwaZulu-Natal (UKZN) (despite historic differences in organisational culture and diversity in the two institutions) made major strides investing in its ICT infrastructure based on the various policy documents alluded to earlier.

Post-merger, the UKZN rationalised its organisational structure by setting up colleges over five campuses. These colleges comprise the humanities, agriculture, engineering and science, health sciences and law and management studies. Below these colleges are schools comprising a host of programmes. Concerns were raised by the unions and staff about the College organisational structure, its efficacy and costs involved and whether this model was suited for an African context. Notwithstanding such concerns, the College model was implemented by the management of the institution in order for it to be globally competitive.

Since the merger, the university made great strides in upgrading ICT infrastructure. Audio-visual technology was installed in teaching venues inter alia, data projectors, high definition document cameras, motorised screens, cabling, and installation of wireless access points. Infrastructure for charging technological tools and creating more learning spaces for wireless facilities were created (UKZN 2016 Teaching and Learning Report 2014-2015: 95). Academic software was upgraded to the most contemporary versions available in developed countries and these were made easily accessible to staff and students. Staff were provided with laptops so that they could teach effectively in lecture venues and have the flexibility to work from home. The success of digital teaching and learning was fully realised in 2015 when 1087 modules were uploaded on Moodle and 36,089 students were accessing the platform (UKZN 2016 Teaching and Learning Report 2014-2015: 93). Moodle served as a learning platform that provided academics, administrators and learners with a personalized learning environment.

The rapid transition to digital learning has earned UKZN an international reputation for academic excellence, outstanding research output and African scholarship. For the 2018-2019 academic year, the Center for World University Rankings (CWUR) ranked UKZN 402 internationally and nationally third as compared to other historically advantaged universities, which have not merged and have not transformed their institutions fully in keeping with the enormous diversity that exists in the academic community.

Given the technological advancement made by UKZN since the merger, the university has created a variety of options for teaching and learning on its campuses. The COVID-19 pandemic in a way placed direct pressure on the institution to test

out whether its eLearning system can cushion the negative impact of the pandemic on both students and academics. In this respect, the institution put in place a Teaching and Learning Project Plan during the COVID-19-related restrictions. The plan focused on ways in which the academic year could be saved, despite the uncertainty of the pandemic by identifying challenges that both students and academics face in adapting to digital learning and overcoming gaps. The project plan examined the implications of digital learning, student training strategies, online teaching strategy, and access to teaching platforms by international and students with disabilities (Songca, 2020).

In implementing the project plan, financially disadvantaged students who qualified for the National Financial Aid Schemes (NSFAS) were supported with digital resources for the learning process to continue. Logistical challenges in acquiring laptops and digital/hardcopy materials to students who are distributed across the province and beyond, data costs of streaming/ downloading content at home, lack of and quality of network coverage across the province and beyond, computer literacy issues, mainly amongst first-year students and lastly student orientation on Moodle and other virtual platforms utilised are some of the challenges that needed to be considered when implementing the teaching and learning project plan (Songca, 2020:2).

As far as academic staff were concerned, the project plan aimed at improving capacity in terms of using ICT tools for curation of online materials. Pedagogical approaches to teaching and learning needed to be adapted for online teaching and learning. This included teaching and learning courses for staff. It was recognised by the project management team that data restrictions due to the unaffordability and unavailability amongst deserving students curtailed the uploading of materials from home. Faculty needed support for curation, editing and uploading of videos. The project management team noted that modes of delivery in certain modules and programmes did not lend themselves easily to online delivery as practical teaching and learning requires face-to-face contact in laboratories. Last, work experience and in-service training requirements to use online teaching and learning need to be explored (Songca, 2020:3).

At a meeting of Universities South Africa (2020) comprising Vice Chancellors from all state funded institutions there was wide recognition that respective

institutions use ICT as an emergency measure for teaching and learning if the academic year was to be saved in the context of the pandemic. In order to test the readiness of online teaching and learning a dry run needed to be undertaken. UKZN made strides in finalising its negotiations with MTN, Vodacom and Telkom for zero-rated access to 11 University sites including Moodle. Arrangements were made to run the learning content via a proxy server on campus for the telecommunications providers as part of getting the University ready for online learning. Other logistical options were also explored to ensure that no students were left out due to lack of access to online services. For instance, home addresses of all registered students were geo-mapped to establish their location and to get a sense of how many students were located in areas with poor internet coverage. The possibility of providing 'Wi-Fi hot-spots' for these students was explored. Meanwhile, students were encouraged to engage in self-directed learning to keep ahead in their studies, while academics were being urged to continue preparing for the dry run and launch of the new system by uploading learning materials and curating content (Universities South Africa 2020).

It would appear that UKZN has taken great measures to ensure digital infrastructure, teaching and learning platforms to be in place. Other ICT logistical issues to further the teaching and learning programme were attended to while logistical arrangements were put in place to continue with the academic programme. A phased access of students to the university was planned and the first cohort of students to be allowed on university premises was scheduled for 29 June 2020. Since the return of students, with dedicated ICT support the online teaching platform with some glitches concluded the first semester of the academic year.

Although most institutions in the country were in a position to complete the first semester through online teaching and learning, upon reflection the Department of Higher Education claimed that the online learning during the pandemic was a "success". This assertion has been highly contested by the South African academic fraternity and in response a petition is circulating refuting the claims made by the Department of Education. The petition contests amongst other things that "closing campuses may have been necessary to fight the pandemic, but in the rush to online teaching we lost important face-to-face engagement with our students. Even as our classes are often too big to have the kind of classroom interactions we would like to

have with our students, the loss of discussion in lecture rooms, after classes, in offices and on campuses, reduced the quality of university education dramatically. Much of what students learn at university does not come from lecture content, but from ongoing interactions with lecturers and tutors, in seminars and workshops, and with the many different people and settings that shape campus life".

Conclusion

The COVID-19 pandemic has changed the way in which teaching and learning take place in institutions of higher learning. Considering that, no one really knows when life will return to normal and given the second wave of the pandemic being amidst us, when universities will open to continue with the academic programme, is a grey area. The paper highlights the enormous benefit that can be derived from the transition to ICT teaching and learning. Although this could be an emergency response to teaching and learning, one needs to be mindful of the pedagogical implications of teaching "through" versus "with" technology. Teaching "through" technology now would appear as a safety measure against social distancing, as learners will have very little contact with the teaching fraternity. Teaching "with" technology using blended methods would be an ideal, but under the circumstance, one has to settle for the lesser.

The digital divide between developed and developing countries in many instances is wide. Bridging this gap during the COVID-19 pandemic is unlikely to feature, as developing countries do not have the infrastructure to transition to ICT teaching and learning. The challenges have different dimensions, including structural, economic, social and technical issues. In the case of South Africa, there is also the divide between historically advantaged and disadvantaged institutions given the legacy of colonialism and later Apartheid. Historically advantaged institutions are better able to transition to ICT-driven teaching and learning modalities. UKZN is a merger project between the former University of Natal, which catered to whites whilst the University of Durban-Westville was historically disadvantaged and catered to the needs of Indian students. Despite merger challenges, UKZN responded proactively to the government's policy call to upgrade ICT infrastructure over time. In the COVID-19 period UKZN has devised a project plan for online teaching and

learning, which commenced on 29 June 2020 in different phases, whilst more advantaged institutions in the country have already concluded their first online semester in the academic year.

This paper has been written at a time when the pandemic was unfolding and captures the emergency response by institutions of higher learning to save the academic year. With the second wave of the pandemic making its round in the globe, South African institutions of higher learning once again have to brace themselves to continue with online teaching and learning.

Although, a dissenting voice is emerging within the academic fraternity on some of the downsides to online teaching and learning, it need be noted that this arrangement was in the context of the world response to the COVID-19 pandemic. Under normal conditions, perhaps a more positive attitude will emerge on the benefits of online teaching and learning. As alluded to earlier a blended learning environment combining both traditional and e-Learning approaches could have sound pedagogical outcomes.

References

Brown, C.; Czerniewicz, L. 2010 *Debunking the 'digital native': beyond digital apartheid, towards digital democracy. Journal of Computer Assisted Learning*. (2010), 26, 357–369.

Czerniewicz, L.; Brown, C. 2005. *The uses of information and communication (ICT) in teaching and learning in South African higher education practices in the Western Cape*. Perspectives in Education, Volume 23(4) 1—18

Department of Education 2001. *National Plan for Higher Education*. Government of South Africa, Pretoria: Government Printers.

Department of Arts, Culture, Science and Technology 2002. *South Africa's National Research and Development (R&D) Strategy, August 2002*. Republic of South Africa, Pretoria: Government Printers.

Department of Education 2003. White Paper on e-Education: Transforming learning and teaching through ICT. Pretoria: Government Printers.

Department of Science and Technology 2002a. *South Africa's National Research and Development Strategy*. Government of the Republic of South Africa. Pretoria.

Department of Science and Technology 2002b. *National research and technology foresight ICT report*. http://www.dst.gov.za/reports/forsight_reports.htm Accessed [10 June 2020).

Gray, E. 2007. *The Other End of the Telescope*: Opening Educational Resources in a South African University. Educational Technology. 47(6) 35-38.

Kopish, M.; Marques, W. 2020. *Leveraging Technology to Promote Global Citizenship in Teacher Education in the United States and Brazil*. Research in Social Sciences and Technology, 5(1): 45-69.

Letseka,M.; Letseka M. M; Pitsoe.V, 2018. *The Challenges of E-learning in South Africa*. http://dx.doi.org/10.5772/intechopen.74843

Njenga, J.K. 2018. *Digital literacy*: The quest of an inclusive definition. Journal of the Reading Association of South Africa. 9(1) 1-7. Reading & Writing 9(1), a183. https://doi.org/10.4102/rw.v9i1.183

Ponelis, S.R.; Holmner M.A. 2015. *ICT in Africa: Building a Better Life for All.* Information Technology for Development.21:(2) 163-177. DOI: 10.1080/02681102.2015.1010307

Saheb, T. 2005. *ICT, Education and Digital Divide in Developing Countries*. Global Media Journal http://www.globalmediajournal.com/open-access/ict-education-and-digital-divide-in-developing-countries.php?aid=35141

Sife, A.S.; Lwoga, E.T.; Sanga, C 2007. *New technologies for teaching and learning*: Challenges for higher learning institutions in developing countries. International Journal of Education and Development using Information and Communication Technology. 3(2) 57-67.

Songca, S.P. 2020. *Teaching and Learning*. Project Plan During the COVID-19-Related Restrictions. University of KwaZulu-Natal, South Africa

Tamrat, W.; Teferra. D. 2020. *The Shift to Online Learning Calls for Global Cooperation*. World University News, Africa Edition. https://www.universityworldnews.com/post.php?story=20200413115722610

Universities South Africa 2020. *Emergency Teaching and Learning during the COVID-19 Era*. https://www.usaf.ac.za/wp-content/uploads/2020/05/Emergency-Teaching-and-Learning-During-the-COVID-19-era.pdf

***Originally published in**: january 2021*

Sociological Teaching

Remote Teaching and Sociological Reflexivity: A few Insights from Brazil

João Marcelo E. Maia
School of Social Sciences (CPDOC FGV), Rio de Janeiro.

Abstract

The Coronavirus pandemic deeply affected institutions of higher learning worldwide. As most universities' campus closed, faculty were urged to engage with emergence remote teaching. This paper discusses how an individual experience with remote teaching in Brazil triggered a sociological reflexivity about the classroom. It draws on the concept of "sociology as pedagogy" by Halasz and Kaufman (2008) to explore how insights from theorists discussed in class helped to improve knowledge about teaching sociology. The paper makes the case that in a context shaped by deep inequalities, such as the higher education system in Brazil, it is important to search for practices of "sociology as pedagogy" that build from alternative forms of knowledge production.

Keywords: Teaching sociology; sociological theory; sociology as pedagogy; sociology in Brazil; Higher Education in Brazil

Introduction

The Coronavirus pandemic deeply affected institutions of higher learning worldwide. As most universities' campuses closed, faculty were urged to engage with emergency remote teaching, even with no proper preparation or adequate equipment. This situation sparked an ongoing debate on teaching strategies and the enduing effects of the pandemic over higher education (HE) in general.

Social scientists rushed to this debate. Within a few weeks, a series of social media posts, YouTube videos and webinars discussed a range of specific issues, from

how to conduct ethnographies during social isolation to what exactly should we be teaching if we are to be true to our mission as critical sociologists.

In a recent editorial piece for "Teaching Sociology", Michele Kozimor (2020) offered three takeaways from the COVID-19 pandemic, focusing on the mental and physical suffering of students and faculty and on the impacts on academic productivity. The rush for online learning is the main topic of Teräs et al. (2020), who urge academic managers and researchers to be careful with digitalization and technologization. They argue that while digital tools may open new perspectives for pedagogy, the role of big companies in providing market-driven digital solutions may bear a negative impact on higher education.

The debate is far from finished, but Euro-American perspectives are still dominant. The reason is that the scholarship on teaching sociology is still focused on the experiences and practices from the Global North, making collaboration between researchers and teachers worldwide a pressing issue if one wants to really build a global sociology (Lyon et al., 2020). My goal here is to contribute to this broader dialogue by presenting a brief reflection on teaching sociology during the pandemic in a highly unequal country from the Global South - Brazil.

I argue that remote emergency teaching/learning challenged assumptions about the classroom thus increasing sociology as pedagogy (Halasz and Kaufman, 2008) and opening space for new teaching practices. However, the inequalities that shape HE (in Brazil and other parts of the South) and the resilience of Eurocentrism require more inclusive forms of sociology as pedagogy that build from alternative modes of knowledge production.

The text has two sections and a short conclusion. I begin by presenting the system of higher education in Brazil and how it responded to the campus' shutdown, calling attention to the diversity in the system and the relevance of the digital divide. In the second section I outline my personal experience teaching "Sociology II" in a prestige private institution in the city of Rio de Janeiro, focusing on how sociological reflexivity helped me face new challenges and change classroom dynamics. I close the text trying to bridge the gap between a personal and unusual experience and the broader picture of HE in Brazil, offering a few sociological insights on the need to include new forms of knowledge production that enrich idea of "sociology as pedagogy".

1 Pandemic and higher education in Brazil

The system of higher education in Brazil is composed of a) a public system funded by the state (either the federal state or state governments) which is largely free-of-charge and enrolls around 25% of undergraduate students; b) a vast private sector which is responsible for nearly 75% of enrollments. In the private sector, there are for-profit institutions, which have been growing dramatically in the last decades, and not-for-private ones, such as the Catholic universities.

The cohort of young adults with a higher education degree – 18% of adults between 25 and 64 years old - is still low compared with countries such as Argentina (36%) and Chile (25%), not to mention OECD's (Organization for Economic Co-operation and Development) countries (39% average) (https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_BRA.pdf). Therefore, democratization of higher education has been a pressing public issue in Brazil for a long time, especially for the prestigious public institutions, which recruited students mostly from the middle and upper-middle sectors until very recently (Salata, 2018).

The system started to expand in the mid-1990s, with a boost from the for-profit private sector during the first Cardoso's term (1995-1998). During Lula's terms (2003-2006; 2006-2010) and the first Roussef's administration (2011/2014), a set of public policies contributed to a greater increase in enrollments. These policies had mixed orientations: while programs such as PROUNI and FIES[1] aimed at increasing enrollments of low-income students in private institutions, REUNI focused on expanding the public federal system by creating more vacancies and new federal universities. In 2012, the federal government enacted Law 12.711, which reserves 50% of vacancies in the public universities to students graduated from public high

[1] FIES is a student loan scheme created in 1999 during Cardoso's second term and reformulated in 2010 under the Worker's Party administration. It provides credit with low-interest rates for students attending private institutions. PROUNI was created in 2004 during Lula's firs term. It provides scholarships which cover part of tuitions in private universities in exchange for the tax exemptions which these institutions enjoy.

schools[2]. Within the 50% ratio there are subdivisions according to social class (measured by family income) and race (self-declaration by students)

Results are mixed. While the body of students in the federal system has never been so diversified, the for-private sector vastly benefited from policies such as PROUNI and FIES, with the emergence of highly lucrative organizations that now play a major role in Brazil's stock market (Martins, 2013). According to Knoble and Verhine (2017), the for-private sector made around U$ 14 billion in 2015, contributing to turn the sector in the tenth component of Brazil's economy.

When the pandemic arrived in Brazil in early March[3], the initial responses were similar: most institutions of HE closed nationwide. Slowly, the differences emerged. While the private sector, which have been heavily investing in distance online education (EAD) due to financial reasons, moved quickly to remote teaching, most federal universities declined to do so, in face of the pressure by both faculty and students who claimed that the digital divide was a major barrier which could not be easily overcome. In fact, a research conducted by TIC Domicílios in 2019 showed that only 71% of Brazilian households declared to have internet access (https://cetic.br/pesquisa/domicilios/indicadores/). Besides, many students from low-income families do not have access to laptops and rely on cell phones with highly unstable connections (in the same survey, figures drop to 69% if we consider households with family income up to 2 minimum wages).

The example of the Federal University of Rio de Janeiro (UFRJ), one of the largest in the country, is paramount. During the months of April and May, the Division of Information Technologies and Communication in UFRJ conducted an online research with students (UFRJ has nearly 60 thousands of students enrolled) which showed that 91% of undergraduate reported that they had access to broad band internet. Although the figures may seem high, one must not forget that nearly 10% of undergrad students do not have access to broad band! Besides, when the survey crossed social class with broad band access, the numbers showed significant inequalities, as

[2] In Brazil, most students from low-income families attend the public secondary system but cannot secure a place in the prestigious public universities due to intense competition for few vacancies.

[3] On March 9th, Brazil confirmed local transmission of COVID-19, and on the 20th the Ministry of Health announced community transmission in the country

only 85% of low-income students had access to broad band internet (https://ufrj.br/noticia/2020/07/02/pesquisa-revela-percentual-de-estudantes-com-acesso-internet)

The problems of remote learning are not restricted to broad band access. The domestic environment is also determinant for the quality of learning. In the case of the State University of Rio de Janeiro (UERJ), an online survey which is still under way shows that 11% of students reported that did not have a proper place to study at home, while 17% claimed that they only had access to such a space for a brief period of time.

Some public universities which have more access to funds and infrastructure quickly provided equipment to low-income students, as it was the case for the University of Sao Paulo (USP) and the University of Campinas (UNICAMP), but most federal institutions do not have these amounts of resources. Besides, the Ministry of Education has been widely criticized for its inability to support universities and schools during the pandemic, making the situation even more challenging.

Only in July, four months after the shutdown, federal institutions began to reorganize their schedule to include remote teaching for the coming semester[4], employing a variety of strategies to deal with the digital divide and the divergent demands from the student body and faculty. For instance, UFRJ decided to organize a special semester with not-obligatory courses targeting at senior students who are about to graduate.

How do Brazilian sociologists and social scientists are reflecting on this issue? A good source is the National Association of Graduate Programs in Social Sciences (ANPOCS), which issued a series of 87 bulletins about the pandemic including a group of texts about the impact of Coronavirus on teaching and education. Not surprisingly, most of these texts deal with educational inequalities and the digital divide, and almost none of them discusses teaching strategies. This will probably change in the following months, as sociologists resume their teaching commitments. For now, I hope to contribute to the debate with a brief reflection from my personal experience.

[4] In Brazil, the first semester starts by the end of February and closes by the end of June, while the second semester being in August and closes by December.

2 Sociological insights from the new classroom

Since 2008 I hold a tenured position in a not-for-profit elite private institution in Brazil. As one of the few sociologists in my units, I have overseen most courses on sociological theory from the so-called classics to contemporary theories. When the pandemic took hold in Brazil, I was teaching Sociology II, which in my institution is a subject focused on social theory during the twentieth-century, covering a temporal span from the early twentieth-century until the mid-1970s. Originally, the syllabus was a bit Eurocentric, focusing too much on US sociology, but eventually it was changed to include Latin American authors and non-white sociologists.

My syllabus started with readings on US sociology (pragmatism, symbolic interactionism, functionalism and microsociology) and Norbert Elias' figurational analysis; it then moved to Latin American's theories on modernization and dependency, followed by readings on critical theory, either from the Frankfurt School or by feminist theorists from Europe and Brazil.

Presential classes were held once a week, every Thursday from 09:20 A.M. to 12:50 P.M., a schedule that required a special strategy to avoid fatigue. My original course design included a first section lasting one and a half hour combining lecture and questions by the undergrads followed by a second section in which students were presented with a practical question which required collective discussion. For instance, the lecture on George Mead's theory of socialization was followed by an activity in which students were required to use the concepts of "self" and "generalized other" to identify the social groups that shape the ordinary reflexivity of a high school student who is about to apply for college. These discussions were held in small groups in a classroom, something favored by the relatively small number of students attending the course – roughly 25, which is highly unusual for undergraduate classes in public institutions.

When our institution closed, we had a one-week break for Zoom training and then we resumed teaching. I decided to keep the syllabus and the scheduled activities, but I had to make a few changes to deal with the challenges of remote learning. Eventually these changes contributed to increase the sociological reflexivity about the classroom and the way I taught social theory.

The first challenge was related to the corporal dynamics within classes. In our "pre-Coronavirus" meetings, we had lively exchanges in which I could see all my students and move around them while talking. This connection was missed. Besides, most students kept their camera off due to instability in internet access, which made things even more complicated. This seems to be a minor detail, but it became an issue after I reflected with students about Erwing Goffman's theory in "Presentation of self in everyday life" (Goffman, 1985)[5]. In this famous text, Goffman points out the role of face-to-face interactions to keep situations "going on" smoothly. The role of the body is crucial for managing impressions and interpreting other's emotions and intentions. While zooming, I could not help but think of how the lack of corporeality required greater physical and mental labor to keep classes going on.

There was no easy solution for that. I decided to remake the first section of classes. In the first 30 minutes, I presented a brief lecture using videos or slides, and then I would open the floor for questions and comments. As most colleagues noticed, it is weird to talk for so long while not being able to see everybody around you, but I struggled to keep the pace. In the second section, I organized the group activities, using the "Break Out" function in the Zoom applicative. I usually gave 20 minutes for each group to privately discuss the practical questions at stake, entering these private rooms every time I was requested to do so.

But other issues were trickier. In Goffman's theory, the physical properties of social settings are deemed crucial for assuring mutual understanding about what is going on in each situation. All of a sudden, teachers were stripped of their classrooms' usual objects, such as blackboards, PCs, slides' projector or even a room with walls, so they had to put an extra effort to turn a disorienting display of virtual windows exhibiting private environments into a new classroom. In my case, I tried to engage with the functionalities available in the digital tool, such as "chat" and "share screen" to employ other learning objects that remind students of our social setting, such as book covers, songs, and interviews with sociologists.

[5] Goffman's original book was published in 1956, but the Brazilian translation came out in the middle 1980s. We used this edition in class.

The second challenge has to do with students' emotions and mental health, which are not a new issue in higher education. A recent report by GEMAA[6] explored data from 2,424 surveys conducted between February and June 2018 with undergraduate students from 63 federal institutions (Portela, Feres Jr and Freitas, 2020)[7] . Researchers found that 83.5% of students reported at least one emotional problem that affected academic performance, with anxiety (62%) leading the answers. The pandemic likely increased this problem due to the social distancing and the feelings of anxiety and loneliness which followed suit.

In the case of Sociology II, some students reported depression, lack of sleep and problems of concentration. Although we have been discussing these issues in our institution for a few years, the pandemic and remote teaching made us all more aware of how difficult it is to engage with these students to help them. The interplay of social structures and self-control of emotions – a central theme for the sociology of Norbert Elias – came to the forefront. Certainly most professors of sociology are not mental health specialists, but what can we do in our classrooms besides indicating mental counselling when we spot any problems? How do the social dimensions that structure these classrooms increase the possibilities of mental health issues?

I soon realized that we must think about the whole structure of the course, from the syllabus to assignments and activities, if we are to take seriously the challenge of improving the interactions in classroom while keeping everybody sane. I left behind the idea of a 'one fits all' type of assignments, giving more space for individual choices and special deadlines. The experience during the pandemic should not be an exception but a blueprint of how we should conduct our learning environment with students.

In the end, most students were able to catch up with remote learning and showed great enthusiasm, but a few dropped out while others missed classes due to family problems and personal issues. I learned that the labor involved in keeping social interaction within the classroom is even greater online, but some strategies reported above could work "off-line" as well. My personal experience with remote

[6] GEMAA stands for the Multidisciplinary Group of Studies on Affirmative Action from the State University of Rio de Janeiro (UERJ)

[7] this sample corresponded to 35% of the enrolled undergraduate in the first semester of 2018

teaching triggered sociological insights about the classroom, but how could this reflexivity be employed in contexts marked by deep inequalities, such as the higher education system in Brazil?

3 Closing remarks

Halasz and Kaufman (2008) use several examples to demonstrate their idea of "sociology as pedagogy", which they describe as "(…) a model that encourages us to use our sociological knowledge to reflect on and address the social dynamics of education" (Halasz and Kaufman, 2008: 301). However, much of the models they describe come from Euromerican theorists, which lead us to question the universality of these insights about the sociological dimension of the classroom. Besides, in a context shaped by deep inequalities, such as the HE system of Brazil, it is important to search for practices of "sociology as pedagogy" that build from alternative forms of knowledge production. In Sociology II, two texts provided a blueprint for this task.

The first one was authored by Silvia Cusicanqui (1949-), an Aymara sociologist working in Bolivia (Cusicanqui, 1987). Cusicanqui discusses the challenges of doing research with indigenous communities and criticizes Marxist theories for homogenizing these groups and failing to recognize the centrality of colonialism in shaping the Nation-State in Bolivia. She presents an account of the THOA (Workshop of Andean Oral History) and explains how the Oral History project she conducted with her colleagues allowed indigenous communities to reclaim their 'long history' from the limits of the Nation-State history.

The second text was authored by black Brazilian scholar Lélia González (1935-1994), who analyzed the role of racism and sexism in Brazilian culture. González (1983) brilliantly combines psychoanalysis, theories of discourse, and antiracism scholarship to examine how black women in Brazil are stereotyped. Her prose is also unique, as she writes in 'Pretuguês' (black Portuguese languages), a vivid form of expression which includes slang and rhythm that challenges the whiteness of academic Portuguese.

Cusicanqui (1987) and González's (1983) works offer fresh sociological insights about what we do in classrooms. First, they make us question what exactly is "theory" by

exploring forms of knowledge production that do not fit into standard accounts of scientific discourse. This is not just about including authors and texts from the Global South in the syllabus, but also about broadening the scope of theorization to address experiences and life-histories that are usually overlooked. Second, they help us to rethink "teaching" by questioning the role of academic experts and suggesting alternative forms of engaging students and communities with the production of knowledge.

These are not new issues in Brazil. The long struggle of black and indigenous movements against racism in education gave birth to Laws 10.639/2003 and 11.645/2008, which require the teaching of black and Indigenous histories in all levels of education, with changes in syllabus, textbooks, and other teaching materials. Since then, we have witnessed new initiatives in HE that are slowly changing the dynamics of the classroom.

For instance, in the Federal University of Pará (UFPA), a degree on Ethnodevelopment was launched in 2011. Regular classes are combined with learning experiences in indigenous communities conducted by students who are themselves recruited from these groups. In most federal universities, black students are actively engaging in groups (the "coletivos") that challenge dominant forms of pedagogy, while black faculty members are exploring the philosophical implications of an antiracist education (Nogueira, 2012). In a recent survey with black activists Pereira, Maia and Lima (2020) found out that education is the one of the key issues at stake for antiracist politics.

All these exciting developments gained traction as a new generation of non-white students claimed their places in the public universities due to the results of affirmative action programs. This phenomenon could open the discussion for new forms of "sociology as pedagogy", which articulate theoretical insights about teaching and learning with new forms of knowledge production that reflect non-hegemonic experiences.

Unfortunately, all these initiatives are facing great risks in Brazil, as Bolsonaro's administration (2019-) is overtly conservative and shows no signs of support for the rights of historically disadvantaged groups. That is exactly why this dialogue is even more urgent, which makes ISA's Pedagogy Series an important tool to build bridges between North and South.

References

Cusicanqui, S. R. 1987. *El potencial epistemológico y teórico de la historia oral: de la lógica instrumental a la descolonización de la historia*. Temas Sociales, 11, p. 49-64.

Goffman, E. 1985. *Representações do eu na vida cotidiana.* Petrópolis, Vozes.

González, L. (19843. *Racismo e sexismo na cultura brasileira.* Revista Ciências Sociais Hoje. 223-244.

Halasz, J. R.; Kaufman, P. 2008. *Sociology as pedagogy*: *How ideas from the discipline can inform teaching and learning*. Teaching Sociology, *36*(4), 301-317.

Knobel, M.; Verhine, R. 2017. Brazil's for-profit higher education dilemma. *International Higher Education*, (89), 23-24.

Kozimor, M.L. 2020. *Editor's Comments: Three Teaching Takeaways from the COVID-19 Pandemic.* Teaching Sociology. Vol. 48(3), p. 181-183

Lyon, K; Tézli, A; Khan, S; Rama, S. 2020. *Institutional and contextual factors that shape sociological teaching practices: the importance of global collaboration among sociology educators.* Isa.e-Forum. Available at https://www.researchgate.net/profile/Sharmla_Rama/publication/339830234_Institutional_and_Contextual_Factors_that_Shape_Sociological_Teaching_Practices_The_Importance_of_Global_Collaboration_among_Sociology_Educators/links/5e67c81e4585153fb3d59f10/Institutional-and-Contextual-Factors-that-Shape-Sociological-Teaching-Practices-The-Importance-of-Global-Collaboration-among-Sociology-Educators.pdf. Accessed at August 20th 2020.

Martins, C. B. (2013). *A participação das instituições privadas na reconfiguração do ensino superior no Brasil*. Análise Social, (208), 622-658.

Noguera, R. (2012). *Denegrindo a educação: Um ensaio filosófico para uma pedagogia da pluriversalidade*. Revista Sul-Americana de Filosofia e Educação, *18*, 62-73.

Pereira, A. A.; Maia, J. L.; Lima, T. C. S. D. 2020. *Os "rolês" do movimento negro brasileiro na atualidade, nas "pegadas" da educação.* Revista do Instituto de Estudos Brasileiros, (75), 162-183.

Portela, PE; Feres Jr, J; Freitas, J.B de. 2020. *Raça, gênero e saúde mental nas universidades federais.* Boletim *GEMMA.* 8. Available at http://gemaa.iesp.uerj.br/wp-content/uploads/2020/07/Boletim-Sa%C3%BAde-Mental.pdf Accessed at 20th August 2020
Salata, A. (2018). Ensino Superior no Brasil das últimas décadas: redução nas desigualdades de acesso? *Tempo Social*, 30(2), 219-253.

Teräs, M., Suoranta, J.; Teräs, H.; Curcher, M. 2020. *Post-Covid-19 Education and Education Technology 'Solutionism': a Seller's Market.* Postdigital Science and Education, 1-16.

***Originally published in**: january 2021*

Sociological Teaching

Students in the spotlight: Using collaborative autoethnography to build a community of learning in the Corona crisis

Isabel Steinhardt
University of Kassel, Germany.

Abstract

Due to the Corona crisis, German Higher Education Institutions had to close their campuses in March and lecturers had to teach online. To understand how the Corona crisis affected students, first this article explains the structural and social inequalities in the German higher education system, using Tinto's (1975; 1997) student engagement theory. Second, the concept of Bergman-Rosamond et al. (2020) is used to analyze the challenges that Corona has raised for students, including current surveys. We found that the closure of the social space campus (and the Corona crisis as a whole) particularly hit hard those students who had previously been affected by (intersectional) inequality. Therefore, to lessen the specific challenges associated with the ad hoc transition to digital studying, the creation of a digital community of learning can help. We demonstrate how such a community can be created by the example seminar, "Digital practices: an autoethnographic observation". During the seminar, students recorded their digital technology use in a journal, and we analyzed the diary entries using the collaborate autoethnography method. The seminar example shows that this method is well suited for the development of a community of learning as it not only places students in the spotlight but as students work together on a topic they get to know each other, and a basis of trust is created through peer-feedback. Therefore, it was important to have a digital space (in this case Mahara) where the exchange could take place. The continuous insight into the students' "learning status" enabled the lecturer to promote the learning and provide individual assistance for the students.

Keywords: Intersectionality, inequality, gender, diversity, higher-education, crisis

The Corona-Crisis in Germany

On March 22, 2020, the sharp increase in Corona cases resulted in comprehensive restrictions involving social contacts in Germany. From this point on, German higher education institutions (HEI) were forced to develop scenarios for digital teaching for the summer semester. It was obvious that over the coming months, face-to-face courses would be impossible and we would have to switch to online teaching on an *ad hoc* basis.

However, as a sociologist studying higher education for years, I was able to draw on knowledge generated by higher education research in general as well as digitization, habitus, inequality, and qualitative methods. This knowledge enabled me to reflexively deal with the demands that the students were exposed to when switching from synchronous teaching and learning to online teaching and learning. From the beginning of what became known as the 'Corona'semester, it seemed important for me to understand the challenges students are facing due to the situation caused by Corona, commonly referred to as the Corona crisis (Brinks & Ibert, 2020). These considerations helped me to develop a seminar in which a digital community of learning has arisen that has responded to the students' challenges. The developed seminar entitled "Digital practices: an autoethnographic observation", serves as an example of how the intersectional challenges of students can be addressed in a seminar if the students themselves are the focus. I will show why and how the focus on student-centered-learning via collaborative autoethnography is particularly well-suited to collectively learn and reflect on students' needs during such a time of crisis on and to react to them in a digital classroom-setting, thereby counteracting intersectional inequalities.

In order to understand the example in its complexity, I first explain the (structural) inequalities in the German Higher Education System, using Tinto's (1975; 1997) student engagement theory. Then using the concept of Bergman-Rosamond et al. (2020) I analyze the challenges that Corona has raised for students.

I then reflect on the seminar by using the results of both analyses before discussing the overall value of the seminar.

1 Social inequalities of German's Higher Education System

The education system in Germany is a public, cost-free system with private schools and universities playing only a minor role in the higher education system (Autorengruppe Bildungsberichterstattung, 2020). Nevertheless, the education system is highly selective, particularly the school system, which segregates students after elementary school. As a result, first-year students from academic families are highly overrepresented. Students with a low social and/or migration background have significantly lower chances of acquiring a university entrance qualification (Autorengruppe Bildungsberichterstattung, 2020). Moreover, students with a low social background drop out more often from their studies and are less likely to pursue a master's degree (Lörz, 2019). Students from non-academic families struggle with the demands of an academic environment such as an understanding of self-structure, academic language and self-motivation, which they have not learned from their families of origin (Schmitt, 2010). The situation is similar for students with a migration background, who are often the first in their families to study and therefore cannot draw on experience from within the families.

In order to reduce the inequality for entrance to HEIs, policymakers offered the opportunity to credit professional skills as a higher education entrance qualification. This step was intended to attract non-traditional students into higher education (Lörz, 2019).

The proportion of women among first-year students is balanced at 51.7%, although fewer women begin a course of study, they are more likely than men to have acquired a university entrance qualification. (Autorengruppe Bildungsberichterstattung, 2020). In addition, there is a strong gender disparity with regard to the choice of field of study. For example, women in Germany tend to choose so-called soft subjects rather than hard sciences and choose less prestigious subjects. Men more often choose subjects that are highly prestigious and lead to high income (Autorengruppe Bildungsberichterstattung, 2020).

In Germany 11% of students have a physical or mental illness (Middendorff et al., 2017). Furthermore, in over a third of cases, the disability or illness leads to an extension of the study period. Students with disabilities are more than twice as likely to interrupt their studies as those without disabilities (32% vs. 13%) (Middendorff et al., 2017).

Currently, about 10% of international students are studying at German HEIs. Despite the dropout rates falling in the last ten years, the dropout rates for international students remain significantly higher than for German students. (Kercher, 2018). The reasons for the high dropout rates include "poor linguistic proficiency, financial problems, a lack of social and academic integration, and misconceptions regarding the teaching and learning culture at German higher education institutions" (Kercher, 2018, p. 2)

Social inequalities also emerge in relation to digital technologies (Scheerder et al., 2017; van Deursen & van Dijk, 2019). "Overall, these findings suggest that even when controlling for basic Internet access, among a group of young adults, socioeconomic status is an important predictor of how people are incorporating the Web into their everyday lives with those from more privileged backgrounds using it in more informed ways for a larger number of activities." (Hargittai, 2010, p. 92) In a study, Steinhardt (2020) showed that students' practices in dealing with digital technologies differ. For example, students from less educated families of origin only adopt digital technologies if they are required to do so and, when doing so, need clear guidance (Steinhardt, 2020).

Typically however, these conflicts are somewhat reduced by peer groups and campus life (Tinto, 1975). As Tinto (1975, 1997) states, central to the success of the study is the involvement and commitment in and with HEIs. „Generally speaking, the greater students' involvement in the life of the college, especially its academic life, the greater their acquisition of knowledge and development of skills" (Tinto, 1997, p. 600). Tinto (1997) further emphasizes that "Classrooms of Community" have a decisive influence. This is especially the case for students who lack opportunities for academic exchange outside the university as the classroom is the place "where education in the formal sense is experienced". (Tinto, 1997, p. 599). Success factors in the classroom are: "Building Supportive Peer Groups, Shared Learning-Bridging the Academic-Social Divide, and Gaining a Voice in the Construction of Knowledge"

(Tinto, 1997, p. 609). We have known for 20 years, that "student learning is enhanced when students are actively involved in learning and when they are placed in situations in which they have to share learning in some positive, connected manner." (Tinto, 1997, p. 601). Even though widely discussed in HEI contexts in Germany, the "shift from teaching to learning" has not fully reached teaching practice.

In the Corona crisis, however, the social space campus was not accessible. This makes the question of how the "Classroom of Community" can be adapted for a digital community of learning even more crucial. Before I answer this question, I will discuss the other challenges of the Corona crisis.

2 Teaching and Learning during Corona crisis

In the following, I use the aspects of crises from Bergman-Rosamond et al. (2020) to describe the challenges of teaching and learning in the Corona crisis in Germany. Bergman-Rosamond et al. (2020) propose an interdisciplinary approach that includes the aspects of scale, time, spatiality, processuality, multi-layeredness, gender, intersectionality and inequality to analysis crises.

Scale

Ehlers (2020) identifies three positions: Firstly, the optimistic-affirmative position, which sees the Corona crisis as a unique opportunity to fundamentally transform HEIs in the direction of digital institutions and to abolish the presence university in its current form. Second, the critical-progressive position, which sees the digital transition in the Corona pandemic as an opportunity to gain experience and to carry out the necessary digital change without abolishing the presence HEIs. Third, the conservative-preservative position, which wants to return to the pre-Corona era and does not want change. Which scaling position will prevail in the end remains open. Nevertheless, the most widespread position seems to be the critical-progressive position. However, the different scaling of the Corona crises meant students had to handle diverse teaching approaches.

The different ways in which lecturers transferred their teaching to the virtual setting can be attributed to the lack of experience with online teaching. Half of the

lecturers taught online for the first time (Kreulich et al., 2020). Online teaching has been a much discussed topic in Germany for years, but has not yet been implemented (Kerres, 2020). Kerres (2020) identifies the freedom of research and teaching, which is protected by the German constitution, as the main reason. In addition, teaching is considered less important than research for an academic's career. (Müller & Schneijderberg, 2020). As a result, lecturers have less institutional/structural motivation to acquire online teaching skills and the university management cannot force them. Therefore, only a few lecturers have comprehensive experience with online teaching and only a few students have had the opportunity to gain comprehensive experience with online teaching (Bond et al., 2018). In a recent study conducted just before the outbreak of the Corona pandemic, Händel et al (2020) found that students had very different experiences with online courses. For example 6% had experience with live streams, 35% with other online-supported learning opportunities, 43% with e-tests, 49% with live media in courses, 52% with online learning modules, and 63% with online communication and collaboration (Händel et al., 2020).

Time

The Corona crisis was an unprecedented blow for all HEIs in Germany. Most HEIs did not have a digital strategy and accordingly, they had to find short term solutions to deal with the digital semester (Kerres, 2020). For example, there was a lack of technical infrastructure for online teaching, such as licenses for video conferencing software such as Zoom, and WebEx etc. As well as the HEIs, lecturers also had to develop quick solutions that would allow for "emergency remote teaching" (Hodges et al., 2020). "Emergency remote teaching" refers to the rapid implementation of online teaching that cannot rely on well thought-out concepts. The fast transition to online teaching was necessary to allow students to continue their studies. This meant that 74% of students did not have any course cancelations with 26% of students reporting that courses were cancelled (Lörz et al., 2020). Besides course cancelation, the closure of libraries meant that students were unable to access sufficient literature, which led to delays in the preparation of papers for 23% of students (Bayreuth Survey 2020). Libraries are not sufficiently equipped for online

access, as many texts are not available in digital format. Delays in studies were also caused by the cancellation of practical laboratory courses and internships.

Therefore, the German government decided not to include the summer term 2020 in the calculation of, for example, BAföG (the German Federal Training Assistance Act). De facto, students will receive financial assistance for one semester longer. This intervention was necessary because some students had less time for their studies due to care tasks (I will discuss this in detail below).

Spatiality

Due to the Corona pandemic, all HEIs were closed and could no longer be accessed by lecturers and students as social space. All HEIs' employees worked from home, resulting in (on all sides) technical issues with laptops, headsets and internet connections. For example, 36% of students professed to having insufficient internet access to participate in online courses (Lörz et al., 2020).

In addition, a problem for almost half of the students was the situation regarding domestic space. Only 59% of the students surveyed at the University of Bayreuth, for example, where able to state, "I have access to a quiet room that I can use to participate in online group sessions," (Bayreuth survey, 2020), while in Göttingen the number was 52% (Göttingen survey, 2020) and Lörz et al.'s survey of 28 HEIs resulted in 32%. Students and lecturers alike had to create opportunities for teaching without giving up their own privacy. As a consequence, screens during live video teaching often remained black.

Due to the limited space available, many students moved back to their parents residences during the semester if they could provide sufficient space (Traus et al., 2020). However, inequality is also evident here. Only students from families with sufficient economic capital benefited from this option. Students with little economic capital had to quit their apartment or shared apartment for financial reasons (Traus et al., 2020). Moving back to the parent/s often meant returning to limited space. Due to the closure of kindergartens, schools and social services, students and lecturers with care tasks also had to find ways to reconcile these tasks spatially.

Processuality

As already mentioned, especially the mode of "Emergency Remote Teaching" is process-related. The HEIs were forced to quickly make technical acquisitions, clarify data protection issues and develop concepts for online teaching. This process continued throughout the semester. The learning experiences of lecturers and students regarding online teaching were also processual. The semester can be described as "trial and error.

Multi-layeredness, gender, intersectionality and inequality

The aforementioned challenges students are facing in the German HE system have intensified during the Corona crisis. Many international students could not even enter Germany in the first place. For international students in Germany, the lockdown meant social isolation because they did not have family around and were not allowed to see more than one other person at the same time. For international students, the main meeting place was the campus, which was unavailable. The social isolation also affected German students; for example, 26% of German students mentioned that they have strong concerns about managing their studies under the current conditions (Traus et al., 2020). In addition to the psychological stress, which only intensified in people with chronic illness or disabilities, 37% of the students had less money than before the Corona crisis (Traus et al., 2020). A job loss hits students from lower social backgrounds particularly hard. These students lost not only their financial security but also the necessary social space of HEIs.

As mentioned, the social space campus or classroom is central to successful studies for students with low social background. Accordingly, these students would need more support and interaction with lecturers in online teaching. However, as the survey of lecturers shows (Bochum survey 2020), the opposite is more likely to happen in "emergency remote teaching". The survey showed that 53% of lecturers stated that they interact less with their students than in face-to-face teaching (Bochum survey, 2020), 58% rated the volume of interaction as too low and 47% rated the quality of interaction as poor. Students also see the loss of social interaction in the online-semester as a huge problem (Bayreuth survey, 2020).

Due to the reduced interaction and the resulting reduced possibility for supervision, it can be assumed that international students, students from non-academic families and students with a migration background are more likely to drop out in the Corona crisis, develop psychological problems or have strong doubts about their studies. These students require particularly intensive supervision, which was mostly unavailable, even before Corona. The Corona crisis, however, has made this lack of supervision even worse (Traus et al., 2020).

Students indicated in all surveys that their workload has increased during the digital semester, thus aggravating the situation. (Bayreuth survey, 2020; Göttingen survey, 2020; Lüneburg survey, 2020). Indeed, most lecturers assign additional tasks to compensate for the lack of presence. Obviously, this also increases the burden on lecturers, especially as most lecturers first had to familiarize themselves with the online teaching format. Accordingly, 84% of lecturers stated that their workload had increased (Bochum survey, 2020).

As well as for lecturers, dealing with online teaching is also new for students. As shown above, interaction and supervision declined. Thus, the digitization of higher education could lead to an increase in inequality. As has already been described by Zilllien & Marr (2013), there is a digital knowledge gap in society. Therefore, unsurprisingly, only 52% (Bayreuth survey, 2020) or 54.8% (Lüneburg survey, 2020) of the surveyed students state that they feel able to complete the summer semester in a purely digital way. 53.8% feel able to study with fellow students in online groups (Bayreuth survey, 2020); almost half of them do not, although most students are familiar with, for example, WhatsApp. In this way we see the difference between everyday practices (communication with friends/family) and the practices incorporated for study (Steinhardt, 2020). As a possible way to help students cope with the new requirements, 75% of students responded that they prefer recorded lectures rather than live lectures, as recordings are easier to combine with other tasks (Göttingen survey, 2020).

The problem of compatibility applies to working students as well as students with children (about 6%). Buß et al. (2018) conclude that students with children have more difficulties in combining their studies with their additional demands. Attending courses, spending self-study time, and taking exams at the scheduled time are the

most common difficulties (Buß et al., 2018). In the lockdown, all kindergartens and schools were closed and as Speck (2020) shows, women mainly take over the care work. In addition to looking after children or caring for relatives, this also includes coping with household duties. Household duties increased during the Corona crisis due to the permanent stay at home and these duties were also mainly adopted by women (Speck, 2020). There are indications that old role patterns are (re)strengthened in the Corona crisis and social inequalities emerge more strongly than before (bukof, 2020; Inno et al., 2020; Myers et al., 2020; Oleschuk, 2020; Zinn et al., 2020).

Contradictions

The Corona crisis on the one hand has reinforced or aggravated inequalities in Germany, especially inequalities related to gender, social and migration background. Thus, student learning in times of Corona has involved moments of crisis that students (and teachers) need to deal with in social isolation. On the other hand, the Corona crisis has created opportunities, for example, in transitioning from teaching face to face to online teaching. At German HEIs, the Corona crisis has opened the window of opportunity for all lecturers to deal with online teaching. The same applies to students. In the best case, lecturers and students are able to acquire new skills. In addition, the expansion of online teaching (if it is asynchronous) provides opportunities to combine, for example, childcare or a job with studies.

3 Collaborative autoethnography as a possibility to create a Community of Learning

As shown, the Corona crisis has confronted students with new challenges. These challenges affect students differently due to intersectional factors. Lecturers, especially in sociology, are often aware of the structural inequalities in the higher education system. At the same time, they often know little about the personal circumstances of students and the challenges they face. For lecturers, it is not possible to ask directly about the social background of students, sexual preferences, or experienced discrimination. Furthermore, experiences of

inequality and discrimination are only shared when trust is built up slowly. If existing inequalities are not to be reproduced in a seminar, a setting must be found that takes into account the diversity of students and allows for individual development. This is particularly important in the current crisis. Therefore, to readjust the power difference between lecturers and students, it is critical that students are seen as partners (Acai et al., 2019). In the concept "Students as partners" (SaP), students are seen as co-creators and co-learners, who contribute their expertise to the teaching-learning situation in a different but equal way (Acai et al., 2019). “SaP is a values-based ethos underpinned by principles of respect, reciprocity and shared responsibility” (Acai et al., 2019). The concept of SaP corresponds to autoethnography as a scientific approach, since it allows for a focus on individual perceptions. In the presented case, the focus was on the experiences of the students: “Autoethnography is an approach to research and writing that seeks to describe and systematically analyze (graphy) personal experience (auto) in order to understand cultural experience (ethno)” (Ellis et al., 2010).

Collaborative autoethnography extends this approach and focuses on the collaborative collection and analysis of autobiographical data: “researchers work in community to collect their autobiographical materials and to analyze and interpret their data collectively to gain a meaningful understanding of sociocultural phenomena reflected in their autobiographical data” (Chang et al., 2016, p. 23f). Through the collaboration in the seminar, stimulated by the method, a community of learning could arise. In the current crisis, this was important to build trust and thereby address the specific challenges of the students. I describe how this occurred in the following way: First, I will describe the seminar setting and the practicing collaborative autoethnography. Secondly, I will analyze why a community of learning (with me as a part of it) arose and how the community helped to meet the challenges of the crisis.

Design and software tools[1]

To make the seminar as inclusive as possible, it was mainly asynchronous. Regarding the above-mentioned challenges, the students and I as a lecturer faced two challenges in particular: First, often having a poor internet connection. Secondly, having to combine care tasks and/or work with studying or teaching. Asynchronous teaching allows for the fulfillment of the tasks set, if there is time and space for it (Sund, 2020, p. 1). For the asynchronous teaching, I chose programs that were already available at the university, easily accessible, and open-source software. Moodle, a learning management system (https://moodle.org), allows me to provide content, set up chats and forums and communicate with students. Students can experience a joint learning environment in Moodle. Moreover, it is also their course and their forum. I also used Mahara (https://mahara.org/) an eportfolio tool that allows students to write texts, share them and give peer-feedback within the seminar or self-created smaller groups.

As Moodle is the common LMS at my university, all students are familiar with it, having used it from the first day of their studies. I uploaded all relevant information and content before the semester started, so that all students could get a comprehensive picture of the seminar and its requirements. The access to the course was open (Moodle also offers the possibility to restrict access via password) thus all interested students could first get an overview.

My role as lecturer: Leading by example

The seminar was an elective course in the second year of a BA in sociology. In order to help students decide for or against the seminar, I also recorded a welcome video. In the video, I first wanted to establish a connection with students. Although this connection was only one-directional, as only the students could see me, I wanted to convey the feeling that I am a real person who can be addressed. Secondly, I spoke openly about the new situation of online teaching, which was new to everyone. I

[1] You can find the syllabus here (but in German): https://sozmethode.hypotheses.org/981

verbalized the challenges to lessen any possible fears among the students. I emphasized that we could adapt parts of the seminar to the needs of the students, but there are fixed requirements that are necessary to make the seminar successful. These fixed requirements were: Firstly, to create 18 diary entries about the everyday use of digital technologies on Mahara; secondly to provide peer feedback on the diary entries; thirdly to collaboratively analyze the diary entries in small groups.

In setting out these requirements, I certainly did not address people who prefer to work alone. For enabling a community of learning, those who prefer to work and learn alone are not the appropriate group of people. More problematic is the question as to whether people did not feel addressed because, due to their personal circumstances, they could not foresee being able to write regular journal entries. Unfortunately, it is not possible to find out whether this was the case.

After I introduced myself via video, I asked the students to introduce themselves in a forum in Moodle. For the introduction, I asked for the motivation of selected the course, the available equipment (computer, internet connection), if they needed additional support, and if the students wanted to change anything about the proposed syllabi. Of the 26 students who registered for the seminar in Moodle, 23 wrote an introduction in the forum. In the introduction, many of them expressed positive feedback about the possibility of writing about their situation, even though no one mentioned any challenges. Many were positive about the welcome video and the opportunity to introduce themselves in the forum, as this overcame the initial fear of total anonymity in the digital semester.

To gain an overview of the students' academic skills, the first task was to write a summary of the text Ellis et al. (2010). I gave students feedback on their summaries via e-mail to connect to the students individually. Additionally, I didn't want to embarrass anyone with the feedback. Honest feedback means making clear where weaknesses lie, but in a friendly and helpful way. It was important to me to emphasize positive aspects as well as justified criticism.

To remove the students' fear of writing something "wrong" in the diaries, I wrote diary entries about my use of digital technologies myself and shared them with the students via Mahara. As I revealed personal information (family, work), the diary entries allowed a deep insight into my everyday life. This seemed only fair to me, as

I wanted the same from the students, in the sense of a learning community based on partnership. The task for the diary entries was to write down which, how, when and why digital technologies are used.

Working collaboratively

Since most of the students in the seminar had never worked with Mahara, I created a step-by-step instructional video and answered questions via the forum. The feedback from some of the students showed how insecure they were in using a new tool and how few digital skills they ultimately have. Once again, it became clear that not all students of the same generation are "digital natives" (Bond et al., 2018) who can intuitively learn new programs without any problems. Instead, there is a "digital competence divide" (van Deursen & van Dijk, 2019). Accordingly, it is important to provide precise instructions and support for students who have not yet been able to acquire adequate digital skills.

In Mahara, the students had the opportunity to read all the diary entries. For three diary entries, each student was required to give feedback each week. The guiding questions for the feedback were “Which diary entry made you think and why?” “Which diary entry resembles your own usage behavior and why?” “Which diary entry describes usage behavior that differs strongly from your own and why?” Every week I also gave each student feedback on the diary entries.

The aim of the peer feedback was firstly to initiate reflections among the students. In the diary entries, students named differences and similarities in the practices of other students after the peer feedback and questioned their own practices. Secondly, I wanted the students to get to know each other through asking them to read their peers’ entries and by giving and receiving peer feedback. As it turned out, only two students on the seminar knew each other personally before the course. This means that the students could not fall back on any social contacts made face-to-face before the lockdown.

After the phase of diary entries, I conducted a theory session on social practices. In the theory session, students learned about the connection between social practices, habitus and types of capital (Bourdieu, 1984). Before the session, I

conducted a short survey on the students' technical equipment because it was important for me that nobody was excluded. The result of the survey was that not all students had a stable internet connection. In addition, Corona had caused some students to change their working times and care tasks, so that not all students were able to attend the dates listed in the course catalogue. Therefore, I conducted a live-Moodle chat rather than a live-Zoom meeting. The chat could be recorded and read afterwards while, for data protection reasons, my university prohibited the recording of Zoom sessions. The short survey showed how important it is to involve students in the planning. At the end of the theoretical part, I asked the students to write a reflection on their own habitus (Bourdieu, 1984). These reflections helped me to see if the students understood the theory. Furthermore, the students could use the reflections as background information for the analysis.

To analyze the journal entries, groups of 2 to 4 students were formed. Eight groups were formed, six of them without my involvement. The group formation process took place because of commonalities in the diary entries or because of the same interest in a practice. The groups analyzed practices such as "the digital morning routine", "killing time with mobile phone" or "music on demand". Due to the short time available to the students, I chose the dense description (Geertz, 1973) for the process of analysis[2]. According to Geertz (1973), the following steps are decisive for a thick description: Firstly, describe what was observed, in this case, the autoethnographic self-observation of the use of digital technology. Second, understand what was observed, and third, interpret what was observed.

The students organized the work in their groups independently via Moodle and Mahara and wrote the thick description. In the five weeks of writing, there were three deadlines to upload parts of the thick description. Both I and the students gave feedback on the papers. I also offered two live-chats to discuss the interpretations and answer open questions. In the end, we decided to publish the thick descriptions in a special issue.

[2] Autoethnography and collaborative autoethnography has no standardised data analysis process (Chang et al., 2016).

4 Discussion: How could a community of learning arise?

To reflect on the didactic considerations of my seminar, I reuse Bergman-Rosamond et al's (2020). aspects of crisis In doing so, I transfer their concept from the political, social, psychological and geographical field to the field of (sociological) teaching.

The first aspect is time. If social interaction cannot take place face-to-face and not synchronously, then time becomes less important because the interaction does not take place at a specific point in time. However, interaction becomes more time-consuming. Digital asynchronous seminars are much more time-consuming than face-to-face seminars, especially for lecturer. For example, the lecturer cannot give feedback in a seminar at the same time but must write the feedback to each student individually. The same applies to written peer feedback. In the described case students gave peer-feedback to each other. Written feedback costs more time, but it also leads to more intensive reading of the texts. In addition, the students got to know each other better through the peer-feedback of the diary entries than would have been possible in a face-to-face seminar, which led to the formation of a community. Building a community is a process that takes place slowly and begins with getting to know each other. That is why I had placed the creation of the diary entries at the beginning of the seminar and not started with the teaching of theory. In the time aspect, it was important not to overburden the students. In Germany, students receive credit points for their courses, which are linked to a time budget. In this respect, it was necessary to estimate how much more time the asynchronous event would cost and to adjust the seminar schedule accordingly.

The next aspect is spatiality. As shown, the social space of the university was (and is) closed. As Tinto (1973; 1996) shows, the social space classroom is crucial for the development of a community. Therefore, it is crucial to create a digital classroom where social interaction is possible. Through social media, most students are already familiar with such digital spaces. So far, digital social spaces are seldom used at HEIs. With Mahara, such a space is available. As an open source tool, it does not track students' data and is therefore secure. In Mahara, students could get to know each other through diary entries and communicate with each other and thus interact

socially. It was irrelevant where they were in the real world, which meant high flexibility for the students.

In contrast to the Bochum Survey (2020) where lecturers reported that there was less interaction with students, I experienced the opposite. I think this was due to the insights gained into the students' everyday lives and biographies through the diary entries. This enabled me to be sensitive to current challenges, to ask specific questions, write words of encouragement, and, when necessary, to handle deadlines flexibly. In this way, I could establish a basis of trust, which enabled students to ask questions and request help at any time. The basis of trust is also reflected in the low dropout rate during the seminar. Only three of the 26 students who originally registered did not complete the seminar. The low dropout rate reflects the commitment to the seminar, despite the multi-layered challenges the students faced[3]. As the diary entries showed, students had to cope first with the switch to digital studies, which was challenging enough for many. Second, students helped with home schooling their siblings so that their parents could continue to work, which also meant that they had less time for their studies. Third, students who had psychological problems before Corona reported an increase in problems due to isolation and lack of structure. Fourth, students reported financial worries due to the loss of side jobs.

The students met the challenges to varying extents. The inequalities that apply to the higher education system in general were also present in my seminar. I could see a connection between social background and academic expression. The differences were particularly evident in the ability to reflect on the students' own diary entries and those of the fellow students. Autoethnography as approach to collect and document everyday experiences offered a substantial way to make these differences visible (to me as a teacher). Autoethnography is a method that relies on verbal expression, self-observation and self-reflection. The autoethnographic entries, which provided a regular rather than one-time glimpse into students' written thoughts, gave me the opportunity to look deeper into their verbal, academic, and

[3] It also can be seen as argument why an honest and detailed course description is beneficial for students and teachers alike.

reflective competencies. Through this insight, I was able to provide individualized learning support through formative feedback.

Verbal expression, self-observation and self-reflection are rarely taught in German schools and even less so at German HEIs. The skills are usually only available to students who learned them at home. Furthermore, students whose families have an academic background tend to have acquired relevant academic competencies before entering HEI, whereas first generation students often do not.

If we as lecturers are expecting these competences and do not help in the learning of these competences, we reproduce social inequality and rate students worse without these competences. To avoid the reproduction of social inequalities, lecturers must recognize structurally determined differences in competence and, above all, provide comprehensive support. It is important to provide this support in a non-discriminatory and habitus-sensitive manner. Clear rules for peer feedback, for example, are helpful here and should prevent discrimination. Furthermore, I checked all comments to prevent harmful peer feedback but did not notice any. I also saw this as a sign of a functioning community: the positive and helpful attitude towards each other.

I would like to reflect on one last point. The students formed the groups for the analysis themselves. As I have already explained, only two people knew each other before the seminar and then worked together in a group. Through the diary entries, the students had a very good impression of each other. Through this knowledge, students formed socially homogeneous groups, as was foreseeable with Bourdieu (1984).

At first, I had considered intervening to mix the groups socially so that the students could learn from each other. However, I decided against it because I see it as my task to support students in learning academic competences and not to leave this to the students themselves. Because of the homogeneous groups in which the students have similar levels of competence, I was able to give specific help and conduct a competence-oriented assessment so, in this respect, not reproducing the social inequalities. By focusing on the students' competences in the different groups, I was able to support students who had little experience with digital technologies.

This resulted in an additional increase in competence, which would not have been possible without the Corona crisis and shows the contradiction of the crisis.

Conclusions

Due to the Corona crisis, German HEIs had to close their campuses and lecturers had to teach online. As shown in the analysis of the crisis, the closure of the social space (and the Corona crisis as a whole) hit students who had previously been affected by (intersectional) inequality particularly hard. To soften the particular challenges associated with the ad hoc transition, the creation of a digital community of learning can help. A helpful way to generate such a community is to choose a method that places students at the center. Autoethnography enabled the students to reflect on their own challenges and those of their fellow students in the Corona crisis. Through this collaborative reflection, a common space of experience was created. For this purpose, it was important to have a digital space (in this case Mahara) where the exchange could take place. A community of learning only develops over time and if all participants take the time to get involved (e.g., through comprehensive feedback). The case presented has shown how the use of autoethnography has made it possible to mitigate inequalities in the academic context that have been exacerbated by crisis situations. The continuous insight into the "learning status" of the students made it possible to promote their learning and provide individual assistance.

References

Acai, A., Mercer-Mapstone, L.; Guitman, R. 2019. *Mind the (gender) gap: Engaging students as partners to promote gender equity in higher education.* Teaching in Higher Education, 1–21. https://doi.org/10.1080/13562517.2019.1696296

Autorengruppe Bildungsberichterstattung. 2020. *Bildung in Deutschland 2020*. wbv Media. http://doi.org/10.3278/6001820gw

Bayreuth S. 2020: *Auswertung des Fragebogens zur digitalen Lehre, Studierendenparlament.* https://www.studierendenparlament.uni-bayreuth.de/de/Corona/fragebogen/

Bergman-Rosamond, A.; Gammeltoft-Hansen, T.; Hamza, M.; Hearn, J.; Ramasar, V.; Rydstrom, H. 2020. *The case for Interdisciplinary Crisis Studies. Global Discourse.* https://doi.org/10.1332/204378920X15802967811683

Bochum Survey 2020: *Erste Ergebnisse der Lehrendenbefragung zur online-basierten Lehre im SoSe 2020*.
https://padlet-uploads.storage.googleapis.com/532752323/613deeaeb2ca5b9dd40ccc4bdf9ea3db/Erste_Ergebisse_Lehrendenbefragung_der_RUB_final.pdf

Bond, M.; Marín, V. I.; Dolch, C.; Bedenlier, S.; Zawacki-Richter, O. 2018. *Digital transformation in German higher education: Student and teacher perceptions and usage of digital media*. International Journal of Educational Technology in Higher Education, *15*(1), 48. https://doi.org/10.1186/s41239-018-0130-1

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Harvard University Press.

Brinks, V.; Ibert, O. 2020. *From Corona Virus to Corona Crisis: The Value of An Analytical and Geographical Understanding of Crisis*. Tijdschrift Voor Economische En Sociale Geografie, *111*(3), 275–287. https://doi.org/10.1111/tesg.12428

Bukof. 2020. *Geschlechterpolitik in Zeiten von Corona—Ergebnisse einer Umfrage unter den Frauen- und Gleichstellungsakteur*innen der außeruniversitären Forschungsorganisationen und Hochschulen* (p. 4).

Buß, I.; Erbsland, M.; Rahn, P.; Müller, R.; Husemann, B. 2018. Studierende mit Kind: Vereinbarkeit und Flexibilität als Studienerfolgsfaktoren. In I. Buß, M. Erbsland, P. Rahn; P. Pohlenz (Eds.), *Öffnung von Hochschulen* (pp. 107–131). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-20415-0_6

Chang, H.; Ngunjiri, F.; & Hernandez, K.-A. C. 2016. *Collaborative Autoethnography*. Routledge.

Ehlers, U.-D. 2020. *Perspektivwechsel – Ansichten und Einsichten zum Digitalsemester 2020*. https://docs.google.com/document/d/1eQG5YDuRFRtEBKxmjSmf5Q2pbXYZazuPW8t_VNsMyDw/edit#heading=h.bhiag079eblo

Ellis, C.; Adams, T. E.; Bochner, A. P. 2010. *Autoethnography: An Overview*. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, *12*(1). https://doi.org/10.17169/fqs-12.1.1589

Geertz, C. 1973. *The Interpretation of Cultures: Selected Essays*. Basic Books, Inc. Publishers.

Göttingen Survey 2020: *Ausgewählte Ergebnisse der Studierendenbefragung zu den Voraussetzungen für digitale Lehre im SoSe 2020 im Auftrag der virtuellen AG Studium und Lehre*. Abteilung Studium und Lehre, Bereich Qualitätsmanagement. https://www.uni-goettingen.de/de/document/download/1bb010ea661fda93bc4cc62bfc5442e3.pdf/20200604_studierendenbefragungSoSe2020_Voraussetzungenf%C3%BCrAG.pdf

Händel, M.; Bedenlier, S.; Gläser-Zikuda, M.; Kammerl, R.; Kopp, B.; Ziegler, A. 2020. *Do Students have the Means to Learn During the Coronavirus Pandemic? Student Demands for Distance Learning in a Suddenly Digital Landscape*. https://doi.org/10.31234/osf.io/5ngm9

Hargittai, E. 2010. *Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the "Net Generation"**. Sociological Inquiry, *80*(1), 92–113. https://doi.org/10.1111/j.1475-682X.2009.00317.x

Hodges, C.; Moore, S.; Lockee, B.; Trust, T.; Bond, A. 2020. *The Difference Between Emergency Remote Teaching and Online Learning*. Educausereview, 12. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Inno, L., Rotundi, A.; & Piccialli, A. (2020). COVID-19 lockdown effects on gender inequality. *Nature Astronomy*, 1–1. https://doi.org/10.1038/s41550-020-01258-z

Kercher, J. 2018. *Academic success and dropout among international students in Germany and other major host countries* (DAAD-Blickpunkt, p. 23). German Academic Exchange Service.

Kerres, M. 2020. *Against All Odds: Education in Germany Coping with Covid-19*. Postdigital Science and Education, s42438-020-00130–00137. https://doi.org/10.1007/s42438-020-00130-7

Kreulich, K.; Lichtlein, M.; Zitzmann, C.; Bröcker, T.; Schwab, R.; & Zinger, B. 202. *Hochschullehre in der Post-Corona-Zeit. Studie der bayerischen Hochschulen für angewandte Wissenschaften* (p. 74). Forschungs- und Innovations-labor Digitale Lehre (FIDL).

Lörz, M. 2019. *Intersektionalität im Hochschulbereich: In welchen Bildungsphasen bestehen soziale Ungleichheiten nach Migrationshintergrund, Geschlecht und sozialer Herkunft – und inwieweit zeigen sich Interaktionseffekte?* Zeitschrift für Erziehungswissenschaft, 22(1), 101–124. https://doi.org/10.1007/s11618-019-00885-1

Lörz, M.; Marczuk, A.; Zimmer, L.; Multrus, F.; Buchholz, S. 2020. *Studieren unter Corona - Bedingungen: Studierende bewerten das erste Digitalsemester*. DZHW Brief. https://doi.org/10.34878/2020.05.DZHW_BRIEF

Lüneburg Survey 2020: *Das digitale Semester an der Leuphana Universität Lüneburg*. Asta der Universität Lüneburg. https://asta-lueneburg.de/post/das-digitale-semester-4660/

Middendorff, E.; Apolinarski, B.; Becker, K.; Bornkessel, P.; Brandt, T.; Heißenberg, S.; Poskowsky, J. (2017). *Die wirtschaftliche und soziale Lage Studierender in Deutschland 2016. 21. Sozialerhebung des Deutschen Studentenwerks—Durchgeführt vom Deutschen Zentrum für Hochschul- und Wissenschaftsforschung* (p. 196). Bundesministerium für Bildung und Forschung (BMBF).

Müller, L.; Schneijderberg, C. 2020. *The Emergence of the Organizational Academic Profession: Vertical differentiation of German universities and the research-teaching nexus* [Text]. Higher Education Forum; Research Institute for Higher Education, Hiroshima University. https://doi.org/10.15027/48954

Myers, K. R.; Tham, W. Y.; Yin, Y.; Cohodes, N.; Thursby, J. G.; Thursby, M. C.; Schiffer, P.; Walsh, J. T.; Lakhani, K. R.; Wang, D. (2020). *Unequal effects of the COVID-19 pandemic on scientists*. Nature Human Behaviour, 4(9), 880–883. https://doi.org/10.1038/s41562-020-0921-y

Oleschuk, M. 2020. *Gender Equity Considerations for Tenure and Promotion during COVID-19.* Canadian Review of Sociology. https://doi.org/10.1111/cars.12295

Scheerder, A.; van Deursen, A.; van Dijk, J. 2017. *Determinants of Internet skills, uses and outcomes. A systematic review of the second- and third-level digital divide.* Telematics and Informatics, 34(8), 1607–1624. https://doi.org/10.1016/j.tele.2017.07.007

Schmitt, L. 2010. *Bestellt und nicht abgeholt*. VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-92193-8

Speck, S. 2020. Zuhause arbeiten. Eine geschlechtersoziologische Betrachtung des >Homeoffice< in der Corona-Krise. In M. Volkmer & K. Werner (Eds.), *Die Corona-Gesellschaft Analysen zur Lage und Perspektiven für die Zukunft.* (pp. 135–144). Transcipt Verlag. http://public.eblib.com/choice/PublicFullRecord.aspx?p=6266831

Steinhardt, I. 2020. *Digitale Praktiken und das Studium* [Preprint]. SocArXiv. https://doi.org/10.31235/osf.io/rebh7

Sund, K. J. 2020. *Suggestions for Moving Teaching Rapidly Online in the Face of the Corona Crisis*. 13.

Tinto, V. 1975. *Dropout from Higher Education: A Theoretical Synthesis of Recent Research.* Review of Educational Research, 45(1), 89–125. https://doi.org/10.3102/00346543045001089

Tinto, V. 1997. Classrooms as Communities: Exploring the Educational Character of Student Persistence. *The Journal of Higher Education*, *68*(6), 599. https://doi.org/10.2307/2959965

Traus, A.; Höffken, K.; Thomas, S.; Mangold, K.; & Schröer, W. 2020. *Stu.diCo. – Studieren digital in Zeiten von Corona.* https://dx.doi.org/10.18442/150

van Deursen, A. J.; van Dijk, J. A. 2019. The first-level digital divide shifts from inequalities in physical access to inequalities in material access. *New Media & Society*, *21*(2), 354–375. https://doi.org/10.1177/1461444818797082

Zillien, N.; Marr, M. 2013. The Digital Divide in Europe. In M. Ragnedda & G. W. Muschert (Eds.), *The Digital Divide: The Internet and Social Inequality in International Perspective* (pp. 75–86). Routledge.

Zinn, V. S.; Kreyenfeld, M.; Bayer, M. 2020. *Kinderbetreuung in Corona-Zeiten: Mütter tragen die Hauptlast, aber Väter holen auf*. 6.

***Originally published in**: january 2021*

Sociological Teaching

The Sociology of a Covid-19 Virtual University

Mariam Seedat-Khan
University of KwaZulu Natal.

Aradhana Ramnund-Mansingh
Mancosa Honoris United Universities.
E-mail: seedatm@ukzn.ac.za

Abstract

The precipitous closing of schools, universities, and colleges across the globe has impacted significantly on the teaching ecosystem. The COVID-19 pandemic has metamorphosed the academy radically. Notwithstanding this histrionic shift, the augmented teaching concomitant loads of online assessments, reconfiguration of teaching templates, research and student consultations, and academic advising has extended the workday beyond any universally accepted standards. This unrecognizable teaching milieu has impacted deleteriously on women in the academy. Socially constructed virtual COVID-19 classrooms expeditiously superseded the substitution of traditional face to face lectures. The demands for a remodeled university environment, novel teaching systems, and inventive conjectural methodologies propelled teaching and learning specialists to work assiduously. The response to COVID-19 necessitated proficiencies in a cutting-edge technical experience together with complementing pecuniary and clerical capitals to support academics in virtual classroom deliveries. COVID-19 has demanded dexterities to compress academic content for virtual platforms. The failure to safeguard academics' individual private space has expedited irretrievable impairment on their physical and mental health. The destruction of work-life balance and unprecedented role overload imposed on women have heightened gender exploitation in the academy. This paper embraces two meaningful teaching and learning approaches. The first is centered on first-hand COVID-19 classrooms. It assumes a qualitative desktop methodological approach, which examines the impact of virtual teaching and learning on academics at universities in COVID-19 virtual classrooms. The second is a clinical approach that measures seven universal

performance areas that are noteworthy to aspects of teaching and learning approaches for academics. The outcomes of this study indicate the challenges experienced by women who undertake the responsibility to maintain exemplary academic standards. Within the analysis of scholarship and the formulation of a clinical model, this paper examines the impact of role overload and learning to teach virtually in a gendered virtual space. We seek to provide sociological

Keywords: Women, teaching, learning, academics, work overload, online, resources, challenges, virtual

Introduction

On 1 March, 2020, patient zero arrived in South Africa after an Italian vacation with a group of friends. The COVID-19 zoonotic pandemic that began in Wuhan-China was proliferating worldwide at an unprecedented pace, claiming human lives indiscriminately.

Universities around the world are guided by existing enterprise risk management policies that outline carefully constructed responses and measures for student discontent, natural disasters, fire, security threats, and a multitude of associated risks. The absence of a pandemic enterprise risk management response at universities around the world has imposed unparalleled weight on academics. The pandemic has unrelentingly disordered every segment of the academy, with women experiencing the greatest burden.

This paper cognizes seven critical areas of significance in an attempt to understand gendered work in academia pre-COVID-19 and a response to COVID-19, considering significant guidelines and clinical interventions.

These include 1) Personal academic progression; 2) Teaching responsibilities; 3) Administrative duties; 4) Research efficiency and promotions; 5) Academic advising of postgraduate students 6) Accessing research funding and 7) Community engagement. These seven areas exemplify a pervasive portion of the sociological scholarship, which deliberate intensifying intersections of a COVID-19 state of crises.

1 Personal Academic Progression

The idiosyncratic strains have distorted the function of women academics, who have of late altogether imported their already excessive pre-COVID-19 workload into the familial personal space. The most significant lockdown challenge that women are experiencing is the act of balancing work and home, which has plagued academics for decades. It is not uncommon for women to work 20-hour days, to meet intensified academic demands. COVID-19 is recognized as an intersecting thread that binds women in embedded struggles.

While a limited portion of disengaged academics uses idem theoretical content repetitively, enthusiastic academics engage with critical, current, and decolonized sociological content, newly constructed for each academic semester. These academics initiated the semester with a set of lecture plans, aligned to the module templates of the course, making effective use of online platforms (Moodle, Blackboard, Learn) prepared for the delivery and execution of a successful academic year.

The augmented responsibilities imposed excessive expectancies on academics forced into teaching on virtual systems with makeshift approaches for which they have not been adequately prepared. The responsibility foisted primarily on women has been rigorous. As a consequence, the procedure of best practice optimal 'online learning' strategies has yet to be identified, leaving academics scrambling for 'emergency online resources' (Petrie, Aladin, Ranjan, Javangwe, Gilliland, Tuominen & Lasse, 2020: 14).

The obligation to convert teaching and assessment models, reconfigure academic supervision models and amend critical research interventions have encumbered women in the academy. Within a space of two months, academics had to review and revise their curriculum delivery based on the precipitous changes on the cusp of lockdown. Ramnund-Mansingh and Seedat Khan (2020) have identified the gravity of gender inequity in the academy and its devastating impact on women in South Africa. The intellectual inventiveness has created extraordinary work-life challenges, with women experiencing disproportionate workloads. The gratuitous teaching workload and associated assessment template formulations have stretched the workday for women punitively.

The relocation into virtual COVID-19 blended approach classrooms has obliterated the fundamental separation between academic workspace and the solitude of academics' individual homes. The encroachment of the academy into personal physical spaces intersects at personal and professional levels. This impact of this virtual university underpins epistemological shifts as academics are duty-bound to assume planning, assessment, coordination, development, teaching philosophies, and design of capricious Covid-19 classrooms. The COVID-19 pandemic and university responses around the world have failed to provide solutions that prioritize the historical marginalization of career trajectories of women in the academy. The failure to consider the systemic, entrenched patriarchal tradition in higher education is not surprising. Women's rights and equality have continuously been placed on the back burner in favor of prioritizing contemporary political, social, health, and economic emergencies. The arrival of COVID-19 has hurtled women into one of the most unprecedented exploitative labor configurations since the 1950's.

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Personal Academic Progression				
Pre-COVID-19	**Covid-19 Response**	**Gender-Specific Challenges**	**Guidelines**	**Clinical Intervention**
Completion of PhD	No modifications; No concessions; Academics are required to meet prescribed deadlines.	Women experience role overload, making Ph.D. completion challenging.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Systematic processes prescribed by human resources, to facilitate completion.
Researcher Rating	No modifications; No concessions; Academics are required to meet prescribed deadlines.	Women experience role overload, making rating challenging.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate*	Systematic processes prescribed by human resources, to facilitate rating with guidance and mentorship.

			Professor; Senior Lecturer; Lecturer.	
Promotion	No modifications; No concessions; Academics are required to meet prescribed deadlines.	Women experience role overload, making promotion requirements challenging. Familial responsibility, young children.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Systematic processes prescribed by human resources, to facilitate promotion with guidance and mentorship.
Fellowships	No modifications; No concessions; Academics are required to meet prescribed deadlines.	Women experience role overload, making travel for protracted periods challenging familial responsibility, young children.	Identify and deliver shorter fellowship experiences to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Equitable access among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.
Sabbatical	No modifications; No concessions; Academics are required to meet prescribed objectives outlined in the sabbatical agreement.	Women experience role overlap making travel for protracted periods challenging familial responsibility, young children.	Identify equitable among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Equitable access among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.
Increase Proficiencies	No modifications; No concessions; Academics are required to meet prescribed deadlines for proficiencies.	Requests for administrative tech support are overlooked.	Equitable response to requests and access to available funds for specialist skills and training.	Equitable access among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.

The work and time invested in content preparation have been voided as academics re-organize presentations, readings, and writing assessment activities. "*There are unparalleled opportunities for cooperation, creative solutions, and willingness to learn from others and try new tools"* (Doucet, Netolicky, Timmers, & Tuscano, 2020, p. 10). Assessments and traditional exams required realignment to blended methodologies to safeguard accurateness and authenticity of accurate

online assessments and health safety COVID-19 protocols. Furthermore, academics are required to ensure students have cognized the module outcomes.

Female academics have been hit particularly hard during the COVID-19 lockdown as all indications point to career stagnation for years to come, high levels of stress and possibly burnout, 20-hour days persist.

2 Teaching Responsibilities

With just over 60 days of lockdown before universities resumed their curriculum, how well prepared were they? While private institutions transitioned with ease as their infrastructure was already in place for distance learning, having a sound technological foundation, students lost minimal time in the semester. Even months after re-opening, public universities contend with failed blended approaches and challenging data connectivity for students in public and private institutions. Aside from a technical infrastructure that is not complete while many rural areas are without connectivity from the lack of cellular towers in these geographic regions, many South Africans simply cannot afford the exorbitant data costs. In assessing the successful continuation of the curriculum, researchers have failed to fully cognize the extensive challenges experienced by academics.

What thenceforth are the experiences of South African women in Social and Human Science faculties, where first-year level modules commonly include 1600 students. Women in the academy are overwhelmed by considerable teaching loads, particularly those of the substantial first-year modules (Seedat-Khan, Ramnund-Mansingh & Johnson, 2020). The physical and now virtual teaching has evolved, demanding additional preparation time, advanced technological proficiencies, and intensified administration responsibilities. Academics skillfully executed first-year modules with 1600 students allocating them into four separate lecture areas contingent on the capacity at university. Online virtual teaching models allow academics to attend to all 1600 students in one virtual classroom.

The challenge lies in the delivery and response to overwhelming student support. South African university students frequently require support specifically in the context of English language proficiencies and understanding

of academic content. These challenges intersect with student pandemic anxieties and place female academics under immeasurable difficulty to help students emotionally and academically.

Female academics are perceived as nurturing, maternal figures, and approachable as a source of academic support and guidance (Ramnund, 2019).

The impact of workloads both at home and paid work keeps women struggling to focus.

> Women are experiencing physical symptoms of severe anxiety and burnout at up to twice the rate of men. In the survey of 3,117 people conducted from 13 April to 17, women were two times more likely to report symptoms like a racing heartbeat, problems sleeping, and feeling overwhelmed than men. Women are disproportionately feeling overwhelmed because they are disproportionately the ones working day and night to keep households afloat (Stieg, 2020).

A study (García-González, Torrano and García-González, 2020) conducted on female university professors who work at online universities attempted to examine the primary stress factors that women working as online university professors are exposed to that may lead to elevated levels of stress or burnout. This is a significant study, for academics faced with online teaching using a blended approach.

Mental fatigue and role ambiguity played a substantial role in their physical and emotional wellbeing.

> The lack of autonomy is another potential stressor the experts agreed upon. Specifically, it is viewed as a possible hazard because of the excessively rigid scheduling in online teaching and the bureaucratization of the evaluation systems that causes the pace of work to be imposed by the educational system instead of workers o (García-González et al., 2020, p. 9).

This resulted in burnout, the physical manifestation of illnesses as well as back pain and visual fatigue.

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Teaching Responsibilities				
Pre-COVID-19	**Covid-19 Response**	**Gender-Specific Challenges**	**Guidelines**	**Clinical Intervention**

Fulfill assigned teaching workload aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer)*	Increased workload on women at *Senior Lecturer; and Lecturer*.	Role overload, with associated administrative responsibilities. Time demands. Student support.	Establish a COVID-19 teaching response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Weekly virtual support meeting with constructive support on teaching challenges *Professor; Associate Professor; Senior Lecturer; Lecturer*.
Measure student academic performance for each assigned module.	Online assessments and evaluations	Inundated with special requests from students. Time demands.	Establish a COVID-19 administrative response team, with additional human resources.	Subsidize funds for the employment of additional administrative, human resources.
Ensure quality proficiency independent student evaluations for each module. Time demands.	Online assessments and evaluations	Difficult to co-ordinate determined by virtual attendance. Time demands.	Establish a COVID-19 administrative response team, with additional human resources.	Subsidize funds for the employment of additional administrative, human resources.
Ensure quality proficiency independent peer evaluations for each module.	Online assessments and evaluations	Difficult to co-ordinate determined by the availability of senior academics. Time demands.	Establish a COVID-19 academic response team, with *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Minimum mandatory peer evaluations per semester.
Develop and design new academic content and programs.	Rationalization of academic programs.	Compromises innovation. Time demands.	Establish and support new areas of scholarship and expertise.	Identify teams of specialists to include *Professor; Associate Professor; Senior Lecturer; Lecturer*.
Include efficient and relevant teaching methods.	Virtual Platforms	Role overload, increased demands for intricate proficiencies and dexterities. No physical contact.	Establish a COVID-19 academic information communication system support team, for *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Accessible information communication system support team, during teaching hours.
Include efficient and	Training for all academic staff; online	Role overload, increased demands for	Establish a COVID-19 academic information	Accessible information communication

relevant use of technology.	assessments; online lectures, compression of data; online delivery and engagement.	intricate proficiencies and dexterities. No physical contact. Time demands.	communication system support team, for *Professor; Associate Professor; Senior Lecturer; Lecturer.*	system support team, during teaching hours
Prescribed teaching templates	Modified assessment templates.	Administration imposed on women. Time demands.	Establish a COVID-19 administrative response team, with additional human resources.	Develop proficiencies among staff at *Professor; Associate Professor; Senior Lecturer; Lecturer.*
Student Consultations	Increased student demands.	Inundated with special requests from students. Time demands.	Establish a COVID-19 academic response team, with *Professor; Associate Professor; Senior Lecturer; Lecturer.*	Minimum mandatory consultations per semester.

3 Administrative responsibilities

Sustained efforts to maintain and establish gender equity in the academy have been threatened by the onset of a pandemic via the formation of the COVID-19 virtual classroom. The unequal division of academic teaching and administrative workloads and associated undertakings remain the responsibility and added burden of women in the academy. This teaching workload has been exacerbated by the pandemic resulting in the creation of COVID-19 virtual classrooms all over the world. Women are burdened and exploited virtually and are required to *"manage the institutional housekeeping – i.e., committee work, student recruitment, departmental social events"* (Swanson and Johnston, 2003, p. 3). Deep racial and 'invisible' gendered, patriarchal structural impairments function to denounce the distinctiveness of women academics. Academics work includes a measure of institutional housekeeping which *"represents the invisible and supportive labor of women to improve women's situation within the institution much like unpaid domestic housekeeping typically performed by women in family units, institutional housekeeping is usually performed without resources or recognition"* (Bird, Litt and Wang, 2004, p. 195).

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Administrative Responsibilities				
Pre-COVID-19	**Covid-19 Response**	**Gender-Specific Challenges**	**Guidelines**	**Clinical Intervention**
Fulfill administration aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer).*	No modifications; No concessions; Academics are required to meet prescribed administration practice.	Increased administrative responsibility. Virtual operations; Absence of physical assistance and support.	Adhere to existing protocol for data protection.	Provide resources and training to deliver requests virtually. Provide additional administrative support.
Fulfill teaching administration responsibilities, academic counseling	No modifications; No concessions; Academics are required to meet prescribed administration practice.	Increased administrative responsibility. Virtual operations; Absence of physical assistance and support.	Adhere to existing protocol for data protection.	Provide resources and training to deliver requests virtually. Provide additional professional support.
Maintaining student records	No modifications; No concessions; Academics are required to meet prescribed administration practice.	Increased administrative responsibility. Virtual operations; Absence of physical assistance and support.	Adhere to existing protocol for data protection.	Provide resources and training to deliver requests virtually. Provide additional administrative support.
Administering teaching assistants	No modifications; No concessions; Academics are required to meet prescribed administration practice.	Increased administrative responsibility. Virtual operations; Absence of physical assistance and support.	Adhere to the terms and conditions of employment contracts	Provide resources and training to deliver requests virtually.
Chair and or membership and or representation on research, teaching, learning, national, international departmental role.	No modifications; No concessions; Academics are required to meet prescribed committee obligations	Women underrepresented in management roles. Women overlooked for senior positions.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior*	Initiate co-chairing with *Professor; Associate Professor;* to mentor *Senior Lecturer; Lecturer.*

			Lecturer; Lecturer.	
Participation in examination and assessment processes and associated administration	No modifications; No concessions; Academics are required to meet prescribed augmented administrative obligations	Increased administrative responsibility. Virtual operations; Absence of physical assistance and support.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer.*	Provide resources and training to deliver requests virtually. Provide additional administrative support.
Serve on approved University Committees	No modifications; No concessions; Academics are required to meet prescribed committee obligations	Women underrepresented in management roles. Women overlooked for senior positions.	Establish a COVID-19 gender response support network to ensure equity among all staff at all levels. *Professor; Associate Professor; Senior Lecturer; Lecturer.*	Initiate co-chairing with *Professor; Associate Professor;* to mentor *Senior Lecturer; Lecturer.*

4 Research Efficiency and Promotions

Promotions in the academic space are reliant on a sum of key performance areas, and the most significant is research and publication productivities.

The actuality of COVID-19 has augmented the drudgery for female academics, and the consequences are predicted to outlast the pandemic by decades.

It can be conjectured that the numbers of female academics reaching higher academic ranks, such as professorship, will be considerably decreased. The domino effect of the privation of publications will be excessively experienced.

> "Women have long been underrepresented in research, accounting for around 31 percent of coauthors on scientific papers between 2008 and 2017, according to an unpublished analysis by Sugimoto and colleagues" (Zimmer, 2020).

Zimmer's (2020) study conducted in the United States established a significant decrease in the number of women listed as first authors for publications dated March to May 2020.

With role overload from prodigious childcare and housework burdens, universities and funding bodies must take into consideration the gendered effect the pandemic has on research when making assessments on promotions and tenure (Matthews, 2020).

The negative resonant impact of the decreased publications will further entrench women within the lowest academic ranks. Zimmer (2020) and Matthews (2020) studies corroborate the equivalent professional suicide that female academics are undergoing. Zimmer (2020) "examined authors with typically male and female names on nearly 2,000 COVID-19–related medical studies and found that the proportion with female first authors was nearly 20 percent lower than for medical studies published in 2019". Matthews (2020) analysis concluded that globally 60,000 scientific journals confirmed a disturbing reduction in putative publications where female academics are identified as the first author.

The analysis cognizes trends from January to February between 2015 to 2020. There has been a steady increase of women publishing as first authors from 2015 with 31% to 2019 with 34%. Conversely, the onset of COVID-19 in March 2020 led to the reconfiguration of universities. There has since been waning in the already low publications statistics authored by women. From 34% in February 2020, the numbers indicated a decline in the historical trends of previous years, which plummeted significantly to 26% in May 2020 (Matthews, 2020).

The negligible advancements secured over by in science, technology, engineering, and math (STEM) are expected to be impacted unfavorably as "already existing underrepresentation of women in scientific research and impair women's scientific careers as well as the quality of research" (Zimmer, 2020). An add-on, research societies, and journal editors have established that scientific research submissions by male academics have remained unaffected, and submissions by male academics have increased since COVID-19 safety protocol lockdowns and regulations have been implemented.

The publications or acceptance of papers from male academics in the health science faculties were reported as significantly high during the lockdown period.

> Having more women researchers may be particularly important with COVID-19, a disease that is increasingly recognized as affecting men and women differently, Pinho-Gomes notes. If 'women are not shaping the research response to the pandemic. . . there is a gendered lens through which we're looking at [the coronavirus] (Zimmer, 2020).

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Research Efficiency and Promotions				
Pre-COVID-19	**Covid-19 Response**	**Gendered Specific Challenges**	**Guidelines**	**Clinical Intervention**
Research Productivity aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer)*	No modifications; No concessions; Academics are required to meet prescribed research productivity units.	Covid-19 restrictions on social distancing. Access to research participants and associated risk to familial household. Mobility determines financial responsibilities. Risk in relation to familial household.	Establish a COVID-19 research response support network. *Professor; Associate Professor;* Co-author with *Senior Lecturer; Lecturer*.	Weekly virtual support meeting with constructive support on publications in progress *Senior Lecturer; Lecturer*.
Professional profile in the academic fraternity.	No modifications; No concessions; Academics are required to intensify their research profile.	Cancellation of local, national and international conferences. Loss of research funds.	Establish a COVID-19 research response support fund.	Subsidize lost research funds for *Senior Lecturer; Lecturer*
Guest/Editor of a scientific journal/book	No modifications; No concessions; Academics are required to meet prescribed research productivity units.	Existing academic networks determine opportunity and accessibility to scientific journals and books. Social distancing and virtual engagements further reduce opportunities. Limited networks of experts in the field.	*Professor; Associate Professor,* required to invite *Senior Lecturer; Lecturer* as observers.	*Senior Lecturer; Lecturer* teamed with *Professor; Associate Professor* to submit a proposal for a *special edition journal or* a book based on a doctoral study.
Publication of journal articles/ book chapters	No modifications; No concessions; Academics are required to meet prescribed research	Absence of mentorship and support. Social distancing and virtual engagements further reduce opportunities. Financial	Establish a COVID-19 research response support network. *Professor; Associate Professor;* Co-author with	Weekly virtual support meeting with constructive support on publications in progress *Senior Lecturer; Lecturer*.

	productivity units.	limitations and costs of publication and editing fees. Existing academic networks determine opportunity and invitations associated opportunities and requests.	*Senior Lecturer; Lecturer*.	
Academic Honors	No modifications; No concessions; Academics are required to exceed research productivity units.	Limited exposure to executive members of sociological associations; poor mentorship; lack of research funds compromise the ability of women to compete.	All *Senior Lecturer; Lecturer* faculty must have subsidized membership to sociological associations.	*Senior Lecturer; Lecturer* teamed with *Professor; Associate Professor* to become active members of working groups and research committees.
Membership and Executive roles in local, national, continental and international Sociological Associations	No modifications; No concessions; Academics are required to maintain membership and pursue leadership roles.	Cost of annual membership; funded by research publications in scientific journals and books.	All *Senior Lecturer; Lecturer* faculty must have subsidized membership to sociological associations.	*Senior Lecturer; Lecturer* teamed with *Professor; Associate Professor* become active members of working groups and research committees. Secure membership to a local organizing conference committee. Accept one executive role at a national level, graduating to an international executive role.
Academic local, national and international scientific partnerships.	No modifications; No concessions; Academics are required to establish and formalize scientific partnerships.	Cost of attending meetings, conferences; funded by research publications in scientific journals and books. Impacts adversely on networking opportunities to establish partnerships.	Subsidize one national/ international conference per annum for *Senior Lecturer; Lecturer*.	Membership to a research committee and attend all sessions to establish significant networks. Volunteer as a regional representative.
Academic mentorship	No modifications; No concessions; Academics are required	The absence of a formal mentorship process; debilitates career trajectory,	Assign a mentor to every *Senior Lecturer and Lecturer*.	Contract between mentor and mentee with weekly meetings and communications.

	to establish and formalize mentorship initiatives.	academic growth and advancement.		
Conference participation; Session chair; organizer; presenter; keynote speaker; conference committee.	No modifications; No concessions; Academics are required to continue participating in conference at multiple levels.	Cost of attending meetings, conferences; funded by research publications in scientific journals and books. Impacts adversely on networking opportunities to attend and participate in academic meetings.	Subsidize one national/ international conference per annum for *Senior Lecturer; Lecturer*.	Membership to a research committee and attend all sessions to establish significant networks. Volunteer as a regional representative. Participate in doctoral workshops.

5 Academic Advising of Postgraduate Students

The multiplicity of gender, race and identity has been acknowledged within the COVID-19 classroom. It must be recognized that the experience of academics is not homogenous.

Literature unfailingly indicates gender differentiations in the way that academics experience their lives, as well as strategies they adopt to deal with issues of race, gender and identity (Gupta & Sharma, 2002; Johnsrud, 1995; Prozesky, 2006; Thorstad, 2006; Walker, 1998).

South African universities must urgently address gender inequities as they persist as traditionally male directed institutions (Boshoff, 2005, p. 359; Petersen & Gravett, 2000, p. 169; Walker, 1998, p. 340).

Walker (1998, p. 340) maintains

> gender is a critical analytical lens for viewing South African universities" and "it cannot be taken as a given that gendered relations outweigh racialized identities…but this is not to discount gender as a shaping practice in academic relations, for both Black and White women". Significant to this unaffected précis are structural and cultural influences which allocate women to large classes while men escape these challenging responsibilities.

Internationally

> *there is accumulating evidence of positive changes in the representation of academics in Higher Education"* (Boshoff, 2005, p. 360), generally, women, and Black women in particular, remain in lower levels of the overall hierarchy (Boshoff, 2005, p. 359; Petersen & Gravett, 2000, p. 169) and are often associated with the heaviest workloads (Department of Education, 1997, p. 141).

The allocation of honors research projects to women is common practice, senior academics shy away from this level of academic advising. The likelihood or possibilities of publications is negligible, with students requiring excessive attention, support and guidance.

Male academics are unquestionably favored as preferred recipients of masters and doctoral candidates; which present opportunities for scientific research publications associated with academic advising at advanced levels of study (Ramnund-Mansingh & Seedat-Khan, 2020).

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Academic Advising Of Postgraduate Students				
Pre-Covid-19	**Covid-19 Response**	**Gender Specific Challenges**	**Guidelines**	**Clinical Intervention**
Fulfill assigned supervision workload aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer)*	No modifications; No concessions; Academics are required to meet prescribed supervision workload.	Covid-19 restrictions on social distancing. Access to research participants and associated risk to familial household of students. Mobility determined by financial resources of students.	Establish a COVID-19 supervision response support network. *Professor; Associate Professor; Senior Lecturer; Lecturer*.	Weekly virtual support meetings with constructive support on supervision challenges in progress *Professor; Associate Professor Senior Lecturer; Lecturer*.
Graduate assigned masters and PhD students associated to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer)*	No modifications; No concessions; Academics are required to meet prescribed supervision workload.	Covid-19 restrictions on social distancing. Access to students that require face to face advising, learning disabilities and or physical disabilities and access to technology.	Flexible guidelines to accommodate unprecedented COVID-19 circumstances.	Suspended registrations, Limit the allocation of additional students.
Publish with PhD students to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer)*	No modifications; No concessions; Academics are required to meet prescribed supervision publication workload.	Advisors with limited publications and experience.	Establish a COVID-19 research response support network. *Professor; Associate Professor;* Co- supervise with *Senior Lecturer; Lecturer*.	Monthly virtual support meeting with constructive support on publication related supervision in progress *Senior Lecturer; Lecturer*.

6 Accessing Research Funding

On a 'regular' day in pre-COVID-19 times, female academics faced insufferable discrimination in the uneven distribution of research funding (Bailey & Mouton, 2004). The role overload experienced has been exacerbated by the pandemic. Every negligible form of help that women require include schools, daycare, care givers and

or domestic staff, were deemed non-essential services and inaccessible throughout lockdown. Subsequently lockdown levels were reduced, high-risk individuals with comorbidities were restricted from procuring support in the home. The routine academic workload as onerous and previously produced complex challenges on work life balance for women (Ramnund, 2019).

> The pandemic imposed significantly complex weights. "A *survey* of about 4,500 principal investigators in the US and Europe in mid-April, which found that having a child under five was the biggest factor associated with a drop in research hours. Women were more likely than men to have young children, partly explaining why they reported a larger drop in research time" (Matthews, 2020).

Women contend with domestic roles, partners, elder care, child care and facilitate homeschooling in her 20-hour day. TUAC (2020) and (Matthews, 2020) substantiate women often begin engaging with academic writing, proposal formulation at 8pm. At this stage, exhaustion ceases any possibilities of meeting a funding deadline, and investing several hours preparing a suitable research proposal for consideration.

Teaching preparation, online activities and marking result in inadequate and irregular sleep over time. Working from home fast becomes a seven-day work week in order to catch up with research funding backlogs.

In Austria, UK and Poland, parents can apply for leave without fear of any deleterious impact on their career trajectories in the academy, even if the leave is time constrained or unpaid. Conversely, associated imbalanced "*gender pay-gaps, women might be much more affected if decisions on unpaid leave have to be taken by families*" (TUAC, 2020: 8). In Japan, this was managed differently as financial support was introduced "*to employers who let their employees take additional paid leave during Covid-19-measures*" (TUAC, 2020, p. 8). Aside from the domestic chores, the academic workload increased as everything needs to be amended and adjusted for online consumption.

The female academic needs to be a pillar of strength to her family, her partner, children and students who are also facing high levels of anxiety and uncertainty. With all of the responsibilities, how do female academics conduct research or publish?

Clinical Considerations For Promoting Gender Equity In The Academy: A Covid-19 Response				
Accessing Research Funding.				
Pre-Covid-19	**Covid-19 Response**	**Gender Specific Challenges**	**Guidelines**	**Clinical Intervention**
Secure research funding from local national and international donors. aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer).*	No modifications; No concessions; Academics are required to meet prescribed areas of performance.	Funding limitations due to COVID-19 safety protocol, impacting on fieldwork and associated ethical requirements. Compromised existing grant agreements.	Flexible guidelines to accommodate unprecedented COVID-19 circumstances. Establish a COVID-19 academic information communication system research training Professor*; Associate Professor; Senior Lecturer; Lecturer.*	Defer funding initiatives. Migrate to desktop, secondary research and or quantitative methods.
Proficiencies in grant applications aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer).*	No modifications; No concessions; Academics are required to meet prescribed areas of performance.	Funding limitations due to COVID-19 safety protocol, impacting on fieldwork and associated ethical requirements. Compromised existing grant agreements.	Flexible guidelines to accommodate unprecedented COVID-19 circumstances. Establish a COVID-19 academic information communication system research training Professor*; Associate Professor; Senior Lecturer; Lecturer.*	Defer funding initiatives. Migrate to desktop, secondary research and or quantitative methods.

7 Community Engagement

Higher education institutions globally have identified community engagement as a key performance indicator for academics and strategic value for the institution in partnering with communities and industry.

According to the Carnegie framework, community engagement is defined as "collaboration between institutions of higher education and their larger communities for

the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity" (Eckel, Hill and Green, 1998, p. 11).

It is mutually beneficial to all parties. However, the obstacles enlisted by COVID-19 has detrimentally impacted on this engagement and interaction. Limited interaction and support transpired on online platforms and universities took to outreach programmes during this difficult time for many.

Community engagement includes research projects for improvement or advancement. The global pandemic foiled plans of international travels, conference and scientific projects are at risk of non-completion.

Trends on the response to community engagement during COVID-19 have been

> a bit less than half of higher education institutions the impact of COVID-19 was positive – the crisis increased higher education institutions' community engagement – whereas at a bit less than one third the impact was negative, decreasing higher education institutions' community engagement activities (Marinoni and de Wit, 2020).

Academics have several roles to play expressly during COVID-19. However, it is encouraging to note that amidst these difficult times, specific academics continue to embark on these endeavors.

Clinical Considerations For Promoting Gender Equity In The Academy A Covid-19 Response				
Community Engagement				
Pre-Covid-19	**Covid-19 Response**	**Gender Specific Challenges**	**Guidelines**	**Clinical Intervention**
Provide Academic Professional service to a community of practice aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer).*	No modifications; No concessions; Academics are required to meet prescribed practice.	Covid-19 restrictions on social distancing. Access to community and associated risk to familial household. Mobility determined by resources and co-morbidities of academic.	Promote the Intellectual Project. Adhere to ethical standards.	*Professor; Associate Professor* to collaborate with *; Senior Lecturer; Lecturer* to provide mentorship and access to networks.
Delivery of consultation assistances to communities,	No modifications; No concessions; Academics are required to meet	Covid-19 restrictions on social distancing. Access to	Promote the Intellectual Project.	*Professor; Associate Professor* to collaborate with *;*

business and industry that aligned to academic level *(Professor; Associate Professor; Senior Lecturer; Lecturer).*	prescribed practice.	community and associated risk to familial household. Mobility determined by resources and co-morbidities of academic.	Adhere to ethical standards.	*Senior Lecturer; Lecturer* to provide mentorship and access to networks.
Occupy leadership positions in national or international sociology through consultation, policy development, reviews, and clinical interventions.	No modifications; No concessions; Academics are required to meet prescribed practice.	Limited exposure to executive members of sociological associations; poor mentorship; lack of research funds compromise the ability of women to compete.	Promote the Intellectual Project. Adhere to ethical standards.	*Professor; Associate Professor* to collaborate with *; Senior Lecturer; Lecturer* to provide mentorship and access to networks.
Publish public intellectual opinion editorial pieces aligned to areas of specialization.	No modifications; No concessions; Academics are required to meet prescribed practice.	Absence of mentorship and support. Social distancing and virtual engagements further reduces opportunities. Existing academic networks determine opportunity and invitations associated opportunities and requests.	Establish a COVID-19 research response support network. *Professor; Associate Professor;* Co-author with *Senior Lecturer; Lecturer*.	Featured profiles of individual academic proficiencies and expertise accessible to the corporate affairs division of the university
Facilitate and establish relationships and research that advance the academic project for students, academics and university.	No modifications; No concessions; Academics are required to meet prescribed practice.	Covid-19 restrictions on social distancing. Access to global networks, require funds to participate in sociological forums, conferences and congress.	Promote the Intellectual Project. Adhere to ethical standards.	Provide mentorship and dexterities on developing a global presence in the sociological community.
Deliver key-note address within a sociological space.	No modifications; No concessions; Academics are required to meet prescribed practice.	Covid-19 restrictions on social distancing. Membership to local and global networks, require	Promote the Intellectual Project. Adhere to ethical standards.	Featured profiles of individual academic proficiencies and expertise accessible to the

		funds to participate in sociological forums, conferences and congress.		corporate affairs division of the university

Conclusion

According to Kelsky (2020), despite significant academic privileges, benefits, job security, and research and development opportunities, now is the time to explore innovative and diverse academic options. Women must, however, continue to navigate prejudiced conventions consistent with institutions embedded in patriarchy, reverberated by the intellectual dominance over women.

The fundamental institutionalized nature of gender, race, socio-economics and geographic location in the academy, has collectively impacted on women as a gendered sector. This is consistent for minority groups that are similarly underrepresented in human, social and health sciences at senior academic ranks. These include but are not limited to First Nations people in Canada, Native Americans, Hispanics, and Black populations around the world who are excessively affected by socio-economic factors associated with the pandemic. Sugimoto in Zimmer (2020) articulates that academics from minority populations are likely to experience a decline in research productivity, based on increased risk exposure resulting in them becoming sick or increased familial sick care responsibilities.

However, that validity requires a protracted period of time to determine specific empirically grounded reasons for the decline in publication outputs among minority women in the academy. Frederickson in Zimmer (2020) adds

> Having a diverse community of researchers at the table during the design of drug and vaccine trials and other COVID-19 research "will allow you to get better and more complete results," while Taylor in Zimmer (2020) states, "How I would approach recruitment for vaccine trials might be very different from someone else.

Women fought unremittingly to gain access into universities as intellectual equals; substantial advances are endangered by the expeditious COVID-19 teaching responses and transformations, in socially constructed virtual universities.

Prevailing gender, race and identity paradigms traverse at a professional level in the academy. This paper underlines significant variables of gender, race and identity intersections for academics, with a focus on women. Universities must authorize rationalizations to support and recognize marginalized women that continue to experience incongruences vis-à-vis recognition, permanent appointments, and challenges in their career trajectory to a professorship. Varied consequences of exertions to survive gender.

Specific challenges: inconsistent career advancement for different sociological areas of investigation have been noted in the literature as well as frustration, stress and long-term reductions in feelings of commitment to work.

> Interruptions in continuity of employment and fractional contracts can work to exclude or hinder research activity, an area pivotal for higher progression. The issue that many models for allocating work exclude research from their calculations exacerbates this. Additionally, this feeds off the expectations that research work is conducted after hours at home, a feature woman may find more difficult (Barrett and Barrett, 2011, p. 141).

Women have traditionally endured unremitting inequitable circumstances in the academic space (Ramnund-Mansingh & Seedat-Khan, 2020).

The traditional dominance of the preponderant old boys' network efficaciously sustains a gendered bias environment.

The virtual COVID-19 classroom has expedited the assimilation of gender, race and academic identity intersections into the personal spaces of women in the academy, resulting in unprecedented workloads. This contributes to the uneven impacts of academia on the mental health of women, which has already been long recognized (Asakura and Chen, 1993).

The amplified workload, increased teaching related administration, strains to procure extensive virtual teaching proficiencies; and intricate virtual assessment dexterities, coupled with amplified demands from large numbers of students; have exposed the ubiquitous and unremitting suppression of women in the academy.

References

Asakura, T. and Chen, L. 1993. *Study on life stress and health of Asian international students.* Bulletin of Tokyo Gakugei University the 5th department, Art Health Sports science, (45):97-103.

Bailey, T.; Mouton, J. 2004. *Synthesis Report – Women's participation in science, engineering, and technology*. Pretoria: Supported by the Department of Science and Technology and National Advisory Council on Innovation.

Barrett, L.; Barrett, P. 2011. *Women and academic workloads: career slow lane or Cul-de-Sac?* Higher Education, (61):141- 155.

Bird, S. Litt, J.; Wang, Y. 2004. *Creating status of women reports: institutional housekeeping as women's work*. NWSA Journal, (16):194- 206.

Boshoff, N. 2005. *The representation of women academics in higher education in South Africa: Progress in the pipeline? South African Journal of Higher Education.* 19(2):359-377 ·

Doucet, A.; Netolicky, D.; Timmers, K..; Tuscano, F.J. (2020*). Thinking about Pedagogy in an Unfolding Pandemic*. Independent report to UNESCO.

Eckel, P. Hill, B.;Green, M. 1998. *En Route to Transformation*. On Change. Occasional Paper, No. 1. Washington, American Council on Education.

Education in South Africa: Achievements since 1994. Department of Education May 2001. [Online]. Available at: https://www.dhet.gov.za/Reports%20Doc%20Library/Education%20in%20South%20Africa%20Achievements%20since%201994.pdf.

García-González, M.A. Torrano, F.; García-González, G. 2020. Analysis of Stress Factors for Female Professors at Online Universities. *International Journal of Environmental Research and Public Health,* (17).

Gupta, N.; Sharma, A.K. 2002. *Women Academic Scientists in India*. Social Studies of Science, (32):5-6.

Johnsrud, L.K. 1995. *Korean academic women: Multiple roles, multiple challenges*. Higher Education. (30):17-35.

Kelsky, K. 2020. *The Professor Is In: Fear, Anxiety, and the Faculty Career*. 17 July. [Online]. Available at: https://www.chronicle.com/article/The-Professor-Is-In-Fear/249197.

Marinoni, G.; de Wit, H. 2020. *A severe risk of growing inequality between universities.* University World News, 8 June. [Online]. Available at: https://www.universityworldnews.com/post.php?story=2020060815405140.

Matthews, D. 2020. *Pandemic lockdown holding back female academics, data show*. 25 June 2020. [Online]. Available at: https://www.timeshighereducation.com/news/pandemic-lockdown-holding-back-female-academics-data-show.

Petersen, N. and Gravett, S. 2000. *The experiences of women academics at a South African university.* South African Journal of Higher Education, 14 (3).

Petrie, C.; Aladin, K.; Ranjan, P.; Javangwe, R.; Gilliland, D.; Tuominen, S.; Lasse, L. 2020. *Spotlight: Quality education for all during COVID-19 crisis*. Research initiative between Hundred and OECD.

Prozesky, H.E. 2006. *Gender Differences in the Journal Publication Productivity of South African Academic Authors*. South African Review of Sociology, 37(2): 87-112.

Ramnund, A. 2019. *Exploring the link between institutional culture and the career advancement of female academics in higher education: a case study of the University of Kwazulu-Natal, South Africa.* PhD Thesis. Durban: University of KwaZulu Natal.

Ramnund-Mansingh, A.; Seedat-Khan, M. 2020. *Move over Ms. Professor! A review of the challenge's women experience in academia.* Journal of Higher Education Service Science and Management, 3(1): 1-14.

Seedat-Khan, M.; Ramnund-Mansingh, A.; Johnson, B. 2020. *Welcome to University: Have a seat please! Unpublished paper.*

Stieg, C. 2020. *Facebook's Sheryl Sandberg: Preventing burnout' needs to be a priority'.* [Online]. Available at: https://www.cnbc.com/2020/05/08/sheryl-sandberg-preventing-burnout-must-be-priority-amid-covid-19.html.

Swanson, D.H. and Johnston, D.D. 2003. *Mothering in the Ivy-Tower: Interviews with Academic Mothers.* Journal of the Association for Research on Mothering, 5(2):63-75.

Thorstad, R.R. 2006. *Breaking the Mold: A Qualitative Exploration of Mother in Christian Academia and Their Experiences of Spousal Support.* Journal of Family Issues, 27(2): 229–251.

Trade Union Advisory Committee to OECD. 2020. *Impact and Implications of the COVID 19-Crisis on Educational Systems and Households*. TUAC Secretariat Briefing 16 April 2020. [Online]. Available at: https://tuac.org/news/the-impact-and-implications-of-the-covid-19-crisis-on-educational-systems-and-households/.

Walker, M. 1998. *Academic Identities: Women on a South African Landscape*. British Journal of Sociology of Education, 19(3): 335–354.

Zimmer, K. 2020. *Gender Gap in Research Output Widens During Pandemic.* The Scientist. 25 June. [Online]. Available at: https://www.the-scientist.com/news-opinion/gender-gap-in-research-output-widens-during-pandemic-67665.

***Originally published in**: january 2021*