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RESEARCH ARTICLE

Teachers in Malta, their Professional Identity and their Experience of School Closures as a Result of the COVID-19 Pandemic

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ABSTRACT:

One of the impacts of the COVID-19 pandemic has been the way we organised teaching and learning. This case study evaluates the experience of teachers in Malta during the initial stages of school closures and the way they have been forced to adapt their practices in order to meet the needs of their learners and wider communities. Five themes which help to evaluate the re-imagining of teachers' identities are explored in this research paper: the professional expectations on teachers, the new technological skills and knowledge teachers were expected to acquire, teachers' stress, teachers' identity and sense of agency, and teachers' resilience. This study, using an analysis of desk research, provides an understanding of how the role of teachers in Malta was perceived and how their work processes were transformed. Moreover, the themes that are discussed help to bring to the fore teachers' narratives of their newly acquired practices, but also a realisation of the need for professional learning and a vision that supports teachers in similarly challenging scenarios. A number of implications which emerge from these themes, in terms of the impact on teachers' lives, careers and sense of identity, are highlighted, together with recommendations, in the Conclusion, for teachers and teacher educators.

Keywords: COVID-19, Malta, Teachers' practices, professional identity, professional learning



Introduction

The COVID-19 pandemic has brought about unprecedented actions in the way we behave and relate to people, including in the area of education and how we organise teaching and learning. As of the 13th of March until the beginning of summer recess at the end of June (2020) all schools and educational institutions from childcare centres to higher education have closed their doors in Malta because of the COVID-19 virus, affecting thousands of students and teachers. 1 Teachers and members of the teaching profession were instructed to teach their students from home after a Working Group set up by the Ministry for Education and Employment issued a number of directions. ² Consequently, teachers have been forced to adapt their practices in order to meet the needs of their learners and wider communities.

Whereas the curriculum, as set up by the schools, did not change, teachers were expected to change their instructional methods largely due to the fact that they were teaching remotely. Students had to learn how to manage their learning through digital and remote means and parents were expected to implement the tasks and instructions being sent by teachers, operating in a mixture of traditional schooling and homeschooling. This situation reflected educational scenarios in the rest of the world, whereby since March 2020 governments around the world have temporarily or partially closed schools in an attempt to curtail the spread of the COVID-19 virus.

The purpose of this paper is to explore, from the perspective of a teacher educator, the impact that this pandemic has had and is having on teachers' sense of professional identity. The research method applied is that of an in-depth case study because it helped us to understand the complexity of the experience of a group of teachers with the aim of producing context-dependent knowledge and experience and develop a nuanced view of reality which is so meaningful in understanding human behaviour. This study is based on the analysis of desk research, specifically news items published on media portals; Press Releases issued by educational entities; Letter Circulars issued by the Ministry for Education; Legal Notices issued by the health autorities; directives, policies and guidelines developed to clarify teachers' changing work processes; and posts on social media written by teachers themselves, and parents, during the pandemic and schools' shutdown (March to June 2020). A number of themes have been identified, namely: the professional expectations on teachers,

the new technological skills and knowledge teachers were expected to acquire, teachers' stress and teachers' identity and sense of agency, and teachers' resilience. All these themes emerge as salient points of the experiences of teachers in Malta during school closures between March and June 2020, and identify episodes of uncertainty, the importance of relationships and the need for resilience. These themes define the general narrative of teachers having to deal with a complex, sudden situation and with novel elements of teaching practices.

framework for understanding teacher professional identity and the complex subjectivities that are formed and re-formed constantly over the course of a teacher's career, is used to understand these themes that I encountered as a teacher educator. Teachers' identities are mediated by a complex interplay of personal, professional and political dimensions characterising teachers' lives, ³ a perspective elaborated upon by Dewey 4 when he speaks of the reflexive dimensions of teachers' work, and Nias 5 who speaks of the complexities of teachers' work and identity. My evaluation of teachers' experiences during the initial stages of the pandemic combines with Butler's 6 explanation of how identities are formed. Teachers in Malta created identifications re-created and themselves throughout the various and everchanging health protocols and work expectations they had to deal with.

Professional expectations on teachers

The many changes in society necessitated by COVID-19, including those in education, are likely to be cognitively and emotionally demanding for teachers. All of a sudden, teachers have entered into a virtual world of teaching after a country-wide semi-lockdown was announced. The situation was extraordinary and few of them had any clue how to continue the teaching—learning process. ⁷ Engaging in remote teaching, whatever which form this has taken, has clearly been one of the most prominent changes required of teachers. Pupils' varying levels of access to online technology ⁷ and their willingness to engage ⁸ has exacerbated the challenge.

Initially, teachers started with sending powerpoint presentations and YouTube links to make the process fruitful, but not all students were signing in and engaging with their teachers and peers. 9,10 There was also a lot of confusion regarding the method of teaching to be adopted, whether teachers should teach synchrously or

asynchronously; whether they should make video lectures with recorded narration or podcasts, for example; a diversity of platforms like Zoom, Microsoft Teams and Google Classrooms was also being utilised, sometimes within the same school with the same cohort of students.

Neither the parents nor the teachers were sufficiently prepared to master the multiple challenges these changes imposed on them. 11 Parents had to participate in the remote process of online education of their children and were sometimes sent very detailed planification and daily schedules to follow with their children. On the other hand, teachers struggled with keeping their relationships with their students and missed advice and support from their schools. 12 It is being presumed that the gap in students' achievement between families of high and low socioeconomic status will be widened due to differences in material and educational resources, living space, or availability of time, when children were taught at home, 13,14

During physical school closures, home resources and parental involvement in school work proved to be of great importance for learning success. However, these benefits are not available equally to all children. Moreover, those children who lack resources and support were on average already lower performers before the pandemic. They are likely to have lost further ground during the COVID-19 school closures, increasing, as a result, overall European educational inqualities. 15 These inexisting inequalities which have been further increased during school closures have been observed also in Malta, although the then Minister for Education Hon. Justyne Caruana assured that teachers rose to the occasion and made that extra effort to make sure that their students could continue with their learning, studies and teaching. ¹⁶ Furthermore, in Malta school abseneeism has been waived during the pandemic, giving rise to concerns about children whose parents are not involved in their education and who may be missing school for less than legitimate reasons. 17 In fact, overcoming these growing inequalities required of teachers to demonstrate extraordinary resilience, skills and a redefined understanding of teachers' professionalism and professional identity. Besides being expected to have the technical proficiency to cope with the challenges and consequences of school closures, teachers were also required to be sensitive to local values and establish partnerships with parents and communities to ensure inclusion, repair learning loss and reverse socioemotional damage to child development brought about by the pandemic. ¹⁸ In such a scenario, it is difficult for an individual teacher to demonstrate this level of professionalism without the opportunity to collaborate and draw on systems of mutual support. This level of professionalism also requires teachers to possess personal agency, that is, the mindset and dispositions to respond adequately and in time to changing conditions in order to serve the needs of students appropriately. ¹⁸

The notion of expectations bestowed upon teachers latches onto the theoretical understanding of how teachers' work and professional practice is constituted across and out of three key domains of their personal experience, professional context and the external political environment. ³ The latter domain in particular, the external political environment, was significantly highlighted, and experienced by teachers in Malta, through the media and how different members of society including parents, employers and employees constructed discourses, attitudes and understandings around the teaching profession and about the way teachers' work should take shape during school closures. The development of government policy relating to school protocols and the ways in which political ideology impacted upon teachers' work, including the insistence by employers for school reopenings, influenced the way teachers perceive themselves and their work.

Apart from the expectations listed above which link to teachers' professionalism, one needs to keep in mind that many teachers may have had competing responsibilities, such as home schooling their own children, caring for vulnerable family members, and/or managing their own mental health. All these demands were happening simultaneous to the demand of teaching their pupils remotely and fulfilling the other non-teaching elements of their job, including administrative work.

New technological skills and knowledge

One of the questions that we need to ask is what are the factors that have contributed to difficulties of teachers to ensure continuation of instruction, when most teaching was conducted from home. While schools and teachers in Malta became increasingly dependent on digital tools for both teaching and communication processes, yet teaching remotely still proved to be a challenge, presumably because they were required to use these tools in a different manner and because the available tools (both teachers' and students') did not match the way teachers needed to make effective instruction. Moreover, whereas for some teachers, using the



internet, communicating via social-media channels or using video-conference tools did not pose a real problem, other teachers have experienced problems in remote teaching. ¹⁹

Their experience also depended on their (technical) skills. Using digital tools and technology in Maltese classrooms is an expected mode of instruction. Teachers in Malta are expected to use technology in the classroom and to possess knowledge that provides an appropriate environment with appropriate teaching strategies and techniques to facilitate and support students' learning. This expectation is bestowed on teachers in other classrooms in other countries. Successful teachers in the 21st century are those who can provide knowledge using appropriate teaching and technology strategies in the classroom. ²⁰ Teachers are expected to master technology and to use it in order to plan and implement learning activities in class. 21-23 As Koehler and Mishra 24 argue, it is essential for teachers to have technological knowledge, pedagogical knowledge, and content knowledge to be sufficient. The knowledge to effectively and efficiently use technology to improve instruction, from planning to evaluating the teaching process, is the kind of teacher knowledge being expected. ²⁵ Rather than just adding technology to the content area, teachers are being expected to know what, how and why technology is used, and how to integrate it in the classroom. ²⁶⁻²⁷ It is hence important for teacher educators to explore how teachers use technology and how they perceive technology's importance.

Research from Malta on how teachers experienced online teaching and learning during school closures indicate that teachers were overwhelmed by the steep learning curve that they had to undergo in order to learn how to teach remotely. Some teachers report that they did not have enough opportunities for training and complained that they should have been better prepared, through training, while schools were still open. 28 This and other research 7 demonstrates that although the online teaching experience allows teachers to acquire new skills, teaching in the classroom may still be widely preferred. The lack of direct interaction with students is the least appreciated element about online teaching. ²⁹ This leads to an important acknowledgement: it is not enough for education authorities to provide new technological tools for teachers; teachers also need to know how to use them adequately to meet their learners' various needs. Lack of time and support can be a major barrier that limits teachers' ability to use and

integrate technology into classrooms. ³⁰ If teachers feel that they have to use technology for which they do not feel competent enough, they will experience stress. ³¹ Technology can only be a useful tool in schools if it increases learning opportunities and learning actualization is significant. ³² Therefore, it becomes more important for teacher educators to ask when and how technology will be used by teachers and the extent to which teachers are provided with professional learning opportunities to be well equipped with the arising needs in their practices.

Teachers' stress

It is undeniable that the teaching profession is one of the most stressful professions. ³³ Teacher stress is a prevalent topic of discussion among educational practitioners, policymakers and researchers. This topic is widely researched also due to the understanding that prolonged experiences of stress can lead to teacher burnout, which in turn is associated with teachers having lower confidence in their abilities and an intention to leave their job. Given that teachers have undergone major changes in the nature of their day-to-day practices during COVID-19 ³⁴ it is important to understand how these new stressors have impact on teachers' experiences and their sense of competence.

Indeed, one of the major adverse consequences of school closures has been confusion and stress for teachers, 35 linked to the abruptness of the closures, the uncertainty about how long they will last, and low familiarity with remote education. The way teachers responded to the pandemic, together with the added expectations they were challenged with and varying pressures from students, parents, education authorities and teachers' unions as the situation kept evolving, may have created new stressors for teachers to deal with. Pre-Covid evidence suggests that online teaching and learning are not necessarily easier or more challenging than conventional teaching and learning. 36-38 Yet, the sudden shift to online teaching may have led to some dissatisfaction in some teachers. Before the pandemic, teachers in Malta were already burdened with excessive administrative obligations, lack of support structures to address classroom management issues and a decreasing sense of fulfillment. 39-41 During the pandemic, this stress has been amplified because teachers are contending with the strains of the pandemic itself, with health concerns, with changes to their teaching practices and with managing relationships with students and parents while teaching remotely.



Moreover, not all teachers react the same in the face of new work challenges. While all of them have been expected to develop an amount of new technological knowledge and skills, some teachers may have perceived the situation as positive, whereas others considered it as negative and stressful, or irrelevant. ⁴² In times of stress, individuals appraise and interpret the same stressors in different ways, and also adopt different coping strategies. There may have been cases, thus, where teachers in Malta may have felt inadequate in dealing with the new demands that the pandemic brought with it, a situation which might in turn result in the experience of stress and lower well-being. ⁴³

Teachers' identity and sense of agency

Teachers have been removed from their usual work environments and asked to work in new ways. This inevitably raises the question of what it means to be a teacher during the time of the pandemic. Reflecting on the way teachers reacted, and perceived themselves, during this time, can help us elicit important components of the profession and gain new insights into teacher identity.

Teacher identity is a multifaceted construct but there is no clear consensus on its definition or its theoretical basis. 44 From an identity theory perspective, teacher identity is seen as something that one develops and then preserves as part of role identity. 45-46 According to Hanna et al. 47 there are six components of teacher identity measures, namely: self-image (view of self as a teacher), motivation (reason for teaching), commitment (dedication to the profession), self-efficacy (ability to carry out activities as a teacher), task perception (understanding the task of a teacher), and job satisfaction (satisfaction level with the teaching job). These components explain how some teachers in Malta took initiatives in their practices to deal with the pedagogical and day-to-day challenges brought about by the pandemic, while some others felt they had to be instructed on ever step they had to make.

Further research is necessary to help us understand the psychological factors that account for the differences in Maltese teachers' experiences of remote teaching, and their actual teaching behaviour. Questions arise as to why and how some teachers maintained daily contact with their pupils and developed supportive relationships with them and their parents, while others made contact with their students and parents only once a week, or very sporadically. It is also necessary to investigate why

some teachers mastered digital technologies while others experienced discomfort.

One of the reasons for this discrepancy in behaviour may be due to teachers' agency, or lack of it, in educational contexts in which they operate. Teachers' mindsets and behaviours, as well as how much they are disposed to change and ready to engage in change processes have been well researched. The social cognitive theory (this originally started as social learning theory by Albert Bandura 48-50) emphasises how human agency evolves and that people can exercise some influence over what they do. People are agents of their own behaviour and can be proactive, organise themselves, regulate their actions, reflect on their behaviour and control their own goals and behaviours, albeit these are also influenced by conditions in the environment. 51 Teachers' agency results from an interplay of individual efforts, available resources and contextual and structural factors. Teachers are conceived as acting according to their environment, rather than simply in their environment. Yet, although the social context in which they work constrains their work, they can influence their environment, depending on how they interpret these contextual constrains boundaries. 18

The conceptualisation of teacher agency does not only refer to individual capacity, but also to work-related activities and behaviours that teachers engage in, and how these shape their professional identity. Teachers practise professional agency when they influence, make choices and take stances in ways that affect their work and their professional identity. ⁵² Professional agency in schools can be observed when teachers, alone or in groups, in a given situation make decisions, take initiatives, act proactively and deliberately strive and function to reach a certain end. ⁵³ This implies that teacher agency is about individual teachers and groups of teachers who are interacting with and within specific contexts.

How has the pandemic impacted on teachers' capacities for agency? What were the knowledge, skills and self-efficacy needed of them and what kind of environments had to be established that allowed, or prevented, the enactment of their agency? The COVID-19 scenario required the enactment of both individual capacities, in terms of confidence and competence, and the collective agency together with the ability of the systems surrounding teachers to facilitate and support this collective capacity. One important consideration is



the way the Malta Union of Teachers (MUT), the first and largest teachers' professional body in Malta has dominated the space where teachers make decisions about their own practices.

The MUT has issued clear directions to its members from the onset of school closures and proposed that a taskforce consisting of the major stakeholders in the education field is set up to issue statements on how educators should proceed. As Marco Bonnici, the MUT's President states: "The main point, on which the MUT insisted, is that stakeholders demonstrate full faith in the professionalism, dedication and commitment of educators towards their learners." 54 Teachers were provided with many support initiatives along with a centralised resource platform. This taskforce helped to develop a syatem which provided direction to educators, education personnel, management and parents. Whether this kind of centralised support helped to elevate professional agency, or discourage individual teachers from taking initiative and respond, promptly and personally, to their pupils' needs, is debatable. It is indeed contradictory that while the MUT commends individual educators who have taken the initiative to prepare, share and communicate educational material with their pupils, it advices against school attempts to regulate online learning in their own manner, and instructs its members to report such cases and refrain from engaging in such actions as directed by the school. 55 A number of industrial disputes with the government, and a teachers' strike, have been registered since March 13th 2020, as a result of disagreement with the educational authorities on how online teaching and learning should be managed, including what kind of digital tools and platforms are teachers to use, whether they are to record their lessons, and the amount of time they should spend interacting remotely with students who cannot attend schools physically.

A second and related consideration is the home-school relations, which is a relevant condition to teacher agency. In the COVID-19 scenario, these relations extend beyond the school gate and include relations between teachers and parents. Parents in Malta have been very vocal during the pandemic and put pressure on teachers and education authorities regarding the way online learning should be conducted, together with a request to retain online learning for vulnerable students when schools reopen. ⁵⁶ They urge educators to collaborate with them for the wellbeing of their children: "If the parent and teacher or LSE cooperate, the parent will be

involved more in the education of their children and can monitor better their progress." ⁵⁶

The teacher–parent partnerships have been particularly relevant when schools are closed as teachers have to rely on parents to support learners in accessing and participating in homeschooling and online learning. Children and their parents from early childhood settings and primary schools needed the most support, ⁵⁷ but there are also students with special educational needs who missed out on the structured learning environments, the learning supportive social exhange with peers and teachers, and the professional, differentiated feedback to advances in learning that are essential for pupils with learning disabilities.

Strong educational partnerships between teachers, parents and the local community contribute positively to the development of students. This necessitates coordination, two-way communication and knowledge sharing, as well as interventions that support parental involvement particularly of parents who are either not significantly involved in their children's education or not involved at all. ⁵⁸⁻⁶⁰

Teachers' resilience

The experiences which are mentioned here show that the challenges that teachers faced during the pandemic, do not just relate to the lack of competences needed to teach online, or to the lack of available digital tools. While it goes without saying that teachers should be equipped by their schools with the technological hardware and software that is necessary for them to teach online, together with the training on how to use them, more should be done to bolster teachers' sense of resilience. We have been made aware that teachers experienced increased levels of stress during schools' shutdown, so coping competencies should also be trained by professional trainers. Moreover, it is important to facilitate research which can examine psychological factors that contribute to teachers' willingness to cope in such adverse situations, to engage in new learning opportunities, and to seek support. Internal factors like motivation, attitudes, knowledge and self-efficacy 61 may be relevant in our quest to understand how teachers cope in a variety of ways.

These experiences also showed that teachers and school leaders need a number of new skills and it is crucial that they learn how to engage productively in remote learning, as well as in blended and hybrid learning models. These new roles could apply to novice and experienced teachers as well as student-

teachers, so teacher education programmes can start planning their curricula around both the challenges and the emerging opportunities presented by COVID-19. This moment of disruption has created the opportunity for rethinking and reinventing preparation, as well as schooling itself.

Conclusion

As the European Commission points out, teachers are a vital driving force for the learning process of students and play the most important role in making education a fruitful experience. 63 Teachers are the social fabric that holds the educational system together, and it is therefore important to protect their ability and capacity to fulfil their role. 64 This article tries to document teachers' experiences during the initial period of school closures in Malta, including the challenges that teachers have faced and the lessons that they have learned at this stage of the pandemic. The outbreak of the COVID-19 virus and the rapid transition from face-to-face to remote learning have underlined how important teachers are in providing all pupils with equal access to quality learning.

The future remains unclear at the time of writing, but it will undoubtedly require teachers to be flexible, resilient, collaborate with their peers and address the levels of uncertainty and stress which will eventually emerge. The 2020-21 scholastic year in Malta was a mix of online, hybrid, and in-person instruction, depending on the level of teaching and also the health condition of some teachers who were unable to staff in-person classrooms for health reasons. Schools have adjusted to social distancing arrangements, and policymakers and school leaders are, as we speak, considering new teaching roles and arrangements.

It is nonetheless the obligation of education authorities to communicate clearly with teachers regarding future plans, and to consult with them about the best ways to support their learners, particularly the most vulnerable. Teachers need to be well supported in meeting the challenges that they face, and well-trained educators need to be recruited into the profession. ⁵¹ It is also necessary of teacher educators to listen to teachers' stories and to gain new insights into what it means to be a teacher and how teachers can be supported to work in fulfilling ways and be agents of their own practices and choices.



References

- 1. Laws of Malta. Legal Notice 41 of 2020. Public Health Act (Cap. 465). Closure of Schools Order, 2020.
- 2. Ministry for Education and Employment. Letter Circular DCLE 2020: Online teaching during the third term 2019/20. Ministry for Education and Employment; 2020.
- 3. Mockler, N. Beyond 'what works': Understanding teacher identity as a practical and political tool. *Teachers and Teaching*. 2011;17(5):517-528.
- 4. Dewey, J. My pedagogic creed. The School Journal. 1897;LIV(3):77–80.
- 5. Nias, J. Primary teachers talking: A study of teaching as work. Routledge; 1989.
- 6. Butler, J. Bodies that matter: On the discursive limits of 'sex'. Routledge; 1993.
- 7. Busuttil, L, Farrugia, RS. Teachers' response to the sudden shift of online learning during COVID-19 pandemic: Implications for policy and practice. Malta Review of Education Research. 2020;14(2):211-241.
- 8. Borup, J, Graham, CR, West, RE, Archambault, L, Spring, KJ. Academic communities of engagement: An expansive lens for examining support structures in blended and online learning. Educational Technology Research and Development. 2020;68:807–832.
- 9. Attard Tonna, M. There's no place like school ... *Malta Today*. 2020.
- https://www.maltatoday.com.mt/news/interview/101499/theresnoplacelikeschoolmichelleattardtonna#.YHNJ8SORppQ. Accessed May 23, 2023.
- 10. Deidun, A. In support of parents and class teachers. *Times of Malta* 2020.
- https://timesofmalta.com/articles/view/insupport-of-parents-and-class-teachers-alandeidun.810021. Accessed May 23, 2023.
- 11. Formosinho, J. From schoolification of children to schoolification of parents?: Educational policies in COVID times. European Early Childhood Education Research Journal. 2021;29(1):141-52.
- 12. Sangeeta, Tandon, U. Factors influencing adoption of online teaching by school teachers: A study during COVID-19 pandemic. *Journal of Public Affairs*. 2020;21(4):e2503.
- 13. Anger, C., Plünnecke, A. Homeschooling und Bildungsgerechtigkeit. *IW-Kurzbericht*. 2020; 44.
- 14. Bol, T. (2020). Inequality in homeschooling during the Corona crisis in the Netherlands. First results from the LISS Panel. (Working Paper). Accessed May 23, 2023.

https://doi.org/10.31235/osf.io/hf32q.

15. European Commission. Educational inequalities in Europe and physical school closures during Covid-

- 19. Science for Policy Briefs: Fairness Policy Brief Series 04/2020.
- Brussels, Belgium: European Union. 2020. Accessed May 23, 2023,
- https://ec.europa.eu/jrc/sites/jrcsh/files/fairness pb2020 wave04 covid education jrc i1 19jun2 020.pdf.
- 16. Caruana, J. COVID a learning curve. The Malta Independent. 2021. https://www.independent.com.mt/articles/2021-03-07/newspaper-opinions/COVID-a-learning-curve-6736231548. Accessed May 23, 2023.
- 17. Times of Malta. Failures in education risk creating a 'lost generation' of students Repubblika. *Times of Malta*. 2020.
- https://timesofmalta.com/articles/view/failuresin-education-risk-creating-a-lost-generation-ofstudents.830185. Accessed May 23, 2023.
- 18. Ehren, M, Madrid, R, Romiti, S, Armstrong, P, Fisher, P, McWhorter, D. Teaching in the COVID-19 era: Understanding the opportunities and barriers for teacher agency. *Perspectives in Education*. 2021;39(1):61-76.
- 19. Quezada, RL, Talbot, C., Quezada-Parker, KB. From bricks and mortar to remote teaching: a teacher education programmes's response to Covid 19. *Journal of Education for Teaching*. 2020;46(4):472-483.
- 20. Lin, T-C, Tsai, C-C, Chai, CS, Lee, MH. Identifying science teachers' perceptions of technological pedagogical and content knowledge (TPACK). *Journal of Science Education and Technology*. 2012;22(3):325–336.
- 21. OECD. Inspired by technology, driven by pedagogy: A systemic approach to technology-based school innovations. OECD Publishing; 2010.
- 22. UNESCO. ICT competency framework for teachers Version 2.0. UNESCO; 2011.
- 23. Wake, D, Whittingham, J. Teacher candidates' perceptions of technology-supported literacy practices. Contemporary Issues in Technology and Teacher Education. 2013;13(3):175–206.
- 24. Koehler, MJ, Mishra, P. What is technological pedagogical content knowledge? Contemporary Issues in Technology and Teacher Education (CITE Journal). 2009;9(1):60-70.
- 25. Ozudogru, M, Ozudogru, F. Technological pedagogical content knowledge of Mathematics teachers and the effect of demographic variables. Contemporary Educational Technology. 2019;10(1):1-24.
- 26. Gu, X, Zhu, Y, & Guo, X. Meeting the "digital natives": Understanding the acceptance of technology in classrooms. *Journal of Educational Technology & Society*. 2013;16(1):392–402.



- 27. Orlando, J, Attard, C. Digital natives come of age: the reality of today's early career teachers using mobile devices to teach mathematics. *Mathematics Education Research Journal*. 2016;28(1):107–121.
- 28. Said Pace, D. The use of Formative Assessment (FA) in online teaching and learning during the COVID-19 compulsory education school closure: The Maltese experience. Malta Review of Education Research. 2020;14(2):243-271.
- 29. Truzoli, R, Pirola, V, Conte, S. The impact of risk and protective factors on online teaching experience in high school Italian teachers during the COVID-19 pandemic. *Journal of Computer Assisted Learning*. 2021;1-13.
- 30. Pittman, T, Gaines, T. Technology integration in third, fourth and fifth grade classrooms in a Florida school district. Educational Technology Research and Development. 2015;63:539-554.
- 31. Al-Fudail, M, Mellar, H. Investigating teacher stress when using technology. Computer & Education. 2008;51:1103-1110.
- 32. Makawawa, JC, Mustadi, A, Septriwanto, JV, Sampouw, F, Najoan, RAO. Primary school teachers perception of technological pedagogical content knowledge in online learning due to Covid 19. *Journal Prima Edukasia*. 2021;9(1):85-95.
- 33. Johnson, S, Cooper, C, Cartwright, S, Donald, I, Taylor, P, Millet, C. The experience of work-related stress across occupations. *Journal of Managerial Psychology*. 2005;20(2):178–187.
- 34. Reimers, FM, Schleicher, A. Schooling disrupted, schooling rethought: How the Covid-19 pandemic is changing education. OECD. 2020. Accessed May 23, 2023. https://read.oecd-ilibrary.org/view/?ref=133133390-
- 1rtuknc0hi&title=Schooling-disrupted-schooling-rethought-How-the-Covid-19-pandemic-is-changing-education
- 35. UNESCO. Adverse consequences of school closures. UNESCO. 2020. Accessed May 23, 2023. https://en.unesco.org/covid19/educationresponse/consequences.
- 36. Li, Q, Akins, M. Sixteen myths about online teaching and learning in higher education: Don't believe everything you hear. *TechTrends*. 2005;49(4):51–60.
- 37. Martínez-Monteagudo, MC, Inglés, CJ, Granados, L, Aparisi, D, García-Fernández, JM. Trait emotional intelligence profiles, burnout, anxiety, depression, and stress in secondary education teachers. *Personality and Individual Differences*. 2019;142:53–61.
- 38. McQuiggan, CA. Faculty development for online teaching as a catalyst for change. *Journal of*

- Asynchronous Learning Networks. 2012;16(2):27–61.
- 39. Borg, MG, Boyle, G, Falzon, J, Baglioni, A. A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology*. 1995;65(1):49-67.
- 40. Billehøj, H. Report on the ETUCE Survey on teachers' work-related stress. European Trade Union Committee for Education, Brussels. 2007.
- https://www.csee-etuce.org/images/attachments/ReportWRSEN.pdf . Accessed may 23, 2023.
- 41. Caruana, S, & Borg, M. Stress-related factors affecting teachers of foreign languages in Maltese state and church schools. *Symposia Melitensia*. 2020:87-99.
- 42. An, Y. The effects of an online professional development course on teachers' perceptions, attitudes, self-efficacy, and behavioral intentions regarding digital game-based learning. Educational Technology Research and Development. 2018;66(6): 1505-527.
- 43. Skaalvik, EM, Skaalvik, S. Job demands and job resources as predictors of teachers' motivation and well-being. Social Psychology of Education. 2018;21:1251-1275.
- 44. Beauchamp, C, Thomas, L. Understanding teacher identity: An overview of issues in the literature and implications for teacher education. Cambridge Journal of Education. 2009;39: 175–189
- 45. Brenner, PS, Serpe, RT, Stryker, S. Role-specific self-efficacy as precedent and product of the identity model. *Sociological Perspectives*. 2018; 61:57–80.
- 46. Burke, PJ, Stets, JE. *Identity theory*. Oxford University Press; 2009.
- 47. Hanna, F, Oostdam, R, Severiens, SE, Zijlstra, BJH. Domains of teacher identity: A review of quantitative measurement instruments. *Educational Research Review*. 2019; 27:15–27.
- 48. Bandura, A. Social cognitive theory of moral thought and action. In: Kurtines WM, Gewirtz JL,eds. Handbook of moral behavior and development. Erlbaum; 1991:45–103.
- 49. Bandura, A. Social cognitive theory: An agentic perspective. *Annual Review of Psychology*. 2001;52(1):1–26.
- 50. Bandura, A. Guide for constructing self-efficacy scales. Self-Efficacy Beliefs of Adolescents. 2006;5(1):307–337.
- 51. Schunk, DH, Meece, JL. Self-efficacy development in adolescence. Self-Efficacy Beliefs of Adolescents. 2006;5:71–96.

- 52. Eteläpelto, A, Vähäsantanen, K, Hökkä, P, Paloniemi, S. What is agency? Conceptualizing professional agency at work. *Educational Research Review*. 2013;10:45–65.
- 53. Lmants, J, Van der Wal, M. A model of teacher agency in professional development and school reform. *Journal of Curriculum Studies*. 2020;52(1):1–14.
- 54. Bonnici, M. In Malta MUT works with government and social partners to guide education systems through crisis. European Trade Union Committee for Education. 2020. https://www.csee-etuce.org/en/policy-issues/covid-19/latest-updates/3780-in-malta-mut-works-with-government-and-social-partners-to-guide-the-education-system-through-covid-19-crisis. Accessed May 23, 2023.
- 55. Malta Union of Teachers. Press Release: Update for educators on current practices from home. 2020. Accessed May 23, 2023.

https://mut.org.mt/update-for-educators-oncurrent-practices-from-home/.

56. Calleja, L. Parents anxious about COVID-19 still want online schooling as option. *Malta Today*. 2020.

https://www.maltatoday.com.mt/news/national/1 04462/parentsanxiousoncovid19stillwantonlinesch oolingasoption#.YHPiSy0RppQ. Accessed May 23, 2023.

57. Leopoldina-Stellungnahmen zur Coronavirus-Pandemie. 2020. Accessed May 23, 2023, https://www.leopoldina.org/publikationen/detail

- ansicht/publication/leopoldina-stellungnahmenzur-coronavirus-pandemie-2020/.
- 58. Goodall, J. Narrowing the achievement gap: Parental engagement with children's learning. Routledge; 2017.
- 59. Epstein, J. School, family and community partnerships. Preparing educators and improving schools. Routledge; 2018.
- 60. Menheere, A, Hooge, EH. Parental involvement in children's education: A review study about the effect of parental involvement on children's school education with a focus on the position of illiterate parents. *Journal of European Teacher Education Network*. 2010;6:144–157.
- 61. European Commission/EACEA/Eurydice. Teachers in Europe: Careers, Development and Wellbeing. Eurydice report. Publications Office of the European Union; 2021.
- 62. Kim, L, Asbury, K. 'Like a rug had been pulled from under you': The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. The British Journal of Educational Psychology. 2020;90(4):1062-1083.
- 63. Ottenbreit-Leftwich, A, Liao, JY-C, Sadik, O, Ertmer, P. Evolution of teachers' technology integration knowledge, beliefs, and practices: How can we support beginning teachers use of technology? *Journal of Research on Technology in Education*. 2018;50:282-304.
- 64. Darling-Hammond, L, Hyler, ME. Preparing educators for the time of COVID ... and beyond. European Journal of Teacher Education. 2020;43(4):457-465.