sustainability

MDPI

Case Report

Enacting Remote and Flexible Learning Placements during a Global Pandemic—A Case Report

Siobhan O'Brien

School of Education, La Trobe University, Melbourne 3083, Australia; siobhan.obrien@latrobe.edu.au

Abstract: The global pandemic significantly affected teacher training programs, specifically professional experience in schools. The past two years of teacher education have necessitated the innovation and adaption of traditional programs to ensure pre-service teachers' preparation and readiness to enter schools as graduates in Australia. This case report explores the creation and implementation of three innovations that were used to support pre-service teachers who undertook a remote and flexible learning placement due to school closures. The report presents the process implemented to best support the pre-service teachers and school mentors to deal with the disruption to professional experience caused.

Keywords: teacher training; teacher education; teacher preparation; remote and flexible learning placement; professional experience; classroom simulation; social media; wellbeing

check for updates

Citation: O'Brien, S. Enacting Remote and Flexible Learning Placements during a Global Pandemic—A Case Report. *Sustainability* **2023**, *15*, 8049. https://doi.org/10.3390/su15108049

Academic Editors: Georgina Barton and Susanne Garvis

Received: 29 January 2023
Revised: 26 April 2023
Accepted: 2 May 2023
Published: 15 May 2023

Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

In Australia, pre-service teachers (PSTs) undertake professional experience placements in schools as a requirement of Initial Teacher Education (ITE) program accreditation [1]. Due to COVID-19 and school closures throughout the lockdowns in Victoria, Australia, it was not possible to conduct traditional school-based face-to-face placements. In light of this, the Victorian Council of Deans in Education (VCDE), in collaboration with the Victorian Department of Education and the Victorian Institute of Teaching (VIT), developed a strategy to lessen the impact of COVID-19 on graduating teachers. A series of key principles and remote and flexible learning placements were devised by a VCDE working group and agreed to by teacher education providers across Victoria. The Department of Education Victoria then directed schools to manage and commit to remote and flexible learning placements as a part of school priorities to ensure the future workforce plan [2,3].

From a university perspective, this case report reveals insights into the development and implementation of 'sustainable practices' that were designed to support pre-service teachers' enactment of remote and flexible learning placements. Using the Education for Sustainability (EfS) theoretical framework [4], the five phases were applied to analyse our collective thinking and understanding of sustainable pedagogical practice, see Table 2. For this paper, the concept of sustainability for education is derived from the United Nations 2030 goals for education, which strive for all learners to acquire the knowledge and skills needed to promote "global citizenship and contribute to sustainable development" [5].

From an education sustainability standpoint, this case report will explore the required pivots that occurred, which include the implementation of three innovations aiming to support the preparedness and progress of pre-service teachers. These innovations are as follows. (1) The use of Mursion, a virtual simulation classroom. This enabled the facilitation and opportunity for pre-service teachers to practice their teaching, explore new strategies and find their 'teacher' voice when they could not access the real-world classroom during lockdowns [6]. (2) The integration of social media. This involved the creation of Instagram professional accounts and offered a way for pre-service teachers, mentors and lecturers to connect and share experiences of becoming a teacher during a pandemic via the hashtag

#swinprofexp. (3) The establishment of an online community, where belonging and voice acted as integrated aspects, critical in supporting teacher identity and wellbeing. This was enacted through regular scheduled drop-in sessions which sought to support pre-service teachers' wellbeing and their ability to navigate this unprecedented time. Other strategies included the modification of lesson plans to support the remote classroom and the reflective portfolio assessment.

2. Literature

This short review of the literature has both an Australian and international focus and sets the foundation for this case report. The research is focused on pre-service teachers' experience of remote and flexible learning placements in primary school settings during the COVID-19 pandemic.

In Australia, schools adapted teaching programs for remote and flexible learning to a combination of self-study, recorded, and live lessons [7]. To support student learning from home, the curriculum was delivered using explicit instruction, feedback, and exemplars. Collaboration was achieved online via daily catch ups. Some schools prepared hard copies of set work for disadvantaged and rural populations or to cater for families who did not have internet access or a device. Challenges within the remote and flexible context included irregular attendance. Pre-service teachers were not always able to visibly 'see' their students during live sessions due to their video cameras being switched off [8].

In Portugal, the pre-service teacher experience of learning to teach remotely was dependent on context [9]. They generally interacted with the students via email and interactive technologies used for online teaching. It was found that because mentor teachers were also adapting to the new context, their availability to support PSTs was lessened.

In Hong Kong, pre-service teachers were capable of integrating technology to conduct online classes and activities [10]. They consulted with their mentors using messaging apps. The PSTs noted benefits with auto-grading to efficiently track student progress. However, they also found it difficult to converse with the students during live sessions as the students lacked the confidence to speak up and ask questions especially, when parents were present in the home.

In Malaysia, pre-service teachers felt their online teaching practicum was a unique experience that would inform their future career [11]. However, they also struggled with technological integration due to little experience and expertise in utilising technology. Some PSTs found that the students had difficulty with the prepared tasks because they lacked the skills to integrate online teaching and learning pedagogies. Due to the context, pre-service teachers also noted a lack of support and communication with their M = mentor teacher.

An American study [12] investigated the use of virtual classroom simulations to prepare PSTs for classroom teaching throughout the COVID-19 pandemic. The findings show that Mursion simulations provided PSTs with a safe, non-judgemental space to practice their teaching. Reviewing and appraising the recording of the simulated teaching experience acted as a form of reflective practice, affording the PSTs the opportunity to evaluate their practice and identify areas of growth. With regard to the other innovations, no papers reported on social media use as a wellbeing strategy or a specific wellbeing curriculum to support pre-service teachers during the remote flexible placement.

3. Method

For this case report, a case study is utilised as an established qualitative approach that holds its own as a well-known and accepted framework in various research fields [13,14]. A "case" can be defined as a single, in-depth investigation [13]. As Patton [14,15] points out, the fundamental aspects of a case study approach is to define a process that looks to connect the pieces of a puzzle together and to elicit how we make sense of things. In this case report, personal narrative is used as a form of reflective practice that looks to make meaning of the lived experience. It also seeks to highlight the significance of the events and scenarios described [16].

The case report is structured around the following questions:

What strategies were implemented to best support your students?
What processes were implemented to deal with the disruption of professional experience?
How were programs changed to embed more learning about wellbeing and resilience?

The responses to the above are drawn from a unit of study that is a first primary school placement. With 70 PSTs enrolled in Semester 2 of 2020 and 90 enrolled in Semester 1 and 2 of 2021, the on-campus unit of study is designed to support PSTs to develop their capabilities as a teacher in the lower primary context when undertaking 21 days of professional experience under the supervision of a school-based teacher mentor. The PSTs are expected to involve themselves in the life of the school and undertake one-to-one and small group work before taking responsibility for a full class. The PSTs demonstrate their competence against the Australian Professional Standards for Teachers (APST).

4. Data Collection and Analysis

In this study, the "case" is a single, in-depth investigation of a unit of study that not only moved from F2F to remote learning during the pandemic, but also encountered the enactment of remote flexible learning placements. The data collected included the unit coordinator's written self-reflective journal entries that acted as an autoethnography. The reflection and use of the question prompts guided the framing of the lived experience, both describing and critiquing the practices and experiences of the author [17]. Reflective practice as a research technique calls for the critical reflection of experiences and actions, which engages a process of continuous learning [18,19].

The following phases of the EfS theoretical framework [5] were applied to translate the approaches taken to support the PSTs undertaking a remote flexible learning placement:

Phase 1: Translation of EfS practice;
Phase 2: Teacher educator focus;
Phase 3: Pedagogies;
Phase 4: Taking action;
Phase 5: EfS in practice and evaluation.

4.1. The Case: The Remote and Flexible Learning Placement

To manage the professional placements during this time, Swinburne University colleagues including university academics, the professional experience office manager, and the Swinburne online program leaders collaborated to establish a clear and consistent approach for the remote and flexible learning placements. The role of the mentor in the school setting was considered crucial to both the University and the PSTs in facilitating and supporting this mode of professional experience. A school and mentor remote and flexible learning placement guide was prepared and made available to schools. This document provided context about the way Swinburne University planned to manage the revised placement model.

The Swinburne University roles and expectations for the remote and flexible learning placement:

Schools will:

- allocate each PST to a mentor for the remote and flexible learning placement, who will engage in regular planning and shared reflection with the PST.
- meet all expectations for the mentoring of PSTs—including that no PST is to be unsupervised with a student/group of students and that all interactions between PSTs and students via phone/video/chat conferencing on any online platform must be actively supervised by the VIT registered mentor.
- provide PSTs with access to communication, learning platforms, or other modes of interaction between teachers and students.
- note that there is no focus on allocated teaching 'hours' to represent placement days. This reflects how teachers are currently working in the existing context.

Pre-service teachers will:

- work collaboratively with mentors and parents/guardians to support student learning in the remote and flexible learning context.
- plan and prepare sessions for students both live online and offline (asynchronous activities) including duties as assigned by their mentor. This could include filming lesson videos for explicit teaching, preparing online teaching materials, reviewing work and providing feedback, monitoring chats during live sessions, and following up questions posted during offline work periods.
- record and collate evidence in the form of a daily log of teaching activity and a reflective portfolio.
- provide evidence of planning for remote and flexible learning in the form of lesson plans, learning tasks, and units of work.
- provide evidence of how they have met the Australian Professional Standards for Teachers (APST) in the context of their remote and flexible learning placement. This includes standard PST activities now in an online environment (e.g., staff meetings and observation), as appropriate to the school.

All PSTs participating in the remote and flexible learning placement also completed a declaration expressing that they understood and would adhere to all relevant regulations and expectations including the VIT Teaching Profession Code of Conduct, the Victorian Government Child Safe Standards, the Swinburne University expectations regarding Child Safe Standards, information from the e-safety commissioner regarding PSTs and their social media and online presence, and prevention of computer related injuries from the Victorian State Government. The PSTs also declared that they would adhere to all rules put in place by the school during the period of remote and flexible learning with staff, students, and families and that all information shared with them is private, confidential, and for educational purposes only.

The remote and flexible learning placements were integrated around the established routine and structure of the school and mentor. The school-based remote learning routines were an essential aspect in 'normalising' the unprecedented circumstances for families [8]. This meant schools had varied live online and asynchronous learning structures [20,21]. To work with this variance and to ensure equitable placement expectations for PSTs, the focus of allocated teaching 'hours' were removed. This referred to the previous expected face-to-face teaching requirements included in each unit of study. Instead, PSTs were to reflect the way in which the mentor was working in the existing context.

The professional experience report was also completed within the context of the remote setting. Any areas that mentors found difficult to complete were supported by academic staff at the university. Mentors and school pre-service teacher coordinators were updated by the university on expectations for PSTs via email and as required. PSTs deemed at-risk were provided with a support plan and also attended online progress meetings with university academics.

A framework titled What constitutes the "Practical Component"? was developed, and it included recommendations on how to complete the mentor report. As a university, we acknowledged that there were a number of ways a mentor and pre-service teacher (PST) could work together. As a part of this framework, we encouraged schools to accommodate a PST and mentor pre-placement conversation to talk through the teaching process and also to consider how the assessment portfolio could be managed. This was designed to support the formation of goals and also to help meet the specific requirements of the unit.

4.2. Innovations within a Remote Flexible Learning Placement

Three innovations were created to support the progress and adaption of PSTs to the remote flexible learning placement. (1) Mursion, a virtual reality classroom simulation, was used to enable pre-service teachers to practice planning and teaching. (2) The use of the social media platform Instagram. PSTs created professional Instagram accounts to connect and share experiences of becoming a teacher during a pandemic via #swinprofexp. (3) The

establishment of a community of belonging to support teacher identity and wellbeing. These innovations were implemented to support PSTs' preparation and preparedness for a remote flexible learning placement in schools during the pandemic.

4.3. Mursion, a Virtual Reality Classroom Simulation

The Mursion classroom simulation was implemented to support the PSTs' confidence and preparedness for their impending remote flexible learning placement. The Mursion classroom simulation was a required task as a part of a formative assessment and included a peer sharing session.

To engage in a simulation, a PST books a session through an online booking system managed by Swinburne online colleagues. A Mursion simulation generally runs for a 15–20 min duration. On the day and time of the session, the pre-service teacher logs in and delivers a lesson that he/she has pre-planned to the student avatars. A simulation specialist controls the actions and responses of the student avatars in real time [6]. The pre-service teacher interacts with the student avatars in the same way he/she would in a classroom. The simulation session is recorded, and a copy is emailed to the PST. A self reflection and evaluation of their teaching against the goals they have set is then conducted. A peer sharing session occurs in the following week. Taking place in online breakout rooms, each PST shows an aspect of their recording and shares their reflections of the experience. They are then provided with feedback from their peers. A copy of the Mursion recording, lesson plan, and self-evaluation is also submitted as part of the portfolio assessment.

4.4. Social Media Use, Facilitating Interaction Using Instagram

The use of Instagram during the remote and flexible learning placement sought to create a communication platform and form a community to enhance collaborative learning. Other positive effects included opportunities for reflective practice, promotion of voice, evidence of the APST graduate teaching standards, and access to resources, other perspectives, and innovative ideas [21]. Instagram posting was a required task as a part the portfolio assessment. A scaffolded approach was used to teach PSTs how to use Instagram in a professional context. This included ethical and safety considerations regarding how the pre-service teachers set up their accounts and what sort of content they shared. University academics developed a series of prompts, topics, and themes to support posting ideas for the PSTs.

The pre-service teachers were required to have a conversation with their mentor about their use of Instagram and to seek permission to take and use photographs of anything school-related. They then completed an online form to confirm they had obtained this in the first few days of the placement. In action and during the placement, the pre-service teachers posted a visual image and a short summary explaining the visual and their response to it using the hashtag #swinprofexp and their respective unit of study (for example, #EDU20006). The pre-service teachers were encouraged to post in alignment with the APST graduate professional standards. They were also encouraged to post wellbeing and self-care strategies that they were utilising to sustain, increase, and gauge their personal wellbeing and self-care.

4.5. A Reflexive Pedagogical Approach to Support Wellbeing

Each professional experience unit of study incorporates content from Building and Sustaining a Teaching Career Strategies for Professional Experience, Wellbeing and Mindful Practice [22]. The text is used to explicitly teach PSTs principles of wellbeing and self-care. In the unit that this paper draws from, the PSTs were supported to develop the skills required in a first primary school placement. The three common stress points for PSTs within this unit were identified as (i) Stress and worry about the unknown, (ii) What and how do I teach?, and (iii) How do I manage the remote and flexible classroom? The content was aligned with and provided connection to learning activities and topics listed in Table 1, which shows self-care and wellbeing content [22].

Table 1. Self-care and wellbeing content.

Self-Care and Wellbeing Content		
Week	**Topic**	**Subtopic**
1	What is mindfulness?	- Mindfulness and being non-judgemental - Self-compassion and self-care
2	Becoming a mindful teacher	- Coping strategies - Rumination - Wellbeing and flourishing
3	Developing confidence to teach	- Self-compassion friend exercise
4	Developing your skills as a teacher	- What if the students do not listen to me? - Developing your voice - Using verbal and visual cues
5	Learning to teach—identifying the stressors	- Organising and caring for yourself as a teacher - Time management - Managing expectations - Managing study load
6	Developing as a teacher	- Learning from professional experience
7	Reflection of your self-care and mindfulness strategies	
8	Planning for your next placement and study progress	

With the aim of enhancing the student experience and supporting the PSTs' transition and learning during their remote and flexible learning placement, scheduled drop-in sessions occurred each week. Acknowledging the complex and varied experiences, one-to-one meetings were also offered for PSTs to book as required. This essentially offered two contact points with a university academic per week.

The drop-in sessions embodied a welcoming approach where we learnt with and from each other. The agenda was co-constructed and provided the opportunity to share, problem solve, and debrief. Time was spent working through the confusion of what the pandemic had meant for schooling. We laughed, cried, and participated as a community to facilitate hope, optimism, and reciprocity. In essence, we came together with a sense of care, compassion, empathy, and a mutual respect and formed an authentic sense of belonging. We celebrated what was happening in each other's schools. Discussions here were held around ways to engage the learners because of how different the remote experience was compared to a face-to-face 'in real life' experience. It was common that remote learning consisted mostly of explicit teaching and student-led learning. We also shared challenges such as children not turning on cameras during live sessions, or not attending at all [14,19]. The PSTs also mentioned that because supervision is needed for early primary students, parents were often present with their children during live online sessions. This was a new experience for both mentors and the PSTs that extended their skills in developing positive relationships with parents. If the PSTs were not directly interacting, they were able to observe their mentor engaging with the family at home through providing instruction, a range of activities, and feedback. The PSTs also noticed that the level of the children's learning was often determined by the parents' capacity to support them [8,20].

4.6. The EfS Theoretical Framework

The EfS theoretical framework is used to translate the approaches taken to support the PSTs undertaking a remote flexible learning placement [4]. The phases provided a way to analyse how each innovation affected the PST experience. For Phase 1: Translation

of EfS practice, we looked at innovation and how it was implemented in response to the crisis situation and the design of the innovation to support the PSTs' enactment of the remote flexible learning placement. Phase 2: Teacher educator focus indicates the role of the teacher educator within the three innovations in supporting the PSTs. Phase 3: Pedagogies shares the teaching strategies and theoretical underpinning of the innovations including student-centred and explicit teaching. Phase 4: Taking action engages the approach that supported the PSTs in real time. Phase 5: EfS in practice and evaluation considers the sustainable application of the innovations in future aspects of the unit of study. See Table 2 for the EfS theoretical framework for undertaking a remote flexible learning placement.

Table 2. The EfS theoretical framework for undertaking a remote flexible learning placement.

Innovations	Mursion Classroom Simulation	Social Media Instagram	Selfcare and Wellbeing
Phase 1: Translation for EfS practice	It was identified that PSTs required an authentic virtual experience that supported placement preparation and confidence and reflects the realworld.	The use of social media offered communication, the formation of a community, collaborative learning, and opportunities for reflective practice.	PSTs indicated three stress points around the remote flexible learning placement: (i) Stress and worry about the unknown, (ii) What and how do I teach?, and (iii) How do I manage the flexible classroom?
Phase 2: Teacher educator focus	The teacher educator promoted peer feedback and self-reflection of the PSTs as a part of the portfolio assessment and engagement of reflective practice.	The teacher educator engaged with prompts and provision for feedback on the PSTs' posts. Use of the shared hashtag linked PST posts to the forum.	The teacher educator engaged with evidenced approaches to support the PSTs' wellbeing.
Phase 3: Pedagogies	The PSTs' student-centred interactions supported the sharing of knowledge and skills that translated into classroom practice in the remote flexible placement.	The PSTs' student-centred posts promoted the sharing of knowledge and skills that were being learnt throughout the remote flexible placement with their mentor and the students in the class.	The self-care and wellbeing content was curated and taught to the PSTs at each stage of the placement.
Phase 4: Taking action	The PSTs' interaction with the remote context and learning from home scenarios were supported by the virtual simulation preparation.	The PSTs' interaction within the environment was individualised due to the schools' home learning approach. The social media posts offered sharing and celebration of the learning that was encountered.	The PSTs worked at developing goals to extend their skills. Reflective practice and other strategies were supported by the teacher educator.
Phase 5: EfS in practice and evaluation	The virtual classroom simulation was promoted to other units of study and embedded into this unit as an ongoing form of preparation for PSTs.	The social media use was extended into all professional experience subjects as a required part of the assessment.	The PSTs successfully navigated a remote flexible learning placement. The wellbeing content informed their self-reflective practice and adjustment to the remote context.

5. Conclusions

What Did We Learn?

The key learnings from the use of the EfS framework revealed that the innovations offered opportunities to prepare the PSTs for the remote and flexible learning placement. For instance, the Mursion classroom simulation, which was a compulsory part of a formative task, provided the PSTs with the ability to practice their skills of planning and teaching

with real-time feedback through interaction with student avatars. The provision for self-evaluation and peer feedback also increased their confidence, realisation of goal-setting, and knowledge around the teaching of the curriculum. The self-evaluation and peer feedback also allowed for reflective practice before they started the remote and flexible placement. The classroom simulation has become an embedded aspect of the unit of study, as the preparatory skills inform face-to-face teaching in the classroom.

The use of social media provided the opportunity for the PSTs to connect and interact with each other and university academics throughout the remote and flexible learning placement. This allowed for interaction in real time with likes and comments offering a supported community of practice.

The sharing of planning, teaching, and strategies for wellbeing created a shared experience, the cross-pollination of ideas, and also positivity and coping emotionally with the unprecedented placement. This was expanded via the wellbeing support of academics via the two touchpoints offered each week. These sessions were well attended, and the sense of community that was co-created supported the PSTs throughout this complex time. The innovations and check-in points were transitioned into following iterations of professional experience units of study to support and sustain PSTs' preparedness for face-to-face school placements beyond COVID-19.

This case report highlighted the strategies employed to best support PSTs during a tumultuous period of their undergraduate course. The identified innovations supported PSTs to navigate and thrive within the significant disruption of their professional experience. The approaches also signposted the recognition and need to support PSTs' wellbeing and resilience. Connecting further was the collaborative work that initiated the *School and Mentor Remote and flexible learning placement guidelines*, which provided a consistent approach about the way Swinburne University planned to manage the revised placement model. This aligned with the wider position denoted by the Victorian Council of Deans in Education (VCDE) in collaboration with the Victorian Department of Education and the Victorian Institute of Teaching (VIT), which directed schools to manage and commit to remote and flexible learning placements as a part of school priorities.

The enactment of the remote and flexible learning placements and the innovations that were developed in response to this situation also illustrate how university academics can respond to counteract unprecedented events. With a willingness to try new approaches and experiment with different strategies within the COVID-19 scenario, PSTs successfully completed their professional experience unit of study and are on track to graduate in the course period of four years.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Bahr, N.; Mellor, S. *Building Quality in Teaching and Teacher Education*; Australian Council for Educational Research: Camberwell, VIC, Australia, 2016.
2. State Government Victoria. Operations Guide Victorian Government Schools from Saturday 2 October 2021. State Government Victoria. 2021. Available online: https://www2.education.vic.gov.au/pal/covid-19-school-operations/resources (accessed on 4 October 2021).
3. Department Education and Training, Remote & Flexible Learning Research Report. State Government of Victoria. Available online: https://www.education.vic.gov.au/Documents/about/department/covid-19/remote-and-flexible-learning-qualitative-research.pdf (accessed on 19 January 2023).
4. Kidman, G.; Chang, C.H.; Wi, A. Defining education for sustainability (EfS): A Theoretical Framework. In *Issues in Teaching and Learning of Education for Sustainability*; Routledge: London, UK, 2019; pp. 1–14.

5. United Nations. Sustainable Development Goals Quality Education. Available online: https://www.un.org/sustainabledevelopment/education/ (accessed on 31 March 2023).
6. Sasaki, R.; Goff, W.; Dowsett, A.; Paroissien, D.; Matthies, J.; Di Iorio, C.; Montey, S.; Rowe, S.; Puddy, G. The Practicum Experience during Covid-19–Supporting Pre-Service Teachers Practicum Experience through a Simulated Classroom. *J. Technol. Teach. Educ.* **2020**, *28*, 329–339.
7. Learning First. The Experience of Remote and Flexible Learning in Victoria. 2020. Available online: https://www.education.vic.gov.au/Documents/about/department/covid-19/experience-of-remote-and-flexible-learning-report.pdf (accessed on 20 April 2023).
8. Armitage, J.; Loukomitis, S. Remote and Flexible Learning Qualitative Research. Department State Government Victoria. Pre-Service Teacher Placements in Schools Advice for Primary and Secondary Schools about Placements for Pre-Service Teachers (PSTs) and Initial Teacher Education (ITE) Providers during COVID-19. State Government Victoria. 2022. Available online: https://www.coronavirus.vic.gov.au/preservice-teacher-placements-schools (accessed on 19 January 2023).
9. Assunção Flores, M.; Gago, M. Teacher education in times of COVID-19 pandemic in Portugal: National, institutional and pedagogical responses. *J. Educ. Teach.* **2020**, *46*, 507–551. [CrossRef]
10. Wong, J.M.S.; Tang, W.K.W. 'Online pre-service teacher placements' during COVID-19: A compromise or an opportunity. *Acad. Lett.* **2021**, *2*, 312. [CrossRef]
11. Kadir, F.A.; Aziz, A.A. Teaching practicum during COVID-19 pandemic: A review of the challenges and opportunities of pre-service teachers. *Int. J. Acad. Res. Bus. Soc. Sci.* **2021**, *11*, 1175–1183.
12. Mikeska, J.N.; Howell, H.; Kinsey, D. Examining the usability and viability of using a simulated classroom environment to prepare preservice science teachers during and after the COVID-19 pandemic. *Discip. Interdiscip. Sci. Educ. Res.* **2022**, *4*, 1–20. [CrossRef]
13. Thomas, G. From question to inquiry: Operationalising the case study for research in teaching. *J. Educ. Teach.* **2013**, *39*, 590–601. [CrossRef]
14. Yin, R. *Case Study Research: Design and Methods*; Sage Publications: Thousand Oaks, CA, USA, 2003.
15. Patton, M.Q. The sociological roots of utilization-focused evaluation. *Am. Sociol.* **2015**, *46*, 457–462. [CrossRef]
16. Ghazi-Saidi, L.; Criffield, A.; Kracl, C.L.; McKelvey, M.; Obasi, S.N.; Vu, P. Moving from Face-to-Face to Remote Instruction in a Higher Education Institution during a Pandemic: Multiple Case Studies. *Int. J. Technol. Educ. Sci.* **2020**, *4*, 370–383. [CrossRef]
17. Adams, T.; Jones SL, H.; Ellis, C. *Autoethnography: Understanding Qualitative Research*; Oxford University Press: Oxford, UK, 2015.
18. Brandell, J.R.; Varkas, T. Narrative Case Studies. In *The Handbook of Social Work Research Methods*; Sage Publications: Thousand Oaks, CA, USA, 2001; pp. 293–307.
19. Fuertes-Camacho, M.T.; Dulsat-Ortiz, C.; Álvarez-Cánovas, I. Reflective practice in times of COVID-19: A tool to improve education for sustainable development in pre-service teacher training. *Sustainability* **2021**, *13*, 6261. [CrossRef]
20. Bradbury, O.J.; Stewart, T.; Barker, A.; Rowe, J. Building Pre-Service Teacher Capabilities through Remote and Flexible Placement-A New Narrative. In *Teacher Education in the 21st Century-Emerging Skills for a Changing World*; IntechOpen: London, UK, 2021.
21. Lemon, N.; O'Brien, S. Social Media use in Initial Teacher Education: Lessons on knowing where your students are. *Aust. J. Teach. Educ.* **2019**, *44*, 38–56. [CrossRef]
22. Lemon, N.S.; McDonough, S. *Building and Sustaining a Teaching Career: Strategies for Professional Experience, Wellbeing and Mindful Practice*; Cambridge University Press: Cambridge, UK, 2020.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.