

Proceedings of the 2nd 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

Title Proceedings of the Second International Conference of the Journal "Scuola Democratica" — Reinventing Education VOLUME III Pandemic and Post-Pandemic Space and Time

This volume contains papers presented in the 2nd International Conference of the Journal "Scuola Democratica" which took place online on 2-5 June 2021. The Conference was devoted to the needs and prospects of Reinventing Education.

The challenges posed by the contemporary world have long required a rethinking of educational concepts, policies and practices. The question about education 'for what' as well as 'how' and 'for whom' has become unavoidable and yet it largely

remained elusive due to a tenacious attachment to the ideas and routines of the past which are now far off the radical transformations required of educational systems.

Scenarios, reflections and practices fostering the possibility of change towards the reinvention of the educational field as a driver of more general and global changes have been centerstage topics at the Conference. Multidisciplinary approach from experts from different disciplinary communities, including sociology, pedagogy, psychology, economics, architecture, political science has brought together researchers, decision makers and educators from all around the world to investigate constraints and opportunities for reinventing education.

The Conference has been an opportunity to present and discuss empirical and theoretical works from a variety of disciplines and fields covering education and thus promoting a trans- and interdisciplinary discussion on urgent topics; to foster debates among experts and professionals; to diffuse research findings all over international scientific networks and practitioners' mainstreams; to launch further strategies and networking alliances on local, national and international scale; to provide a new space for debate and evidences to educational policies. In this framework, more than 800 participants, including academics, educators, university students, had the opportunity to engage in a productive and fruitful dialogue based on research, analyses and critics, most of which have been published in this volume in their full version.

Pandemic and Post-Pandemic Space and Time A Premise

Papers in this third volume deals with the Covid-19 pandemic which is having an enormous impact on education systems worldwide. Policy makers, teachers, school managers, parents and students have been called to the reinvent their way of 'doing school'. At the same time, the governance of the education system and schools' organizations have been exposed to unprecedented tensions.

Within a short period of time, radical changes had to be introduced, simultaneously, at various levels of the school system. At national and regional level, there has been the need to rethink the way in which teachers are recruited, engaged and managed. National assessment and evaluation systems have been suspended or redefined in their uses by school actors The ways through which institutes were managed and organized had to be rethought, passing in a very short time through an on and off of dematerialization and hyper-normativity of time and space. Within schools, managers and teachers have been called to redefine the role of digital technologies in their didactic, as well as in their relationships with families and students. In some cases, these set of changes led to experience novel and unexpected daily proximities, in other prevailed a context characterized by distance and unsatisfactory relationships. Managers and teachers have been asked to re-invent their professionality to rethink their organizational, didactic and relational competences. Students and families, on their side, have been called to rebuild and reimagine new way of being at school, re-inventing the spaces and time of schooling and the way in which they relate among each other and with teachers.

The pandemic emergency has been a lens revealing intersections and structural tensions among various level and actors of the education system, but also allowing opportunities of changes thanks to the exogenous shock. At the same time, it must be considered that the emergency is interacting on pre-existing inequalities and contradictions. The pandemic clearly revealed the deep disparities of educational opportunities associated to students' life and housing conditions, beyond their access and uses of technological devices. Remote teaching and the enactment of an 'emergency didactic' has exacerbated learning difficulties for underprivileged students (children facing material deprivation, students with migratory background, students with special needs or disable, etc.). The interaction between the pandemic and pre-existing inequalities created different contextual conditions for actors' agency, orienting toward different directions the pandemic's transformational potential.

Higher education systems have been affected too: in constant evolution due to constant transformations of society and changed functions of knowledge, universities have undergone a structural change along with pandemic times. Simultaneously, the growing relevance of knowledge for the economic development of the capitalistic system has profoundly affected higher education systems, characterized by the neo-liberal approach which his subject of increasing critical analysis.

However, Higher education systems are starting to be affected by other somewhat inevitable changing processes due to the evolution of knowledge and the consequent forms of its transmission. These forms have to be necessarily new both because of the availability of new instruments and the increased need to develop interpretative models of a constant and often unpredictable change. In this juncture the university might assume a renewed central role. At Higher Education System level, the growing use of digital instruments is envisaged in order to cope with the rising of the management rates of the training offer as well as to answer to the growing differentiation of user categories. A feasible consequence could be the increasing of the already pressure for the differentiation among the universities, with the related social implications.

At individual university level, it is foreseeable the demand for university involvement in tackling the problems of society and the economy will increase. And this at global, national and local level. From an organizational point of view the most significant feature is represented by the accumulation of traditional and new tasks that do not seem to be possible to manage. Whatever form the higher education systems will come to take, it remains that a central point to be clarified concerns the management of change. It will be the market that will impose its rules and the universities will organize themselves individually within the invisible enclosures that will guide their policies (with predictable growing social and territorial differences), or instead the State will choose incentive policies to direct its training system. It remains that in a condition of uncertainty and constant change the university's roles multiply and become – at least potentially – more and more central. It can therefore be argued that the university is not only called upon to respond to the demands of society but by elaborating answers and solutions to the problems it progressively affects the functioning of society.

We are fully aware that each educational experience produces specific results and definitions of teaching-learning practices. The well-established model of the magister teacher, based on a one-to-many transmission of knowledge, is complemented by new configurations of teaching-learning practices. There are teaching practices that cultivate the ambition to combine the technological innovation with the psychological and pedagogical issues. Educational technologies, such as the Interactive Whiteboard, incorporate a new grammar and pragmatic in which the emphasis is placed on the

involvement and the participation of the student, as well as on a "reverse teaching", compared to the traditional one. The diffusion of online educational platforms, based on algorithmic architectures and data-driven approaches, also draws attention to a personalized way of learning and a datafication of teaching. Digital technologies are therefore stimulating a series of transformations in the socio-material order of the class affecting the spatial and temporal configuration of teaching. At the same time, they are embedded in the complexity of the educational contexts that rework their practical and symbolic value.

In the European framework of strengthening the relations between the labour market and education, we also witness the implementation of teaching practices associated with the idea of knowledge as an economic and social investment. Recently, a large field of critical investigation has highlighted how teaching aimed at improving the employment prospects of students is deeply affecting public values in education. At the same time, different points of view in the educational field claim to postpone the transmission of skills related to the labour market to broader educational objectives of social inclusion and civic participation.

The new proxemics imposed by the current pandemic challenge traditional spatial configuration, from the arrangement of desks to the mobile use of chairs, from the forms of communication in virtual environments to the interaction in the classroom. Therefore, this is to register the need to re-elaborate the ecology of the educational practices, starting from the socio-material space of learning.

Reinventing E	xperiential Learnin	g Activities in	Primary School	2
	riential Learning. <i>La Gazzet</i>			THE
Neighbourhood				
Elvira Celardi				3
A VILLAGE IN A ME	TROPOLIS: SOCIOLOGICAL ISSUES	s Around a Children'	S EDITORIAL INITIATIVE IN A	Suburban
AREA				
Alessandro Ci	silin			13
Who Gets the Rig	SHT TO GO TO SCHOOL? THE ITA	LIAN CRITICAL WORKER	ts' Affair	
Chiara Gius				23
	ND DISTANCE LEARNING AT THE		HE CASE OF THE GAZZETTA C	
	resti and Maddalena Gatti		•	33
	NALISM IN AN EXPERIENTIAL LEA	RNING SESSION IN PRIM	ARY SCHOOL	42
Christian Rug	giero and Mauro Bomba			43
//V 0 0 1	L ICV. D. II. W		E	
	It, If You Really W			
Improve Stude	ent Learning Expe	riential Learn	ing Activities in	Primary
School				58
	E SCHOOL ASSESSMENT REFORM	42 THE MISSED FEEECT	S ON FORMATIVE ASSESSME	
Serafina Pasto		VI: THE IVIISSED EFFECT	3 ON I ORIVIATIVE ASSESSIVIE	59
Scrajina rasti	ne -			33
Dainvanting	Decision Making	in Cohoolou	Calf Evaluation	9. Doto
	Decision-Making	III SCHOOIS:	Sell-Evaluation	
Literacy				70
PARENTS AS DECISION	on-makers. Financial-organ	IZATIONAL INVOLVEMEN	NT OF FAMILIES IN THE SCHO	OL OF
AUTONOMY				
Anna Granata	a and Valerio Ferrero			71
THE USE OF DATA T	O SUPPORT STRATEGIC PLANNII	NG AND SCHOOL IMPRO	VEMENT AND INNOVATION	
Serena Greco	and Elettra Morini			79
Assessment Litera	ACY, DATA USE, AND TEACHER [DECISION-MAKING: A FE	ASIBLE BALANCE?	
Serafina Pasto				91
	SMENT. THE ROLE OF SELF-ASS	ESSMENT PROCESSES IN	SCHOOL IMPROVEMENT	
Daniela Roba	sto			101
Have Cahaala	Address the Coul	d Emarranau	. Voices from D.	de dinale
	Address the Covi	a Emergency:	voices from Pr	
Teachers, and	Students			110
THE ECEC PROFESS	SIONALS WITHIN THE COVID-19	9 EMERGENCY: FROM F	EMOTE CONTACTS TO LEARN	NING
COMMUNITIES				
Rita Bertozzi (and Tatiana Saruis			111
DISTANCE LEARNING	g at Emilia-Romagna's Scho	OLS. A FIRST IN-DEPTH	QUANTITATIVE AND QUALIT	ATIVE
ANALYSIS FROM THE	TEACHERS' PERSPECTIVE			
Andrea Ciani,	Chiara Dalledonne Vandin	i, Aurora Ricci and L	ucia Scipione	122
	ERIENCE DURING THE COVID-1	9 EMERGENCY: THE RE	SULTS OF A FIELD RESEARCH	
Maria Chiara	3			135
	HOOL MANAGEMENT: CHALLENG	ges for Future Educ <i>a</i>	TION	
Francesca Dei				149
	G COVID-19: AN OVERVIEW OF		ENCES, FEELINGS AND STRAT	EGIES IN
	EARNING OF THE ACTORS INVOL			
_	ulia Mattiacci and Damian		, -	161
	SCHOOL ACTIVITIES DURING THE	E FIRST COVID-19 Loc	KDOWN IN ITALY: COMPARA	TIVE STUDY
	KDOWN WORKSHOPS			
Giuseppe C. P		- Francisco Taracco	_	171
	HOUSE, A KITE: METAPHORS OF		J	407
Elettra i roina	, Andrea Mangiatordi and	Luisa Zecca		187

Training Educational Professionals During the Pandemic: Imp	
Learning, Strategies and New Didactic Challenges Faced by	
University Traineeship	196
Online Traineeship: Which Educational Chances? Changes From Live to Online Model in TFO Experience	
Marco Alviti, Luca Bassi and Maria Elena Scotti	197
WHICH TRAJECTORIES TO TRAIN 'SECOND LEVEL' EDUCATIONAL PROFESSIONALS? REFLECTIONS ABOUT A UNIVI	ERSITY
Traineeship Facing COVID-19 Pandemic Maria Benedetta Gambacorti-Passerini and Paola Eginardo	205
RAISING AWARENESS OF STUDENTS' PROFESSIONAL IDENTITY. AN ONLINE INTERNSHIP PATH FOR FUTURE EDUC	
AT THE UNIVERSITY OF CATANIA	
Roberta Piazza and Valeria Di Martino	215
THE INTERNSHIP OF THE BACHELOR'S DEGREE COURSE IN EDUCATION OF THE UNIVERSITY OF MILANO-BICOCCA TIME OF PANDEMIC	. IN
Elisabetta Marazzi, Benedetta Pozzoli, Marialisa Rizzo and Silvia Tognetti	227
Inspiring and Preparing a Comprehensive View of the Professional Role of Educator: A Simulated)
Traineeship Experience Claudia Secci and Andrea Spano	237
Cidudia Seceralia Anarea Spano	237
Challenges and Weaknesses. Differentiation, Digital Transformation	tion,
Professionalism, Autonomy	246
THE REMOTE LEARNING TRANSITION AT THE UNIVERSITY OF BOLOGNA: STUDENT EXPERIENCES AND EXPECTATION	ONS
FOR A POST-PANDEMIC FUTURE	
Alessandro Bozzetti and Nicola De Luigi University 2030: Thinking About a Structural Change	247
Giovanni Ragone	261
THE HARD PATH OF ACADEMIC STABILISATION INTO A NEOLIBERAL EUROPEAN ACADEMIC FRAMEWORK	
Marialuisa Villani, Sanja Djerasimovic and Orazio Giancola	271
University Third Mission and the Local Environment	284
PUBLIC ENGAGEMENT AND GENDER DIFFERENCES IN ITALY: EXPLORING THE GAP BY ACTIVITY AND DISCIPLINE	
Monia Anzivino Territorial Development and 'Third Mission'	285
Donatella Capaldi and Alessio Ceccherelli	298
Rethinking Higher Education at the time of COVID-19: Challenges,	new
perspectives, critical issues	308
A COMPETENCY MODEL FOR OBESITY PREVENTION AND HEALTHY LIFESTYLES EDUCATION THROUGH THE	
INTERDISCIPLINARY AND SUSTAINABLE PARADIGM OF TELEMEDICINE	200
Stefania Massaro and Loredana Perla Hybridity And Educational Virtuality. What Did 2020 Leave us?	309
Sergio Ricardo Quiroga	319
THE TRANSITION TO ONLINE TEACHING IN TIMES OF PANDEMIC: AN EXPERIENCE OF TEACHERS' TRAINING IN	
EUROPEAN HIGHER EDUCATION Mars Romana, Torres Roman, Montre Guitart and Rable Partán	220
Marc Romero, Teresa Romeu, Montse Guitert and Pablo Baztán Addressing Complex Real-World Challenges in Software Engineering Education through the	329
Integration of Gamification and Crowdsourcing	
Mercedes Ruiz, Manuel Trinidad and Alejandro Calderón	343

University	and Ac	tive Citiz	zenship.	Didactic	Practices	and
Methodologi	cal Trajec	tories for tl	he Develop	ment of C	reative and Cri	tical
Thinking						358
	BATE INTO UNIVE	RSITY. A METHOD	OLOGICAL PROPO	SAL TO FOSTER	CREATIVE AND CRITICAL	
THINKING Ivan Daldos	c					359
DESIGN PROFESSI		TIONS IN SCHOOL	AND UNIVERSITY	THROUGH CRE/	ATIVITY	339
			essandra Roma			371
ACTIVE CITIZENSH		RMATIVE PERSPEC	TIVE			
Claudio Mel		MAY TO BROMO	TE CIVIC RESPONS	IDII ITV		381
		Silva and Alessi		IRITLIA		391
_				OUGH DIGITAL	STORYTELLING. AN	
EXPLORATORY STU						
		sco and Alessai		DARTICIDATOR	NY CITITENSIUD MODE ON	405
RELEVANT SOCIAL			(IS FOR ACHIEVING	PARTICIPATOR	RY CITIZENSHIP WORK ON	1
			Fernández and	Elisa Navarro	o-Medina	417
Reinventing	Universit	y. Public	Engagem	ent as	Participative	and
Collective Ur	niversity					426
		BETWEEN SOCIAL	L WORKERS AND F	HOMELESS PEO	PLE: THE EDUCATIONAL	
			OLE OF THE RESEA	ARCHER		
	Floriana Grass		IES AND DEDIVATION	ONC		427
Transformation Andrea Lom		, BETWEEN RESIDE	JES AND DERIVATION	JNS		437
		PROFESSIONAL AI	ND ACADEMIC KNO	OWLEDGE MEE	TS	
			onino Sidoti an			451
-		EDS OF THE TERRIT	TORY: THE CASE O	F THE EDGE PR	OJECT PRESENTATION	462
Fiorella Vinc	:1					463
Tertiary Educ	eation in It	alv: The Pi	riem of Diff	oroncoc		476
-		-	TISTICAL ANALYSIS)ECADE	4/0
		anasio and And		OF THE EAST D	LCADE	477
Faculty Deve	elopment,	Scholarsh	ip and Pr	rofession	alism in Teac	hing:
Challenges a	_		_			494
					ACHING OBSERVATION,	PEER
FEEDBACK, AND C				VIEW		
	,	an and Anna Se		_		495
FACULTY FEEDBAC		ARNING DURING TH	HE ELENE4LIFE PIL	OT PROJECTS		508
•		ARCH CAPACITY B	UILDING IN HIGHEI	R EDUCATION		300
Antonella Lo	otti and Dario	Torre				520
					AND LEARNING IMPROVE	
			Ercole and Lucil	-	ROFESSIONAL DEVELOPM	532
		inci and Alessia		ACADEMIC P	NOTESSIONAL DEVELOPN	1EN 1 544
_0.00011010	,ana vi	/ 1100010				5 + 4

The New Challenges of the Post-Pandemic University Forma	tive
Processes, Third Mission and Active Citizenship	558
HELICES OVERLAPPING IN THE ITALIAN MEGA-UNIVERSITIES. THE INFLUENCE OF INNOVATIVE DIDACTICS IN PROMOTING THE THIRD MISSION	
Barbara Mazza and Elena Valentini RETHINKING INTERNSHIP EXPERIENCES FOLLOWING THE COVID-19	559
Cristina Sofia	571
Understanding Society Using Digital Spaces and Resources: Teacl	ning
and Learning Paths in Higher Education	582
TRAINING FOR TRAINING: MOODLE AS A TEACHING TOOL BY AND FOR TEACHERS	
Jessica Camargo Molano, Daniele Battista and Michelle Grillo	583
LEARNING SOCIAL RESEARCH TECHNIQUES THROUGH DIGITAL RESOURCES AND COLLABORATIVE APPROACHES: T POINT OF VIEW OF SOCIOLOGY STUDENTS	HE
Maria Carmela Catone, Màrius Domínguez Amorós and Leon Freude	591
THE IMPACT OF COVID-19 ON ENGLISH LANGUAGE TEACHING IN HIGHER EDUCATION CHINESE SYSTEM, EMER	
REMOTE TEACHING IN NEOLIBERAL UNIVERSITIES IN CHINA	
Giovannipaolo Ferrari and Eugénie Duthoit	601
HELP TEACHING AND DIGITAL RESOURCES: A COMPARISON OF CLASSROOM AND DISTANCE-LEARNING EXPERIEN	ICES
IN A COURSE OF METHODOLOGY OF SOCIAL RESEARCH	
Luciana Taddei	609
DISTANCE LEARNING: GIVING VALUE TO THE COVID-19 EMERGENCY Alessandra Decataldo, Brunella Fiore and Sara Zizzari*	619
Alessandra Decatalao, Branella Flore ana Sara 2122an	013
Reinventing Education in and through Artistic Languages ART AS A DIDACTIC TOOL: 'THE BAUHAUS 2.0' DIGITAL WORKSHOP	630
Alfonso Amendola and Jessica Camargo Molano	631
IMPROVISATION IN TEACHING PROFESSION: AN EMBODIED APPROACH FOR INQUIRY	031
Laura Corbella	641
Preliminary Data from a Dancing Practice in Distanced Learning	
Francesco V. Ferraro, Luigi Aruta, Ferdinando Ivano Ambra and Maria Luisa Iavarone	649
COMMEMORATING PIAZZA FONTANA THROUGH THE ARTS: LEARNING PRACTICES, ARTISTIC PRODUCTIONS AND	
PUBLIC MEMORY	CEO
Lia Luchetti The Aesthetic Thinking. Reconnecting the Subject with the Reality, the Society and the Cosmos	659
Stefano Polenta	669
THE PROCESS OF CROSSBREEDING IN CONTEMPORARY ARTISTIC PRODUCTION. NEW ROUTES IN AESTHETIC	003
EDUCATION	
Raffaele Tumino	681
A Universities Programme of Art-Based and Art Informed Research	
Franca Zuccoli and Elisabetta Biffi	689
Scaling Up Innovation: from Educational Practices to Systemic Cha	nge 698
The Art Ecosystem. Promoting Innovation, Inclusive Learning and Active Citizenship Tiziana Faitini and Erik Gadotti	699
'Boundary' practices: Reinventing education across and beyond	the
forme scolaire	710
FOREST PEDAGOGY AND NEOLIBERAL CHALLENGES: EXPLORING THE DISCURSIVE CONSTRUCTION OF FOREST	
CHILDREN'S SUBJECTIVITY IN ITALY	
Stefania Donzelli	711
Homeschooling and Unschooling	

Nunzia Vezzola 723

Training a Democratic Teacher: Between Individualized Teaching	and
Formative Evaluation	734
BETWEEN WELL-BEING AND POVERTY IN EDUCATIONAL CONTEXTS. WHAT IS THE ROLE OF TEACHERS? A NARRA	ATIVE
LITERATURE REVIEW	
Sara Baroni and Nicoletta Di Genova	735
TEACHING PRACTICES AND USE OF DIGITAL IN THE DADA MODEL (DIDACTICS FOR LEARNING ENVIRONMENTS)	
Cristiana De Santis, Sara Germani and Daniela Di Donato THE EPISTEMOLOGICAL QUESTION OF DIGITAL CITIZENSHIP AT THE TIME OF THE PANDEMIC	747
Alessio Fabiano	761
THE INFLUENCE OF TRAINING ON TEACHERS' TEACHING STRATEGIES: STUDY OF A SAMPLE OF SECONDARY SCHO	_
TEACHERS	
Eleonora Mattarelli and Marta Cecalupo	770
THE SCHOOLYARD AS A TEACHABLE SPACE: A RESEARCH-TRAINING PROJECT WITH TEACHERS AND PARENTS	
Andrea Pintus and Laura Landi	781
Reinventing Professional Learning and Development	792
TOWARD A PHENOMENOLOGY-ORIENTED TRANSFORMATIVE EDUCATION IN ADULT LIFE	
Giuseppina D'Addelfio	793
CITIZENSHIP EDUCATION IN SECONDARY SCHOOL: BETWEEN TEACHERS REPRESENTATIONS AND STUDENT VOICE	
Claudia Fredella and Luisa Zecca	805
TEACHER MERIT RESTYLING THROUGH INCLUSIVE TEACHER LEADERSHIP Ilaria Salvadori	821
nunu sulvauon	021
Reinventing School between Pedagogy, Architecture and Design	n: A
Dynamic Laboratory?	830
MODERN ARCHITECTURE FOR CONTEMPORARY COMMUNITIES: LEARNING AND INCLUSION IN THE OPEN WORK	
Lino Cabras	831
SCHOOL BUILDINGS AS A PRETEXT FOR AN ARCHITECTURAL MANIFESTO	
Alessandro De Savi	841
THE 'FLEXIBLE SPACE' AND THE PEDAGOGICAL ROLE OF ARCHITECTURE Daniela Monti	851
Modern School Heritage: Architectural and Pedagogical Models in Sardinia (Italy)	651
Laura Pujia	863
EDUCATION RETHINKING SCHOOLS AND REDESIGNING THEM TOGETHER	
Franca Zuccoli, Maria Fianchini and Antonella Bellomo	873
Peer Feedback and Peer Assessment as New Perspectives for Teacl	hina
and Learning	888
MUTUAL FEEDBACK EXCHANGE AND PEER ASSESSMENT DURING TEXT REVISION IN PRIMARY SCHOOLS	000
Elisa Farina	889
PEER ASSESSMENT AND PEER FEEDBACK TO FOSTER COLLABORATIVE LEARNING AND CONSOLIDATE THE WRITIN	
Skills of University Students	
Giovanni Moretti, Arianna L. Morini and Bianca Briceag	901
School System and Daily school. Learn about Practices and Make Se	ense
of Evaluation to Promote Innovation	914
MEASURING THE MATHEMATICS ABILITIES OF STUDENTS WITH SPECIAL EDUCATION NEEDS THROUGH A COMPU	
MEASURING THE MATHEMATICS ABILITIES OF STUDENTS WITH SPECIAL EDUCATION NEEDS THROUGH A COMPU BASED MULTILEVEL ADAPTIVE TEST	IEK-
Emanuela Botta	915
INNOVATING THE SCHOOL: COMPARING THE POINT OF VIEWS OF STUDENTS, TEACHERS AND HEAD TEACHERS	
Sara Mori, Francesca Rossi, Francesca Storai and Valentina Toci	929

Assessment, Power, Subjectivation Processes. Biopolitical-Transdisciplinary Hypotheses Andrea Giacomantonio Assessment and Inclusion. The Teachers' Experience of Emergency Remote Teaching During the	945
LOCKDOWN PERIOD Arianna L. Morini and Irene Stanzione DIDACTIC STRATEGIES AND METHODS DURING THE COVID-19 EMERGENCY: A COMPARISON BETWEEN DATA OBTAINED FROM THE QUALITATIVE ANALYSES OF SIRD SURVEY Giulia Toti, Giulia Barbisoni, Eleonora Pera and Irene Dora Maria Scierri	953 965
Quality ECEC in Italy: Teaching and Learning in the New 0-6 System EDUCATING IN THE COOPERATIVE MODEL THROUGH A STRUCTURAL DIALOGUE BETWEEN FACE-TO-FACE AND D ENVIRONMENTS	
Isabel Alfano, Alessio Ceccherelli, Luca Fratepietro, Marco Serra and Andrea Volterrani	979
LEARNING TO LEARN IN PRESCHOOLS: AN EXPLORATORY QUALITATIVE STUDY IN ITALY AND MEXICO Victor Gerardo Cardenas, Cristina Stringher, Hugo Armando Brito and Ma Irene Silva GAME MEDIA LITERACY AS AN APPROACH TO COMPLEXITY IN EDUCATION	991
Glauco Babini, Massimo Dell'Utri, Roberto Furfaro, Andrea Ligabue, Carlo Andrea Pensava and Antonella Ventura	lle 1005
Reinventing the Curriculum and its Practices	1016
Active Learning and Curriculum Across Disciplines: A Field Research Study in Secondary School Serena Goracci, Rachele Borgi, Loredana Camizzi, Francesca De Santis, Laura Messini and Francesco Perrone	1017
GRAPHIC TOOLS FOR A VISUAL REPRESENTATION OF THE CURRICULUM Luciano Perondi	1035
Pedagogy meets Architecture and Digitalisation RETHINKING LEARNING SPACES AND TEACHING METHODOLOGIES BY CONNECTING COMMUNITIES DURING THE COVID-19-PERIOD: INCLUSIVE VISION AND RESEARCH-TRAINING IN ON-LINE WORKSHOP Mariagrazia Francesca Marcarini	1048 1049

Designing Technology to Support Online Faculty Development Through Teaching Observation, Peer Feedback, and Collaborative Reflection: A Brief Literature Review

Fulvio Biddau, Alessio Surian and Anna Serbati University of Padua, fulvio.biddau@unipd.it University of Padua, alessio.surian@unipd.it University of Padua, anna.serbati@unipd.it

ABSTRACT: This paper presents a brief literature review on technologies and web-based tools for faculty development. It investigates what resources are available to higher education (HE) teachers to support online professional development (OPD) activities based on feedback, collegial discussion, collaborative reflection or teaching observation. From recent studies we note that collective reflection is effective when technologies are acted and used as a medium for collaborative professional learning, appropriately choosing and aligning technology with education purposes and teachers' developmental needs, acknowledging the interrelations among technology, content and pedagogy. The paper provides a better understanding of the limits and potential of different technologies and how programmes of online faculty development can be designed to promote dialogical collaborative thinking.

KEYWORDS: Online professional development, Feedback, Video-based feedback, Teaching observation, Intercultural reflection.

Introduction

Feedback and reflection are frequently considered an essential dimension of learning from experience, and a wealth of literature on teaching, teacher education, and faculty development focuses on them. The origins of reflection and reflective practitioner can be found in the works of Dewey (1910) and Schön (1983), with the latter distinguishing between reflection-on-action undertaken retrospectively, and reflection-in-action, which implies a reflective conversation with the situation. The concept of reflection has been further elaborated by scholars such as Mezirow (1991) and Brookfield (1995) among others. The first, distinguished between content, process, and premise reflection, representing different types and levels of depth in reflective practice. These are understood respectively as using beliefs and knowledge to make interpretations on action, reviewing the effectiveness of chosen strategies, and questioning the

validity of core beliefs, coinciding with instrumental, communicative, and emancipatory forms of learning (Kreber, Cranton, 2000). While reflection may be primarily an individual task, Brookfield pointed out that even if «critical reflection often begins alone, it is, ultimately, a collective endeavor» (1995, 35-36), namely a dialogical inquiry effort informed by four complementary lenses (of our students, peers/colleagues, the literature and our autobiography).

In this regard, some authors (e.g., Pickering, 2006) emphasized the benefits of dialogue for reflection, highlighting the perceived usefulness of collaborative reflection for novice academics and how higher education (HE) teachers can use reflective dialogue and feedback to develop their practice.

However, the literature on feedback in HE has drawn attention to the importance of challenging prevailing notions of feedback. Learning from feedback involves 'complex appraisal' and depends on the development of evaluative expertise (Sadler, 2010). As Shortland (2010) stressed, feedback can be inherently dangerous. Critical feedback may be damaging to the relationships, and sensed as evaluative, judgmental, competitive, and painful, hindering teachers' motivation opportunities of exchange and support from colleagues. Nevertheless, it can be useless for the teachers' development if the critical/problematic is avoided. To be beneficial and provide learning and development opportunities, feedback needs to be critical but at the same time constructive, non-judgmental and supportive (Hogston, 1995). Good formative feedback should concern positive aspects of teaching and those that can be enhanced, motivating the identification of alternative ways of interpreting and doing things while being simultaneously specific, context-related and realistic, appreciating working constraints and offering options fitting with the context (Fletcher, 2018).

In the HE context, recent research has stressed the value of peer review and observation for community building (Harper, Nicolson, 2013) and to enable the examination of teaching from multiple perspectives (Huxham *et al.*, 2017).

In this regard, OPD technologies and opportunities have the potential to support collaborative, dialogic, and evidence-based approaches of mutual professional learning that would complement individual reflection on practice (Mann, Walsh, 2017).

1. Online faculty development: what technologies for supporting feedback and reflective practice with peers?

Digital technologies constitute a unique opportunity for professional development (PD) activities that are not just faculty-based. They provide teaching staff with the possibility of sharing and building knowledge with peers located at distance (Ravenscroft *et al.*, 2012). In this context, teachers may be conceived as «Self-directed, informal, and collaborative

learners – as OPD can be adapted to the needs and expectations of the teacher, conducing to full autonomy and self-realisation of learning» (Macià, Garcià, 2016).

Action-researchers that engage in a self-reflective spiral of investigation, reflection and constructive dialogue, looking for an external source of information to innovate classroom experience and produce new insights facilitating their professional development (Prestridge, Tondeur, 2015).

Nevertheless, limits and factors influencing the experience of technology-mediated collaborative reflection should be carefully considered. First, the social/psychological factors that affect collegiality and meaningful participation in online spaces, such as perceived trust and sense of community, or the perception of being in a safe and supportive virtual environment.

Second, the barriers to online participation that concern technology adoption and use (perceived ease of use and usefulness, digital habits). In this regard, technology acceptance is fundamental for boosting social interactions and increasing the satisfaction and sense of community (Tsai, 2012).

Finally, the role of educational experts in guiding the analytical process, sustaining knowledge sharing, nurturing debates, and encouraging and connecting teachers in the virtual environment. Research demonstrates that more complex, dialogical, and critical levels require guidance and support by mentors or instructors (Prestridge, Tondeur, 2015).

2. The literature review: rationale, procedure and materials

This paper has been developed in the context of the Erasmus+ funded project IntRef (Intercultural Reflection on Teaching, 2018-2021)¹, which aims at stimulating reflective dialogue and collaborative problem-solving between academics across different countries, institutions, departments and disciplines, facilitated by technology. Academics are linked across institutional and national boundaries through technology such as video recordings and videoconferencing to facilitate communication and exchange about learning, teaching and assessment.

In this context, we were interested in improving our understanding about the use of digital technologies to support faculty development activities based on observation, feedback and collaborative reflection.

For this reason, we revised the most recent scientific literature focusing on technologies and web-based tools that allow for collaborative reflection and feedback². The rationale and purpose of the paper is

.

¹ https://sites.durham.ac.uk/intref/

² Therefore, we did not consider self-reflective tools such as reflective journals or e-portfolios.

twofold: on one hand, the paper aims at mapping and exploring what kinds of resources are available to HE teachers to support transnational professional development opportunities based on feedback and collaborative reflection; on the other hand, it tries to understand how faculty development programmes of feedback-based reflective practice be designed to promote dialogical collaborative thinking in the virtual sphere.

The literature review was conducted by applying the following threestep procedure (i.e., search, qualitative synthesis, discussion), inspired by the Search, AppraisaL, Synthesis and Analysis (SALSA) analytic framework. The first step regarded the search procedure, which was carried out using the following search query adopted within title, abstract and keywords:

"reflection on teaching" OR ("Reflective Practice" AND teaching) OR (feedback AND reflection AND teaching) AND ("higher education" OR college OR university) AND (online OR web OR technolog* OR video*)

The search was performed on the 25th of June 2020 with the Scopus database and was limited to peer-reviewed journal articles (research and review articles) published in the English language in the last decade (2010-2020). The first search produced 189 results.

After checking for duplicates, we assessed the eligibility of articles as the second step. The articles were assessed according to their relevance regarding the technological dimension and collaborative potential. We considered only articles that discuss in-depth the technological component supporting collaboration in professional development or teacher education.

During this process, we identified further literature to include in the final dataset. Articles were categorized into 'highly relevant articles' (i.e. articles where the technological dimension is at the core of the paper and strongly problematized), 'medium relevance articles' (i.e. the research article adopts or focuses on technology and gives information about its use), and 'low relevance articles' (i.e. the article only uses technology without sufficiently problematize its adoption).

From high relevance and medium relevance articles, we selected a sample of 46 articles representative of different digital technologies. These articles were included in the third step of the procedure, the qualitative synthesis and discussion, aimed at identifying and commenting on the main potential and limits of these technologies for faculty development.

3. Results

The review shows that the majority of studies focuses on teacher education/initial training, partially neglecting collaborative reflection for

continuous professional development (Hamel, Viau-Guay, 2019). Moreover, very few studies refer to the HE sector, and there is an almost complete lack of research in an international development context (Baecher *et al.*, 2018; Major, Watson, 2018), neglecting the increasing internationalization of HE teaching and related mobility of teachers.

Our review found that the most used digital technologies for online professional development of teachers fall in the following areas: online communities such as blogs or discussion forums, video-viewing and vide-based feedback (synchronous and asynchronous), and video-annotation tools integrated with virtual environments. Our findings are discussed focusing on these technologies.

3.1. Technologies for online asynchronous discussion: Blogging, discussion Forums and vlogs

Blogs and discussion forums are characterized by asynchronous nature, knowledge sharing and immediacy of responses, which make them suitable spaces for OPD characterized by sharing resources and reflections on teaching. Blogs have been increasingly used in HE. Nevertheless, two literature reviews highlight how they have primarily focused on student learning and experience rather than teacher reflection and feedback to enhance teaching (Kirkwood, Price, 2014; Sim, Hew, 2010).

Current literature argues that teachers use blogs mainly to share knowledge and materials (Booth, 2012). Despite this, they can be recognized as reflective devices that enable externalisation of reasoning, justifications of beliefs and considerations across time, while fostering collaboration and social interactions among fellow teachers (Deng, Yuen, 2011). However, blog posts are often descriptive – like diary entries – and involve reactions and emotional responses to classroom or curricula situations, with reflection often not taking place (Killeavy, Moloney, 2010; Smidt et al. 2018).

For this reason, blogging can be acknowledged as not the most effective tool for sharing personal reflections or reflecting collaboratively, with HE teachers. According to Powell (2017), the success of reflection through blogs greatly depends on the presence of clear learning goals, detailed instructions and safe virtual environments. Indeed, research demonstrates that structured prompts seem necessary for online-focused, guided and supported conversations fostering professional development (Booth, 2012).

On the other hand, within discussion forums, in-depth critical reflection seems promoted through the nature and wording of forum topics. When centred on pedagogical practices, discussion forums can question and scaffold teachers' understanding of the underlying assumptions and underpinning premises about the reason why particular pedagogical approaches are appropriate and effective, or not, and how to replicate and adapt them to the educational context (Dymoke, Harrison, 2008; Jones, 2014).

Thus, forums may overcome isolation and provide critical social support by developing a community of reflective practice that can enable professional learning through reading and inquiring into peer reflections and feedback (Boulton, Hramiak, 2012).

In these spaces, knowledge construction can happen with careful planning and facilitation, with scholars suggesting using synchronous discussion for analysing and debating controversial topics – such as new theories, ideas, or counterposing pedagogical alternatives – to improve the professional learning outcomes. In this regard, facilitators must guarantee the social, cognitive and teachers' presence by making the digital environment a supportive space, providing social support and encouragement, allowing interactions among members and promoting the analysis and discussion through instructions and suggestions (Chen et al., 2009).

One further technology considered in the literature falls between blogging and video-viewing: the vlog. Vlogs or video blogs are recorded videos of the teacher speaking while thinking back across their practice, on understanding or misunderstanding of their actions during practice (Parkers, Kajder, 2010, 219).

In the same extent of blogs, vlogs are believed as excellent platforms for sharing ideas, thoughts, observations and knowledge within a learning community and could be adopted respectively as community-building tools, collaborative tools, and reflective tools (Taylor, 2013). The recent study by Ong, Swanto, and Alsaqqaf (2020) highlights how using vlogs teachers benefitted from reflecting deeply on their practice, but more importantly, by watching their peers they learnt new ideas and techniques they can borrow in their practice.

3.2. Video-viewing and video-based reflection and feedback In the last 15 years, videos have been increasingly used both for teacher education and professional development, coinciding with an increasing research interest.

Indeed, the majority of articles we examined focuses on video technology, with recent reviews highlighting their possibilities and limits for teacher education and professional development. Compared to classic observation or reflective writing, videos give access to classroom events without sacrificing authenticity and complexity (Rosaen *et al.*, 2008), revealing missed events and making students thinking more visible (Barnhart, van Es, 2015), enhancing teachers' noticing when a particular lens/focus is provided (Gaudin, Chaliès, 2015). Research has demonstrated that using videos can be particularly useful for testing the effectiveness of teaching methods and identifying alternatives, enhancing classroom interaction and questioning, increasing the role of students and their speaking in class, challenging assumptions about students and their learning, and inquiring into their thinking processes to support them (e.g. Brown, Kennedy, 2011; Cho, Huang, 2014; McCullagh, 2012; Harlin, 2014). In this regard, videos can be used with two main

objectives: the developmental and the normative (see Gaudin, Chaliès, 2015). The first one aims to develop the teacher knowledge about how to interpret and reflect on classroom events of personal practice while the second aims to develop teacher knowledge on what to do in class by exposing teachers to exemplar or not exemplar videos of other teachers.

Seeing personal and peer videos can provide teachers with a double mirror - by being faced with an inner and outer perspective. By watching personal videos, teachers can recognize and learn what strategies worked or failed with students and what constitute a good performance and the rules of good functioning (Garcia et al., 2017). On the other hand, viewing a peer video can help to clarify and question personal assumptions on teaching and learning, and develop new related understandings. It has the advantage of increasing knowledge of teaching by exposing teachers to different strategies through developing knowledge-based reasoning skills to analyse personal teaching (Prilop et al., 2020; Kleinknecht, Schneider, 2013). In this way, teachers can improve their professional vision and engage in different sense-making strategies, which may counterbalance self-criticism (Zhang et al., 2011) and contribute to the active self-development of the observer, leading to greater reflection and change in practice (Tenenberg, 2016). On the other side, videos can promote a shift from descriptive analysis to more focused and interpretative ones, and from the teacher to the students and their learning (Tripp, Rich, 2012a). Moreover, scholars found video-based feedback more specific, better grounded on and supported by evidence, and therefore more accepted by the observed teachers who can compare interpretations with evidence and identify strengths and limits of their practice and approach. To fully exploit the potential of video recordings, the intrinsic limits of the artefact and how to organise the analysis and collaboration should be considered. First, it appears crucial to realise appropriate videos, with choice and recording guided by classroom situation and teacher learning goals (Santagata, Guarino, 2011). Empirical evidence suggests that when teachers' agency and ownership of their learning is promoted, they show deeper reflective practice, are more autonomous, interact more freely, and benefit from formative evaluation (Rosaen et al., 2010; Tripp, Rich, 2012b).

However, the use of videos can bring a high cognitive and emotional load, presenting multiple pieces of information that may overwhelm the teacher (Derry *et al.*, 2014). Therefore video-viewing and analysis should be scaffolded, guided and supported, anticipating elements that may be identified and possible interpretations, avoiding evaluation and providing appropriate frames to structure the inquiry process. Without adequate training and focus, teachers experience multiple difficulties in identifying relevant events in classroom videos, and without a particular filter they tend to focus on elements of little significance, producing a descriptive and superficial reflection (Gaudin, Chaliès, 2015).

Different studies demonstrated the necessity of prompting participants (e.g., Danielowich, McCarthy, 2013), or providing scaffolding for

supporting teachers' reflective practice (Blomberg *et al.,* 2013), though warning about using predetermined checklists constraining the gaze and perception of the situation by the observer (Shortland, 2010).

Altogether, this literature supports the idea that higher levels of reflection cannot be reached just by watching videos, but that a structured learning process has the potential to support reflection. Despite this large body of research, very little is known about how video-based protocols pragmatically support reflection (Danielowich, 2014), especially in the higher education sector. The use of video is often described in general terms and few studies document the trainer/facilitator contribution in the protocols (Arya *et al.*, 2013a), or describe in detail the instructions and how the video is integrated into instruction (Baecher *et al.*, 2018).

3.3. Video-annotation collaborative tools and digital-based feedback and reflection environments

To avoid cognitive load, some scholars suggest focusing on short clips, which focuses the attention on a particular issue seem to be more useful than longer videos raising a host of issues (Bates *et al.*, 2016; Sherin *et al.*, 2009).

In this regard, video-annotation collaborative tools integrated into digital environments can be more suitable. These are characterised by a simple graphic-based interface integrating a viewing area and space where users can add and edit comments on specific segments/clips.

Our review highlights that research on video-annotation is recent, limited, and mostly with pre-service teachers (e.g. Colasante, 2010) or focusing on personal reflection. For example, the study by McFadden et al. (2014) used video annotation technologies to provide teachers with the ability to add time-marked text annotations to their classroom video and reflect on their practice. They found that teachers' annotations revealed a predominance of the lower-level reflective stances and that the technology usability and accessibility must be complemented by structured assignment and facilitation within the tool.

However, when used in a collaborative way, research demonstrates that video-annotation can augment and extend the reflective experience by facilitating and collaboratively structuring the analysis process, receiving feedback from multiple participants/perspectives. The study by Picci, Calvani, and Bonaiuti (2012) argues that some aspects are fundamental to increase the usefulness, appeal and ease of use of collaborative video-annotation technologies: the sharing and negotiation of observation criteria among participants and specific training on feedback.

Other scholars put it that the permanency of comments provides teachers with a written record for later reflection, and enough time to consider the feedback thoroughly and compare their viewpoint with other peers (Straková, Cimermanová, 2018; Kassner, Cassada, 2017). The advantage is to expose teachers to diverse peer coaching, questioning,

observations that may elevate the quality of analysis and feedback, allowing the integration of positive, critical and counterbalanced perspectives into reflection on self and other teaching events (Kleinknecht, Gröschner, 2016).

Despite this, synchronous discussion can be more effective in supporting higher-order thinking and ensuring cognitive presence in the online environment.

Conclusions

The affordance of technologies to promote the social construction of knowledge is effective when technologies are acted and used as a medium or stimulus for collaborative learning, appropriately choosing and using them aligned with education purposes, recognizing the connection between technology, content and pedagogy (see Jones, 2014).

The literature examined suggests exploring and using technologies giving priority to those who result as user-friendly, familiar or that can be easily integrated into everyday life and habits to increase the perceived ease of use and usefulness for boosting social interactions and increasing satisfaction.

The review shows that the success of technology-mediated collaborative reflection depends on how instructors/facilitators assist with the process, guaranteeing social, cognitive and teacher presence, how collaboration is socially organized, and what instruments/lenses are provided for inquiry, reflection and feedback about teaching and learning. While teachers should be the owners of their learning path and have adequate agency in the process, they need to be trained and guided in reflecting writing, video-viewing (noticing and interpreting events) as well as on feedback and strategies for scaffolding critical reflection of colleagues (e.g. framing, oppositional voice, counterposing alternatives, see e.g. Clara *et al.*, 2019) to foster effective use of technologies for professional learning purposes.

Regarding future areas of research, we found limited evidence on the use of video-conferencing technology to support synchronous discussion (see e.g., Lenkaitis, 2020), and collaborative inquiry (such as in video-viewing); technologies that may enable the development of reflective experiences and communities across countries and institutions.

Moreover, while the technologies discussed in this review may allow the integration of students' perspective and voice into personal and collaborative reflection on teaching (e.g., Huxham *et al.*, 2017), therefore taking full advantage of Brookfield stance on the dialogical inquiry into teaching (1995), this represents a field of research almost unexplored that deserves further attention.

References

- Arya, P., Christ, T., Chiu, M.M. (2013a). «Facilitation and teacher behaviors: An analysis of literacy teachers' video-case discussions», *Journal of Teacher Education*, 65(2), 111–127.
- Baecher, L., Kung, S. C., Ward, S. L., Kern, K. (2018). «Facilitating Video Analysis for Teacher Development: A Systematic Review of the Research», *Journal of Technology and Teacher Education*, 26 (2), 185-216.
- Barnhart, T., van Es, E. (2015). «Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking», *Teaching and Teacher Education*, 45, 83-93.
- Bates, M. S., Phalen, L., Moran, C. G. (2016). «If you build it, will they reflect? Examining teachers' use of an online video-based learning website», *Teaching and teacher education*, 58, 17-27.
- Booth, S. E. (2012). «Cultivating knowledge sharing and trust in online communities for educators», *Journal of Educational Computing Research*, 47 (1), 1-31.
- Boulton, H., Hramiak, A. (2012). «E-flection: The development of reflective communities of learning for trainee teachers through the use of shared online web logs», *Reflective Practice*, 13 (4), 503-15.
- Brookfield, S. (1995). *Becoming a Critically Reflective Teacher*. San-Francisco, Jossey-Bass.
- Brown, K., Kennedy, H. (2011). «Learning through conversation: Exploring and extending teacher and children's involvement in classroom talk», *School Psychology International*, 32 (4), 377-96.
- Chen, Y., Chen, N. S., Tsai, C. C. (2009). «The use of online synchronous discussion for web-based professional development for teachers», *Computers, Education*, 53 (4), 1155-66.
- Cho, Y. H., Huang, Y. (2014). «Exploring the links between pre-service teachers' beliefs and video-based reflection in wikis», *Computers in Human Behavior*, 35, 39-53.
- Clarà, M., Mauri, T., Colomina, R., Onrubia, J. (2019). «Supporting collaborative reflection in teacher education: a case study», *European Journal of Teacher Education*, 42 (2), 175-91.
- Colasante, M. (2011). «Using video annotation to reflect on and evaluate physical education pre-service teaching practice», *Australasian Journal of Educational Technology*, 27 (1).
- Danielowich, R. M., McCarthy, M. J. (2013). «Teacher educators as learners: How supervisors shape their pedagogies by creating and using classroom videos with their student teachers», *Action in Teacher Education*, 35 (3), 147-64.
- Danielowich, R. M. (2014). «Shifting the reflective focus: Encouraging student teacher learning in video-framed and peer-sharing contexts», *Teachers and Teaching*, 20 (3), 264-88.
- Deng, L., Yuen, A. H. (2011). «Towards a framework for educational affordances of blogs», *Computers, education*, 56 (2), 441-451.

- Derry, S. J., Sherin, M. G., Sherin, B. L. (2014). «Multimedia learning with video», in R. E. Mayer (ed) *Cambridge handbooks in psychology. The Cambridge handbook of multimedia learning*, Cambridge University Press. pp. 785–812.
- Dewey, J. (1933). *How We Think: A Restatement of Reflective Thinking to the Educative Process.* Boston: D. C. Heath.
- Dymoke, S., Harrison, J. (2008). *Reflective teaching and learning*. SAGE Publications Ltd.
- Fletcher, A. K. (2018). «Help seeking: Agentic learners initiating feedback», *Educational Review*, 70 (4), 389-408.
- Garcia, I., James, R. W., Bischof, P., Baroffio, A. (2017). «Self-observation and peer feedback as a faculty development approach for problem-based learning tutors: A program evaluation», *eaching and learning in medicine*, 29 (3), 313-25.
- Gaudin, C., Chaliès, S. (2015). «Video viewing in teacher education and professional development: A literature review», *Educational Research Review*, 16, 41-67.
- Hamel, C., Viau-Guay, A. (2019). «Using video to support teachers' reflective practice: A literature review», *Cogent Education*, 6 (1), 1673689.
- Harlin, E. M. (2014). «Watching oneself teach–long-term effects of teachers' reflections on their video-recorded teaching», *Technology, Pedagogy and Education*, 23 (4), 507-21.
- Harper, F., Nicolson, M. (2013). «Online peer observation: its value in teacher professional development, support and well-being», *International Journal for Academic Development*, 18 (3), 264-75.
- Hogston, R. (1995). «Evaluating quality nursing care through peer review and reflection: the findings of a qualitative study», *International Journal of Nursing Studies*, 32 (2), 162–72.
- Huxham, M., Scoles, J., Green, U., Purves, S., Welsh, Z., Gray, A. (2017). "Observation has set in': comparing students and peers as reviewers of teaching, Assessment, Evaluation in Higher Education, 42 (6), 887-99.
- Jones, M. (2014). «Reflective practice in the online space», in *Successful Teacher Education*, Brill Sense. pp. 153-173
- Kassner, L. D., Cassada, K. M. (2017). «Chat it up: Backchanneling to promote reflective practice among in-service teachers», *Journal of Digital Learning in Teacher Education*, 33 (4), 160-8.
- Killeavy, M., Moloney, A. (2010). Reflection in a social space: Can blogging support reflective practice for beginning teachers?. *Teaching and teacher education*, *26*(4), 1070-1076.
- Kirkwood, A., Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, media and technology, 39*(1), 6-36.
- Kleinknecht, M., Schneider, J. (2013). What do teachers think and feel when analyzing videos of themselves and other teachers teaching?. *Teaching and teacher education*, *33*, 13-23.
- Kleinknecht, M., Gröschner, A. (2016). Fostering preservice teachers' noticing with structured video feedback: Results of an online-and video-based intervention study. *Teaching and Teacher Education*, *59*, 45-56.

- Kreber, C., Cranton, A. (2000). Exploring the scholarship of teaching. *The Journal of Higher Education*, 71(4), 476-495.
- Lenkaitis, C. A. (2020). Teacher candidate reflection: Benefits of using a synchronous computer-mediated communication-based virtual exchange. *Teaching and Teacher Education, 92*.
- Macià, M., García, I. (2016). Informal online communities and networks as a source of teacher professional development: A review. *Teaching and Teacher Education*, *55*, 291-307.
- Major, L., Watson, S. (2018). Using video to support in-service teacher professional development: the state of the field, limitations and possibilities. *Technology, Pedagogy and Education*, *27*(1), 49-68.
- Mann, S., Walsh, S. (2017). *Reflective practice in English language teaching:* Research-based principles and practices. Routledge.
- McCullagh, J. F. (2012). How can video supported reflection enhance teachers' professional development?. *Cultural Studies of Science Education*, 7 (1), 137-52.
- Mezirow, J. (1991). Transformative Dimensions of Adult Learning. SF: Jossey-Bass.
- Ong, W. A., Swanto, S., Alsaqqaf, A. (2020). Engaging in reflective practice via vlogs: Experience of Malaysian ESL pre-service teachers», *Linguistics*, 9, 716-724.
- Parkes, K. A., Kajder, S. (2010). Eliciting and assessing reflective practice: A case study in Web 2.0 technologies», *International Journal of Teaching and Learning in Higher Education*, 22 (2), 218-28.
- Picci, P., Calvani, A., Bonaiuti, G. (2012). «The use of digital video annotation in teacher training: the teachers' perspectives», *Procedia-Social and Behavioral Sciences*, 69, 600-13.
- Pickering, A. M. (2006). «Learning about university teaching: Reflections on a research study investigating influences for change», *Teaching in Higher Education*, 11 (3), 319-35.
- Powell, G. (2017). «Blogging as a Form of Web 2.0 Technologies for Reflective Practice», in *Handbook on Digital Learning for K-12 Schools*, Springer, Cham, pp. 271-91.
- Prestridge, S., Tondeur, J. (2015). «Exploring elements that support teachers engagement in online professional development», *Education sciences*, 5 (3), 199-219.
- Prilop, C. N., Weber, K. E., Kleinknecht, M. (2020). «Effects of digital video-based feedback environments on pre-service teachers' feedback competence», *Computers in Human Behavior*, 102, 120-31.
- Ravenscroft, A., Schmidt, A., Cook, J., Bradley, C. (2012). «Designing social media for informal learning and knowledge maturing in the digital workplace», *Journal of Computer Assisted Learning*, 28 (3), 235-49.
- Rosaen, C. L., Lundeberg, M., Cooper, M., Fritzen, A., Terpstra, M. (2008). «Noticing noticing: How does investigation of video records change how teachers reflect on their experiences? », *Journal of teacher education*, 59 (4), 347-60.

- Rosaen, C., Lundeberg, M., Cooper, M., Fritzen, A. (2010). «Interns' use of video cases to problematize their practice: Crash, burn and (maybe) learn», *Journal of Technology and Teacher Education*, 18 (3), 459-88.
- Sadler, D. R. (2010). «Beyond feedback: Developing student capability in complex appraisal», *Assessment, Evaluation in Higher Education*, 35 (5), 535-50.
- Santagata, R., Guarino, J. (2011). Using video to teach future teachers to learn from teaching», *Zdm*, 43 (1), 133-145.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action,* New York, Basic Books.
- Sherin, M. G., Linsenmeier, K. A., van Es, E. A. (2009). «Selecting video clips to promote mathematics teachers' discussion of student thinking», *Journal of Teacher Education*, 60 (3), 213-30.
- Shortland, S. (2010). «Feedback within peer observation: Continuing professional development and unexpected consequences», *Innovations in Education and Teaching International*, 47 (3), 295-304.
- Sim, J. W. S., Hew, K. F. (2010). «The use of weblogs in higher education settings: A review of empirical research», *Educational Research Review*, 5 (2), 151-63.
- Smidt, A., Wheeler, P., Peralta, L., Bell, A. (2018). «Transformative and troublesome: reflective blogging for professional learning about university teaching», *Reflective Practice*, 19 (4), 474-89.
- Straková, Z., Cimermanová, I. (2018). «Developing Reflective Skills of Student Teachers in the Virtual Learning Environment», *Electronic Journal of e-Learning*, 16 (2), 107-21.
- Taylor, S. G. (2013). «Vlogging composition: Making content dynamic», *Hybrid Pedagogy*.
- Tenenberg, J. (2016). «Learning through observing peers in practice», *Studies in higher education*, 41 (4), 756-73.
- Tripp, T., Rich, (2012a). «Using video to analyze one's own teaching», *British Journal of Educational Technology*, 43 (4), 678-704.
- Tripp, T. R., Rich, J. (2012b). «The influence of video analysis on the process of teacher change», *Teaching and teacher education*, 28 (5), 728-39.
- Tsai, I. C. (2012). «Understanding social nature of an online community of practice for learning to teach», *Journal of Educational Technology, Society*, 15 (2), 271-85.
- Zhang, M., Lundeberg, M., Koehler, M. J., Eberhardt, J. (2011). «Understanding affordances and challenges of three types of video for teacher professional development», *Teaching and teacher education*, 27 (2), 454-62.