

# Proceedings of the 2<sup>nd</sup> International Conference of the Journal Scuola Democratica REINVENTING EDUCATION

2-5 June 2021

### **VOLUME III**

## Pandemic and Post-Pandemic Space and Time

**ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"** 



Proceedings of the 2nd
International Conference of
the Journal Scuola
Democratica
REINVENTING EDUCATION

VOLUME III
Pandemic and PostPandemic Space and Time

#### **Edited by**

The Organizing Committee the 2nd International Conference of the Journal Scuola Democratica

https://www.rivisteweb.it/issn/1129-731X



Published by: ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"

Via Francesco Satolli, 30 – 00165 – Rome, Italy

**Published in Open Access** 





#### This book is digitally available at:

https://www.scuolademocratica-conference.net/proceedings-2/

© 2021 Associazione "Per Scuola Democratica"



Unless otherwise stated, all contents published are subject to license Creative Commons - Attribution - version 3.0.

#### https://creativecommons.org/licenses/by/3.0/it/

It is therefore possible to freely reproduce, distribute, transmit and adapt data and analysis of the Volume, including for commercial purposes, provided that the source is cited. Images, logos, any registered trademarks, and other content owned by third parties belong to their respective owners and cannot be reproduced without their consent.

How to cite a proceeding from this Volume. APA citation system:

Author, N., Author, S., (2021). Title, in *Proceedings of the 2nd International Conference of the Journal Scuola Democratica "Reinventing Education"*, VOL. 3, *Pandemic and Post-Pandemic Space and Time*, pp-pp

The	New	Challenges	of	the	<b>Post-Pandemic</b>	University	<b>Formative</b>
Pro	cesses,	<b>Third Missio</b>	n an	id Ac	tive Citizenship		558
		APPING IN THE ITALIAN HE THIRD <b>M</b> ISSION	n Meg	ia-Univ	ERSITIES. THE INFLUENCE OF	INNOVATIVE DIDAC	TICS IN
RE		Mazza and Elena V TERNSHIP EXPERIENCE			THE COVID-19		559
	Cristina S						571
				_	igital Spaces and	l Resources:	_
		ng Paths in H	_				582
Tr					TOOL BY AND FOR TEACHER	5	503
	ARNING SOC	•	QUES T		ta and Michelle Grillo TH DIGITAL RESOURCES AND (	Collaborative App	583 ROACHES: THE
PO				əminai	uez Amorós and Leon Fr	eude	591
	Е ІМРАСТ ОІ	· · · · · · · · · · · · · · · · · · ·	LISH <b>L</b> A	NGUAG	E TEACHING IN HIGHER EDU		
	•	paolo Ferrari and E	_				601
	A Course o	F METHODOLOGY OF			Parison of Classroom and RCH	) Distance-Learnin	
Dis	Luciana T	<i>addei</i> RNING: GIVING VALUE	TO THI	e COVII	D-19 EMERGENCY		609
Di		a Decataldo, Brun					619
Reir	ventin	g Education i	n an	d thr	ough Artistic Lan	guages	630
AR		CTIC TOOL: 'THE BAU					
	-	mendola and Jessi		_			631
	Laura Cor	bella			BODIED APPROACH FOR INQ	UIRY	641
PR					DISTANCED LEARNING	Administration to the section of	
Co		. •			nando Ivano Ambra and e Arts: Learning Practice		
	BLIC MEMO		4 IIIKO	OGIT III	L ANTS. LLANNING I NACTICE	3, AKTISTICT RODUC	TIONS AND
	Lia Luche	tti					659
Тн			CTING	THE SU	BJECT WITH THE REALITY, THE	SOCIETY AND THE C	
<b>T</b>	Stefano P		Cour		ARY ARTISTIC PRODUCTION. I	NEW DOUTES IN A SC	669
	E PROCESS ( UCATION	OF CROSSBREEDING IN	CONTE	EMPORA	ARY ARTISTIC PRODUCTION. I	NEW ROUTES IN AES	THETIC
LD	Raffaele 1	<sup>r</sup> umino					681
Αl			T-BASE	D AND	ART INFORMED RESEARCH		
	Franca Zu	ccoli and Elisabett	a Biffi	i			689
Sca	ling Up	Innovation:	from	Edu	cational Practice	es to Systen	nic Change 698
Тн		ystem. Promoting li aitini and Erik Gado		ATION, II	NCLUSIVE LEARNING AND AC	TIVE CITIZENSHIP	699
'Da	ındon.'	nractices 5	) oin	vont:	na aducation of	aroo and L	ovend the
	muary <i>ne scola</i>	=	ıcılı	veiili	ng education ad	JUSS AIIU D	reyona me 710
			Сниг	ENGES.	EXPLORING THE DISCURSIVE	CONSTRUCTION OF	
		BJECTIVITY IN ITALY	CHAL	LLINULJ.	LAI LONING THE DISCONSIVE	CONSTRUCTION OF	IONEST
	Stefania L	Donzelli					711
Ho	MESCHOOL	ng and Unschoolin	IG				

#### Distance Learning: Giving Value to the COVID-19 **Emergency**

#### Alessandra Decataldo, Brunella Fiore and Sara Zizzari

Università di Milano-Bicocca, alessandra, decataldo @unimib.it Università di Milano-Bicocca, brunella.fiore@unimib.it Università di Milano-Bicocca, sara.zizzari@unimib.it

ABSTRACT: This paper addresses the current state of Italian higher education. On the one hand, the COVID-19 emergency revealed some vulnerabilities in Italian universities while, on the other hand, it enhanced their resiliency: in a short time, most of them were able to ensure the continuity of teaching activities, replacing face-to-face experiences with online ones. Teaching is one of the main aims of higher education, but it is often taken for granted and undervalued, while research activities receive far more attention. The pandemic had the advantage of bringing teaching activities back to the center of attention. It became fundamental to redesign teaching activities using distance learning methods even if stakeholders (including university lecturers) were not prepared to do so. Indeed, in addition to the difficulties of accepting and using information technologies, lecturers faced the challenge of planning and designing new forms of teaching that would ensure students' attendance and guarantee their level of learning. In the beginning, distance learning represented an emergency 'solution' introduced in response to the restrictions imposed by the pandemic. Its implementation required a significant investment in digital skills, including the learning of new software and the procurement of adequate supporting hardware. Generally, a crisis like the one we are currently facing leads us to deeply reflect on our future and on lessons learned that might give value to the emergency. Now the question is whether, in the aftermath of the health emergency, the outcomes of this digital investment can become an integral part of our educational offer and the new teaching strategies can endure. his paper reflects on the experience of the University of Milan Bicocca, discussing the outcomes of a survey administered to university lecturers using the CAWI methodology. The survey was distributed to the lecturers' institutional email addresses through the Qualtrics web platform. It is part of a broader research project, which compares the survey results to administrative data about the same university lecturers and concerns the effective use of distance learning tools available on the university online platform. Furthermore, the research employs mixed methods strategies and involves, in addition to lecturers at the University of Milan Bicocca, students and technical-administrative staff. The

The work presented in this paper is part of the research project Giving value to the emergency. Quality indicators to evaluate teaching practice and design curricular and territorial training proposals, funded by the University of Milan Bicocca for the period October 2020-September 2022. The research group is composed of Alessandra Decataldo (Principal Investigator), Barbara Balconi, Giberto Chirico, Brunella Fiore, Alessandro Gabbiadini, Stefano Malatesta, Andrea Mangiatordi, Franco Passalacqua, Sara Zizzari.

questionnaire was administered to a sample of 1,205 lecturers who taught during the first semester of AY 2020/21. A total of 955 questionnaires were collected, of which 456 were fully completed.

**KEYWORDS**: University, Distance learning, Technology, Self-Reported behavioral indicators, Lecturers

#### Introduction

Since the early months of 2020, the emergency caused by the COVID-19 pandemic has triggered deep crises at various levels, dramatically highlighting the general economic, institutional, and cultural fragility of the world-system (Giovannini, 2020). Therefore, we can consider the COVID-19 pandemic a disaster by referring to the definitions of disaster provided by the literature (De Marchi *et al.*, 1987; Oliver-Smith, 1996; Hoffman, Oliver-Smith, 2002).

When disasters happen the first matter of concern is the physical reconstruction of spaces, public or private. Unfortunately, we never give much consideration to the community that is affected by the disaster. But the characteristics of this specific disaster (the COVID-19 pandemic), vastly different from an earthquake, a hurricane, an atomic accident, etc., allow us to more deeply reflect on its consequences on the community.

In this contribution, we consider disasters as processes (social, organizational, and technical) rather than sudden and unpredictable events.

From a methodological point of view, the case studies on disasters with wide spatial/temporal coverage have shown a higher efficacy. Indeed, long-term perspectives and situated analyses of the effects of disasters on people's lives and on society as a whole are useful for reading the processes of change (Duyne-Barenstein, Leemann, 2013), breaking established patterns of thought, and re-conceptualizing non-linear processes. The COVID-19 pandemic is in fact a process, with an unknown conclusion, that will have consequences for every sector: social, educational, psychological, economic, etc.

Among the sectors most affected by the COVID-19 disaster, 'Education and Training' experienced severe disturbances in balances, routine practices, and cultural and regulatory models, with serious consequences for all stakeholders. Teaching activities are one of the main objectives of universities, but are often taken for granted and undervalued, while research activities receive a lot more attention. On the one hand, the emergency pointed out some vulnerabilities in Italian universities but, on the other hand, it enhanced their resiliency: in a short time, most of them were able to ensure the continuity of their teaching activities, replacing face-to-face experiences with online alternatives. Furthermore, the pandemic has succeeded in bringing educational activities back to the

center of attention, intensifying reflections on the quality of the delivery of the educational offer, the potential of distance learning to strengthen that offer, and the role of universities as active players in the territory (Hodges *et al.*, 2020). At the beginning of the COVID-19 pandemic, it was necessary to redesign teaching activities using distance learning methods even if some stakeholders were not prepared to do so. Indeed, in addition to the difficulties of accepting and using information technologies, lecturers had to face the challenge of planning and designing new forms of teaching that would ensure students' attendance and guarantee their level of learning. Distance learning represented an emergency 'solution' introduced in response to the restrictions imposed by the pandemic. Its implementation required a significant investment in digital skills, such as the learning of new software and the procurement of adequate supporting hardware.

In the future, this crisis will be interpreted as a decisive turning point, which forced a rethinking of models and practices that had previously seemed firmly established. Generally, crises spark new reflections about what was happening before the breaking point and what can represent an opportunity for the future. Now the question is whether, in the aftermath of the health emergency, the outcomes of this digital investment can become an integral part of our educational offer and the new teaching strategies can endure.

This paper addresses the state of Italian higher education, reflecting on the experience of the University of Milan Bicocca. We ask ourselves if we can safeguard the community of the university: lecturers, students, technical-administrative staff, etc. This paper examines the outcomes of a survey administered to university lecturers using the CAWI (Computer Assisted Web Interviewing) methodology. The survey was distributed to the lecturers' email addresses through the Qualtrics web platform.

The survey collected information on subjective perceptions of the experience of distance teaching and self-reported behavioral indicators. It is part of a broader research project (funded by the same university), which compares the information collected from the survey to administrative data about the same university lecturers and concerns the effective use of distance learning tools available on the university online platform. Therefore, subjective perceptions of the distance teaching experience, as well as self-reported behavioral indicators, are integrated with objective behavioral data extrapolated by the Information Systems of the University of Milan Bicocca.

Furthermore, the research employs mixed methods strategies (including in-depth interviews and focus groups) and involves, in addition to lecturers at the University of Milan Bicocca, students and technical-administrative staff. In fact, we are also carrying out a qualitative study through in-depth interviews with first- and second-year students of bachelor's degree and single master's degree courses, in order to analyze the learning experience provided by distance learning tools. The results of the survey and in-depth interviews will be the stimulus for subsequent

focus groups with lecturers, students, and technical-administrative staff to discuss and evaluate their experiences of both planning and implementing new strategies of teaching and learning.

In the third and final phase, the results of the previous research activities will inform university guidelines, complete with quality indicators, for the design of teaching proposals to be delivered in presential, semi-presential and distance learning modalities.

These guidelines specifically concern: the quality of curricular teaching; the methods of teacher training; the development of training proposals aimed at different users (students attending and not attending, curricular and extracurricular courses, etc.); and the development of training proposals aimed at the territory (so-called third mission).

A multidisciplinary team is working on this project. All members share a scientific interest in the design, implementation and evaluation of teaching and learning activities. The interdisciplinary nature of the group responds to the need to investigate the quality of the teaching-learning process from a combination of different research perspectives: the perspectives of sociology of education, didactics, and social psychology.

As stated by Guri-Rosenblit (2018), distance education radically changes the work of teachers. It requires a broad reformulation of their teaching practices and new forms of teaching support. Furthermore, it involves a lot more tools and resources. Over the past year and a half, the shift towards distance learning has radically accelerated due to the restrictions imposed by governments in response to the COVID-19 pandemic. Nonetheless, the digital acceleration created by this extraordinary situation can represent an opportunity to innovate education, its tools, and its languages (ibidem). Even before the pandemic, the gap between the educational system and the generation of digital natives, in terms of models and communication skills as well as content, was already the subject of debate (Landri, 2018).

Even if distance learning was born as an emergency solution in response to the restrictions of the health emergency, its implementation required a significant investment in specific skills, such as knowing and learning new software and procuring hardware to support it. Looking to the near future, the question we ask is whether the outcomes of this investment can become part of our offer along with the activities delivered in presence and semi-presence modes.

The current situation represents an opportunity to reflect on how to make learning activities more effective and efficient, teaching students the skills they need for the future and using modern digital technologies for communication. Now more than ever is the time to implement an actual process of cultural, organizational, and institutional innovation.

There are still few studies on this issue and most of them focus on the students' experience. As far as we know, the only research on Italian university lecturers is *Universi-Dad* by Francesco Ramella and Michele Rostan – Centro Luigi Bobbio of the University of Turin, Department of Cultures, Politics and Society with UNIRES (Interuniversity Center for

Research on Higher Education Systems). The study focused on lecturers' experience of distance learning in some Italian universities (Milano, Pavia, Bologna, Florence, Turin, Scuola Normale Superiore of Pisa, Liuc Università Cattaneo di Castellanza and Fondazione CRUI) during the first period of the COVID-19 pandemic (March-June 2020). The achieved sample of lecturers was 3,398. The results show a very positive experience, indicating that lecturers did not want to abandon distance learning: 54% of respondents believed that online classes should be reproposed and integrated with face-to-face classes in the future.

This paper is divided into four sections: the first describes the research aims, the second outlines the data, variables, and methods, and the third illustrates the results from a descriptive data-analysis. The paper ends with a summary and conclusions section presenting the main outcomes.

#### 1. Research aims

New forms of teaching through distance learning not only involve lecturers on the one hand and students on the other, but also the technical-administrative staff responsible for both planning and implementing the new strategies of teaching and learning. These professionals were forced to adapt to new educational models in a short period of time and seek alternative solutions, not only disciplinary in nature but also communicative. Furthermore, these stakeholders were asked to address these changes while safeguarding the educational relationship in the absence of bodily proximity.

As stated above, this paper addresses the main outcomes of the survey distributed to the lecturers. The research aims of this paper are merely descriptive and aspire to: identify subjective-perceptual indicators and self-reported behavioral indicators to assess the quality of distance learning teaching processes; monitor the quality of the teaching processes from the previously identified indicators to:

- verify which factors (for example, individual characteristics) favor the acceptance and use of new technologies in teaching.
- Evaluate the relationship of these indicators with the variables concerning the learning context (for example, disciplinary field).

#### 2. Data, variables and methods

The survey was administered to university lecturers using the CAWI methodology. It was distributed to their institutional email addresses through the Qualtrics web platform.

The questionnaire was administered to a sample of 1,205 lecturers (full, associate, assistant professors, but also adjunct professors which include PhD students, research fellows and external professionals) who held at least one course during the first semester of AY 2020/21 (from

October 2020 to January 2021). The survey started on March 8, 2021; we sent reminders to those who had not yet answered or had started but not completed the compilation, on March 13, March 18, and March 24. Currently, a total of 955 questionnaires have been collected, of which 486 are fully completed.

Respondents are 49.8% men and 50.2% women and predominantly aged 35-55 (61.5%), followed by over 56 (24.9%) and under 35 (13.6%). 33.3% of them are associate professors, followed by adjunct professors (32.2%), full professors (18.6%) and assistant professors (15.9%). We categorized our sample into scientific areas drawing from ISTAT definitions of macro-disciplinary areas and adapting them to the Milan Bicocca University configuration of the areas (https://www.istat.it/it/files/2018/11/Report-Dottori-di-ricerca-

26nov2018.pdf). As a result, we obtained the following: scientific area (52.9%), humanities and social sciences area (38.5%) and health-care area (8.6%).

The majority of respondents live with a partner and their children (55.8%), followed by those who live with only a partner (18.9%), those who live alone (13.8%), those who live with other people who are neither partners nor children (7.8%), and finally those who live with only their children (3.7%).

To reduce the amount of data produced by the scales relative to lecturers' subjective perceptions of the experience of distance teaching and self-reported behavioral indicators, we used the Principal Component Analysis Technique. In this way, we obtained the following indexes:

- Fostering student reflection
- Student engagement
- Monitoring and supervision of learning
- Re-elaboration of contents
- Lesson design and planning
- Use of Moodle's feature
- Use of platform educational features

In this paper we present an initial and partial descriptive analysis of the data. Indeed, among the aforementioned indexes, we consider only the first two: Fostering student reflection and Student engagement.

Furthermore, we created additive indexes to reduce the data produced by other scales in the questionnaire. These indexes show the perception of ease of use and of usefulness of digital technologies for distance learning. They are:

- Involvement
- Technology availability
- Support from the university
- Impact on family care
- Anxiety
- Ease of use
- Future use of digital technologies for distance learning

- Usefulness
- Perception of control
- Perception of efficacy

Of these, we consider only three in this paper: Impact on family care, Ease of use and Future use of digital technologies for distance learning.

#### 3. Initial outcomes

We begin by presenting some of the main results related to the additive indexes regarding the perception of ease of use and of usefulness of digital technologies for distance learning.

Firstly, referring to the Future use of digital technologies for distance learning we can observe that the higher the academic role, the lower the percentage of those who want to use the technologies for distance learning in the future. Indeed, the percentage is lower among full professors and higher among adjunct professors (Tab. 1).

**TAB. 1.** Future Use of digital technologies for distance learning by academic role of respondents (%)

or respondents (70)				
Academic role	Disagree	Neither agree nor disagree	Agree	Total
Adium at Duofaceau	35	26	93	154
Adjunct Professor	22.7%	16.9%	60.4%	100%
Assistant Duefeese	13	20	43	76
Assistant Professor	17.1%	26.3%	56.6%	100%
Accesiate Drefessor	36	42	81	159
Associate Professor	22.6%	26.4%	50.9%	100%
Full Duefessen	18	33	38	89
Full Professor	20.2%	37.1%	42.7%	100%

This outcome is mainly attributable to age-related skills, as can be seen from the fact that the percentage of respondents who agree with the statement that they will continue to use digital technologies in the future decreases with increasing academic role, with full professors being the least likely to agree, followed by associate professors, assistant professors and finally adjunct professors. However, it should be noted that even among adjunct professors there are professionals who are no longer young.

Further proving our argument, the percentage of respondents who found it easy to use digital technologies for distance learning was lowest among full professors and highest among adjunct professors (Tab. 2). Regarding the impact of distance learning (in terms of commitment to the design and implementation of new activities) on family care, we can observe that more women agree that it has a strong impact (recording a difference of 10 percentage points compared to male colleagues) (Tab. 3).

**TAB. 2.** Ease of Use of digital technologies for distance learning by academic role of respondents (%)

Academic role	Disagree	Neither agree nor disagree	Agree	Total
Adiment Dunfaces	10	32	112	154
Adjunct Professor	6.5%	20.8%	72.7%	100%
Assistant Duefessen	5	11	60	76
Assistant Professor	6.6%	14.5%	78.9%	100%
A : - t - Du-f	9	47	103	159
Associate Professor	5.7%	29.6%	64.8%	100%
Full Professor	15	17	57	89
ruii riolessor	8.2%	19.1%	64.7%	100%

TAB. 3. Distance learning impact on family care by sex of respondents (%)

		, , , , , , , , , , , , , , , , , , , ,		1 . ,
Gender	Disagree	Neither agree nor disagree	Agree	Total
Man	126	59	57	242
Man	52.1%	24.4%	23.6%	100%
\/\anaa	105	57	82	244
Woman	43%	23.4%	33.6%	100%

With regard to the indexes on lecturers' subjective perceptions of the experience of distance teaching and self-reported behavioral indicators, we can observe that the higher the academic role of the lecturers, the lower the percentage of those who practice strategies to encourage student engagement during lessons. The percentage is lowest among full professors and highest among adjunct professors (Tab. 4).

TAB. 4. Student engagement by academic role of respondents (%)

TAB. 4. Student engagement by academic role of respondents (%)					
Academic role	Low	Moderate	High	Total	
Adjunat Professor	25	46	45	116	
Adjunct Professor	21.6%	39.7%	38.8%	100%	
Assistant Drafassar	25	14	14	53	
Assistant Professor	47.2%	26.4%	26.4%	100%	
Associate Professor	36	42	44	122	
Associate Professor	29.5%	34.4%	36.1%	100%	
Full Professor	34	18	16	68	
ruii riolessor	50%	26.5%	23.5%	100%	

Furthermore, we can observe a relationship between how much the lecturers encouraged student reflection and their disciplinary area. Indeed, lecturers from the social sciences and humanities area are more involved in terms of inviting students to reflexivity compared to their colleagues in the scientific and health-care areas (Tab. 5).

TAB. 5. Fostering student reflection by disciplinary area of respondents (%)

Disciplinary areas	Low	Moderate	High	Total
Social and Human Sciences Area	22	41	49	112
Social and Human Sciences Area	19.6%	36.6%	43.8%	100%
Health care area	12	11	9	32
nealth care area	37.5%	34.4%	28.1%	100%
Coiontifia Araa	81	64	56	201
Scientific Area	40.3%	31.8%	27.9%	100%

#### **Conclusions**

This preliminary and descriptive analysis of the survey data allowed us to analyze the experiences of distance learning (forcibly introduced due to the COVID-19 pandemic) focusing on three main aspects: academic role gap, work-life balance, and teaching strategies.

The first results are related to the perception of ease of use and of usefulness of digital technologies for distance learning. We observed a gap in academic role because full professors have a lower propensity to plan for the use of digital technologies in the future, especially compared to adjunct professors. Consistently, full professors reported having more difficulty using these technologies than their younger colleagues. It seems that different generations respond to and utilize digital technologies in very different ways. The months of lockdown, smart working and distance learning exposed the divide among these university lecturers in terms of digital competencies. Furthermore, an academic role gap also emerges with respect to experience of distance teaching, with younger lecturers appearing to be more student-centered, using strategies for student engagement during lessons more often than full professors. Younger lecturers seem more able to fill the distance between the educational system and the generation of digital natives in Italy.

The second issue pointed out in our analysis is work-life balance. The level of commitment necessary to design and implement new distance learning activities impacted women lecturers more than their male colleagues. Contrary to what we might have expected, the positive role of a high academic qualification and a highly qualified job in protecting individuals from the impacts of typical factors, such as sex, is only partial. Unfortunately, this gender difference in care responsibilities does not surprise us. Women remain the principal caregivers of families and their responsibilities have increased dramatically since many of the children's school activities and mothers' work activities have gone remote (see, for example, Pastori *et al.*, 2020).

The third issue is related to teaching strategies: some differences emerge with respect to disciplinary area, because in the human and social areas there is a greater propensity to encourage student reflection.

As sociologists (like all social and human scientists), we know that the relationship and interaction between teachers and students is key, not only to learning, but also to students' social and emotional development and teachers' professional development. Thanks to recent technological advances, various forms of online teaching and distance learning had been growing even before the COVID-19 emergency. These modes of learning are characterized by the fact that teachers and students are not in the same physical space (and often not in the same timeframe either).

However, we know that educational innovation cannot take place without an overall plan for digital development that considers both

teacher training and the technological infrastructure of universities: the potential of distance learning should be explored beyond the emergency in order to allow teachers to become more familiar with some tools.

These interventions would make it possible to consolidate the efforts made so far. For many lecturers, distance learning, which until now posed a complex challenge, now represents an exceptional opportunity for the development of inclusive, innovative, and quality education.

New technological platforms might be capable of innovating didactics, but their effective use requires the adequate preparation of teachers and a thorough reflection on educational structures and teaching strategies. Our initial outcomes (although related to a local context) highlight the need for a national digital plan for Italian universities, one with an adequate investment program for infrastructural equipment and specific attention dedicated to teacher training so that teachers are not burdened by their disciplinary and (sometimes low) competencies on top of their family responsibilities. New technologies can help to advance the good practices of didactic innovation already present in university classrooms. Indeed, many of these technologies, rather than replacing face-to-face teaching, can improve it by facilitating more interactive and collaborative forms of teaching.

The literature highlights how the unexpected shift from face-to-face learning to online instruction during the COVID-19 pandemic has led to negative health consequences for higher education students. The disruption of normality that students experienced during lockdowns and quarantines exacerbated symptoms of health disorders in the student population (Aguilera-Hermida, 2020; Hasan, Bao, 2020; Hawley *et al.*, 2021). These concerns should be addressed by politicians working on the many dimensions that require continuous effort prior to a disaster: improving information flow across organizational boundaries, career planning and placement, providing social support, expanding technical support, and requiring feedback are all strategies for engaging students (Vicente *et al.*, 2020) and increasing their wellbeing, as well as that of lecturers, both within and outside of the university.

#### References

- Aguilera-Hermida, A.P. (2020). «College students' use and acceptance of emergency online learning due to COVID-19». *International Journal of Educational Research Open*, 1.
- De Marchi, F., Ellena, A., Cattarinussi, B. (1987). *Nuovo Dizionario di Sociologia*, Milan, San Paolo.
- Duyne-Barenstein, J., Leemann, E. (2013). *Post-disaster reconstruction and change: A community perspective*, Florida, CRC Press/Taylor Francis.
- Giovannini, E. (2020). «La sostenibilità nella crisi del COVID-19», *Pandora Rivista*, 2, 1-8.

- Guri-Rosenblit, S. (2018). «E-Teaching in Higher Education: An Essential Prerequisite for E-Learning», *Journal of New Approaches in Educational Research*.
- Hasan, N., Bao, Y. (2020). «Impact of 'e-Learning crack-up' perception on psychological distress among college students during COVID-19 pandemic: A mediating role of 'fear of academic year loss'» Children and Youth Services Review, 118.
- Hawley, S. R., Thrivikraman, J. K., Noveck, N., Romein, T. S., Ludy, M. J., Barnhart, L., Tucker, R. M. (2021). «Concerns of college students during the COVID-19 pandemic: Thematic perspectives from the United States, Asia, and Europe», *Journal of Applied Learning and Teaching*, 4 (1), 11-20.
- Hodges, C., Moore, S., Trust, T., Bond, A. (2020), «The Difference Between Emergency Remote Teaching and Online Learning», *EDUCAUSE Review*, https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning
- Hoffman S.M., Oliver-Smith, A. (2002). *Catastrophe and Culture: The Anthropology of Disaster*, Santa Fe, School of American Research Press.
- ISTAT (2018), L'inserimento professionale dei dottori di ricerca, https://www.istat.it/it/files/2018/11/Report-Dottori-di-ricerca-26nov2018.pdf. Accessed on 23 June 2021.
- Landri, P. (2018), *Digital Governance of Education: Technology, Standards and Europeanization of Education*, London-Oxford, Bloomsbury.
- Oliver-Smith, A. (1996), «Anthropological research on hazards and disasters», *Annual Review of Anthropology*, 25, 303-28.
- Pastori, G., Mangiatordi, A., Pagani, V., Pepe, A. (2020), *Che ne pensi? La didattica a distanza dal punto di vista dei genitori*, Research Report, Milan, Riccardo Massa' Department of Human Sciences for Education, University of Milano-Bicocca, https://bit.ly/report-dad
- Ramella, F., Rostan, M. (2020). Universi-DAD: gli accademici italiani and la didattica a distanza, Centro Luigi Bobbio of the University of Turin, Department of Cultures, Politics and Society with UNIRES (Interuniversity Center for Research on Higher Education Systems), https://www.rivistailmulino.it/a/universi-dad
- Vicente, H., Delicado, A., Rowland, J., Estevens, J., Weiss, A., Falanga, R., Lessmollmann, A., Truninger, M. (2020). «Going virtual: finding new ways to engage higher education students in a participatory project about science», in K. Helen, K. Su-Ming (eds) *Research in the age of COVID*, Vol. 1, Response and Reassessment, Bristol University Press.