Teachers’ Metamorphoses: A Narrative Inquiry into Indonesian Secondary School Teachers' Resilience during the Covid-19 Pandemic

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ABSTRACT

The Covid-19 pandemic has been going on for a while, as the virus was first discovered back in late 2019. Education is one of the most impacted sectors during the pandemic, where teachers around the world are expected to change their approaches, making sure that students are still able to learn without attending school and have ‘normal’ learning circumstances. Through this research, we investigate how teachers convey their teaching experience during the Covid-19 pandemic and how resilience appears in the teachers’ stories. Therefore the research question is how resilience appears in the teachers’ stories about their teaching experience during the Covid-19 Pandemic. The result of the study shows that all participants have reached growing phases through adversity (the Covid-19 pandemic) according to Patterson & Kelleher's (2005)'s four-cycle phase of resilience.

1. Introduction

After more than a year of the Covid-19 pandemic, Indonesian teachers need to adapt by force to either distance learning or hybrid learning (Ministry of Education et al., 2021). If an individual is unable to adapt to a challenging experience, he/she will probably sink into a dysfunctional level, unable to cope with the adversity at all. Some may adapt but not fully recover, which places them at a survival level. There will also be those who recover and will return to the status quo. Finally, a small minority of individuals who thrive will reach the growing phase and achieve a strengthened resilience level (Ledesma, 2014; Nishikawa, 2006). Adversity gives the chance for teachers to grow and learn, the extent to which they are able to find continuing professional and personal fulfillment through their work, and sustain their commitment to teaching to their best over time (Gu, 2018). The continuous motivation for professional learning and development is what makes good teachers and great teaching (Anyers, 2010).

In this study, we investigate how resilience appears in the teachers’ stories about their teaching experience during the Covid-19 Pandemic. Understanding teachers' experiences when facing
the pandemic might give insights into how to support teachers’ well-being during such adversity.

1.1. The Definition of Teacher Resilience

There are various perspectives on teacher resilience. First, resilience is developed by teachers when they can adapt positively to any adversity and challenge (Castro et al., 2015; Clarà, 2017) leads them to be able to keep on maintaining “their commitment to teaching and teaching practices despite challenging conditions and recurring setbacks” (Brunetti, 2006). Second, Gu & Li (2013) in their research take Brunetti’s definition further, indicating that teachers’ resilience “is not only primarily associated with the capacity to ‘bounce back’ or recover from highly traumatic experiences and events but rather, the capacity to maintain equilibrium and a sense of commitment, agency and moral purpose in the everyday worlds in which teachers teach”. From these two perspectives, in this study, teacher resilience refers to the effort or contribution that teachers make to positively adapt to adverse situations.

1.2. “Roller Coaster” Effect (Four-Cycle Phase of Resilience)

Patterson and Kelleher (2005) state that everyone, even the most resilient people, will experience a “roller coaster effect” whenever they come across difficult times. The roller coaster effect is the trajectory of one’s experiences as he/she develops his/her resilience. The trajectory consists of four phases, namely: (1) deteriorating phase; (2) adapting phase; (3) recovery phase; (4) and growing phase. According to Patterson and Kelleher (2005) and (Pearsall (2003), when adversity strikes, most people will enter a deteriorating phase for some time. In this phase, people may experience a feeling of denial, grief, and anger which are necessary and need to be managed constructively (Neenan, 2009). After experiencing the deterioration by managing frustration successfully, one could bounce to the adapting phase. Neenan (2009) describes the adapting phase as a period when one could rationally start to eliminate attitudes that keep him/her “trapped in non-resilient ways of responding” to adversity. Therefore, in this phase, one will start to manage his/her negative feelings, anger, and self-denial, and challenge his/her victim mentality (Patterson and Kelleher, 2005; Pearsall, 2003). After adapting to the adversity and managing the attitudes that undermine resilience development, one will get into the recovering phase. In this phase, one gets back to one’s initial condition and functions properly just as before the adversity strikes (Patterson and Kelleher, 2005). The resilient people will demonstrate awareness of what is essential in their life, and what to pursue (Neenan, 2009), and want more of being their better selves after the crisis (Pearsall, 2003). From this phase, they move from the recovering phase to the growing phase. The growing phase is a phase when one learns from adversity and knows how to navigate him/herself through it (Patterson and Kelleher, 2005).

1.3. Distance Learning and Hybrid Learning

In March 2020, Indonesia began the movement restriction order, and the learning activities in schools started switching from face-to-face to distance learning (Ministry of Education, 2020a). The implementation of distance learning is identical to online learning, an experience of transferring knowledge using various media such as images, videos, and online communication (Basilaia & Kvavadze, 2020) and supported by internet networks and platforms (Xu et al., 2020). Distance learning is where teaching and learning activities are carried out through the use of technology and information in a structured manner in which there is communication/relations between students and teachers regularly, substantively, and supportively (Griffiths, 2016). Around the end of 2020, it was announced that face-to-face learning may be
implemented in schools along with strict health protocols, in the form of a hybrid learning setting (Ministry of Education, 2020b) even though the regulation has been constantly changing from time to time and varies depending on the schools’ region (Ministry of Education et al., 2021). Hybrid learning itself is a combination of face-to-face learning with asynchronous or synchronous learning (Makhdoom et al., 2013). In this research, hybrid learning is defined as a learning model that combines face-to-face learning and distance learning (Cremers et al., 2016).

2. Methodology

Narrative inquiry is a research methodology whose main purpose is to understand one’s experiences (Josselson, 2009). Experiences narrated in the form of stories can help us to understand how one faces adversities from a particular period of time; since the stories were always situated in a particular time, space, and social relations within a specific context (Pyhältö et al., 2011). In this research context, the experience or event is the adversity of teaching secondary education during the Covid-19 pandemic.

The researchers explored the teachers’ lived experiences through various narrative instruments such as; (1) the teachers’ stories and (2) teachers’ personal learning notes, with the purpose to generate meaning, insights, and understanding (Kim, 2016). Utilizing line drawing as personal learning notes and identifying the “roller-coaster effect”, researchers conducted an open-ended interview, as Atkinson (1998) claims that it will allow the participants to narrate their stories on their own accord. Firmin (2008) also asserts that the interviewers should not superimpose their ideas on the participants. In this manner, the interview will be a moment where the teachers could articulate their stories without predetermined force from anyone. Therefore, in this study, the interviews were open-ended interviews as well as a participant-led process.

2.1. Participants & Procedure

The participants of this study consisted of four in-service teachers, who are teaching in a secondary school in Bekasi, Indonesia. The teachers have experienced various teaching experiences ranging from; face-to-face teaching, distance learning, and hybrid teaching and learning. The participants consist of three male and one female teacher, with teaching experience ranging from 5 to more than 10 years of teaching. The teachers involved were 3 mathematics teachers and 1 science teacher, and even before the pandemic, the teachers were the daily users of presentation slides, collaborating using Google Suite for education. For the data collection, all participants gave interview consent and online briefing prior to the interview to establish rapport, clarify things, and prepare them to be ready for the actual interview. Before the interview, participants are required to describe their experience in the form of a line drawing as a visual aid to describe the past one-year teaching experience during the pandemic, which was further discussed as guidance for the interview. The meetings were recorded for the data analysis purpose per participants’ consent.

All recorded interviews are transcribed and interpreted to identify common themes related to how they develop resilience. The interpretation is further cross-referenced among the researchers to ensure a common understanding of how resilience appears in the teachers’ stories about their teaching experience during the Covid-19 Pandemic.

In this qualitative research, the validity and reliability “concern the believability of a statement of a knowledge claim.” (Polkinghorne, 2007). Therefore we evaluate the believability of this study according to the five principles of narrative inquiry evaluation proposed by Heikkinen, Huttunen, Syrjälä, and Pesonen (2012).
3. Results and Discussion

Each teacher's story and the respective line drawing were analyzed based on the Four-cycle phase of resilience to find common themes across the stories that tell the emergence of resilience. It was clear that there are five common themes that appeared as the teachers went through adversity (the Covid-19 pandemic). These themes construct a transformation journey that develops the teachers’ resilience.

3.1. Theme 1: Deteriorating Phase of Resilience

When adversity strikes, most people will experience a deteriorating phase for some time (Patterson & Kelleher, 2005; Pearsall, 2003). The teachers were still encountering feelings such as worries and doubts, and these feelings were healthy if they could manage their frustration constructively. For Mr. Arjuna, this pressure helped him to strategies to adapt to the situation and which helped him to be more prepared for his next academic year. Ms. Delima was also in a similar situation where she was panicking to prepare the facility and her teaching.

“I was really scared before (starting distance learning), I didn’t want the next batch to get into the same problem...What I wrote in my line drawing, the vertical axis, are events and feelings, so when there are a bunch of events coming, there is pressure. I got mixed feelings out of it, for example feeling under pressure because I need to keep up with the deadlines...It has all kinds of feelings, from worried to optimistic.” - (Mr. Arjuna)

“I first get my panic attack when we are asked to do distance learning... I can’t imagine how to teach my students without face-to-face delivery, that was very concerning for me. On top of that, I need to think about the facility, such as wifi connection... So I was panicked not just because of the teaching itself, but also regarding other personal matters related to the facility at home, in the midst of a pandemic where our movement was so restricted in the beginning.” - (Ms. Delima)

3.2. Theme 2: The Role of a Professional Learning Community

An important strength of this perspective is that it defines resilience as the quality of both individuals and their environments (Ungar, 2013). The third theme that occurred is how the communities help teachers face and grow through adversity. Promoting and cultivating healthy individual and collective learning and achievement cultures in schools is essential to how they feel about themselves as professionals (Gu, 2018)

Most teachers noted that the interaction between colleagues supports them in facing the challenges of distance learning, and having the sense of “we are in this together” helps teachers to endure and stay motivated towards adversity.

“From the very beginning (of distance learning), the ecosystem in the school really supports us to learn. So even though we make a mistake, that is a learning curve and nothing is shameful about it. We have the formal ways and informal ways...every Thursday during meetings with colleagues and discussions...We also use WhatsApp, it is not always about distance learning but sometimes we also talk about how to manage students' behavior as well...I could also ask my peers about the issue I had in class.” - (Mr.Chandra)

“When I discuss with the senior teacher, she has more (strategies that I learned from) However, sometimes she was also sharing her struggle during distance learning as well. I am grateful that the school has such a strong learning community. Our teacher
has a chat group as an open forum for teachers to share challenges... We also had a discussion with the school management advisor, he will share learning resources through email. I really benefit from our professional learning community.” - (Mr. Arjuna)

“I am quite proud of the school I am working at because the teachers here could adapt to the technology quickly... When I am interacting with other teachers, I am trying to be positive and validate each other's feelings about it... So with that mindset, I have conversations with some teachers. Then we share about it and compare one and our to-do list with one another and realize we are in the same state. You know when they say ‘misery loves company?’ That's what happens... - (Mr. Budi)

The pandemic is something that happens around the world and Mr. Arjuna also tried to find external resources from teachers around the world who faced a similar situation. Whereas Ms. Delima, with the extra time on her hands, attended free training and learned from other teachers. These statements have strengthened Palmer's finding (2007), which stated that teachers’ professional worlds are made up of a web of communal relationships.

I am trying to find external resources... There are so many resources since it is happening around the world... However, the resources are not always suitable for our needs. I need to filter it and adjust it to my circumstances... The internet is very helpful! - (Mr. Arjuna)

I get more time to attend training and enrich myself with extra time on my hands, there is plenty of free training. I am also curious how other subject teachers teach during this pandemic that is my cycle. - (Ms. Delima)

3.3. Theme 3: Adaptive Phase - Managing Expectations

While noticing the limitations teachers were facing, the second theme occurs: teachers have to manage their expectations related to teaching, learning, and work, that is, teachers need to be ready for various changes which might impact their teaching. Mr. Arjuna and Ms. Delima emphasized how changes in lesson duration alter their expectation towards their teaching content, students’ well-being, and students’ achievement. As mentioned by various researchers (Patterson and Kelleher, 2005; Pearsall, 2003), this theme depicts the adapting phase of resilience development as the teachers started to manage their negative emotions and feelings.

“When the face-to-face delivery we have 45 mins in 1 period, it is now reduced to 30 mins to reduce the screen time. Due to that, it is almost impossible if we want to teach based on content. As teachers, we could adjust the load accordingly and focus on other things that are really important.” - (Mr. Arjuna)

“... during distance learning we are lowering our expectations, I think around 50% or 70%. We are not forcing them to achieve the way they did... I also try to reduce the amount of homework, so students could reduce their screen time after class. I encouraged my students to maximize their time in my class to complete the task.” - (Ms. Delima)

Distance learning also changed the way teachers assessed the students' learning outcomes, as Ms. Delima shared that students’ achievement was not merely determined by result (score), but she was also considering students’ effort and participation.

“Now we are focusing on how independent they are in completing their task... Not just solely assessing on getting the right answers. For example, previously we had 10 tasks, and all 10 needed to be correct to get a full score, but for now, we assess how students
could maximize the 30 mins time that they have... What we focus on is student participation.” - (Ms.Delima)

Distance learning also caused the limitation of interaction and the ability to oversee the overall classroom dynamic. This limitation also affects and changes teachers’ expectations.

“We can’t make sure that students will get a 100% learning experience as we expected. Students are still used to offline teaching and reflecting back to that time, some students are still afraid to ask. With distance learning now, it is even harder to expect the students to turn on their camera.” - (Mr. Arjuna)

“I can’t really guide them as much as offline learning, even though I have tried my best to equip them with my technological knowledge to better understand the lesson... In offline learning, we get to see their facial expression and body language... But for now, students might open or engage in other activities during class even if they turn on their cameras. Even when I set the work in a space where I could monitor them online, it didn’t guarantee 100% that they would be active in the class.” - (Ms. Delima)

Aside from lesson delivery, teacher responsibilities included paperwork. Mr. Budi shared his experience of how the adversity changed his expectation of himself while dealing with paperwork from school.

“I get to reflect that we can’t nag about it for a long period of time, without doing anything. So, I tried to arrange some strategies, the priority is to submit it first for my supervisors to check it and give their feedback, and afterward, I could amend it. Therefore, I get to complete it in a shorter time. It reduces my perfectionism, from time to time I get to reduce it bit by bit... Over the years, I try to be more realistic, and the pandemic really makes me more realistic.”- (Mr.Budi)

3.4. Theme 4: Adaptive Phase - Teachers’ Preference for Teaching and Learning Environment

After more than a year in this situation, teachers started to build new preferences and feel more comfortable in distance learning. For example, even though it was not an easy decision, Mr. Arjuna preferred to have distance learning because Hybrid learning is more difficult to set up and manage. Ms. Delima had a similar opinion as she could work from home and use her time more effectively compared to prior to the pandemic. For Ms. Delima, time is more precious than the extra cost she needed to spend to set up an internet connection at home. This theme, as stated by Patterson and Kelleher (2005), was when the teachers were managing their emotions and adapting to the challenge.

“We tried our best to make the best choices, but we are aware these choices come with limitations. Plenty of it and the difficult ones! I prefer full online teaching, I think most of the teachers will agree with me because teaching hybrid is very difficult, it is difficult to divide our attention.” - (Mr. Arjuna)

“Obviously, I prefer to work from home. The internet connection might cost similar value compared to my normal commuting cost. But in terms of time, I could save at least 2-3 hours/day. Imagine that I have 3 extra hours to mark. I could do all the administration work better when I work from home compared to the time I work from school.... I feel ever since we went online, I have more time.”- (Ms. Delima)

Hybrid learning was still manageable for Mr. Chandra, as long as teachers were not expected to be able to split their attention for both classes (online and offline) at the same time. In fact for him, it would be great to see students who needed face-to-face facilitation to come to school.
“if some students are coming to school, that won’t be a problem as long as teachers are not required to split themselves (to be able to entertain both offline and online students). For students who will come to school, as teachers, we just need to be there to keep them focused... it is actually good because for students who really have problems managing their studies, they could come onsite and there will be someone who supervises them, because not all students are responsible in their own learning” - (Mr. Chandra)

Mr. Budi stated that both teaching methods have their strengths and weaknesses, which was why he had not had any preference yet.

“For me personally, I still can’t decide my preference yet (offline/online). If online, we are so limited and students are still struggling to follow the lesson. but if offline, there is a risk (health-wise)” - (Mr. Budi)

Through the teacher's stories of their teaching preferences, it is interesting to see the changes which might happen in the future when it comes to teaching style and method once the pandemic ends.

3.5. Theme 5: Entering a Growing Phase

Reaching a recovering phase might be a final goal for some, but not for others. For these people, being a better self after the crisis--that is, entering a growing phase--is the preference (Pearsall, 2003). All of the teachers adapt positively during adversity, which results in the development of the teacher's own skills and resilience (Beltman & Mansfield, 2018; Castro et al., 2015; Clarà, 2017).

“I do enjoy the process (to learn)... In context of teaching during the pandemic, it nurtures anticipatory mentality and reflective thinking. While teaching face-to-face, I tend to be lazier, because it is something I have known and mastered for years. When I need to teach in a new situation, with different expectations, and different circumstances there are several factors to be put into consideration. I have things to learn, understand, and master... I would like to give my best. That is my motivation... That is the most valuable thing to me, the willingness to give the best while being challenged with these difficult circumstances.” - (Mr. Arjuna)

“When I made the line drawing... It actually reminds me of the moment when I really dropped to the point I felt it was too hard to bear when I felt that I hit rock bottom. After that, I could rebound and reflect that it was not that hard.” - (Mr. Budi)

“Now I have already figured out the technology tool, so I am already comfortable with it. Yes, yes, way better, but there are still things to figure out. But I am already comfortable with it.” - (Ms. Delima)

Ms. Delima mentioned that there were other things to learn yet with a firmer foundation, and she felt more comfortable in facing adversity and rapid changes due to the training she had been attending. Furthermore, she could set a timeline to adjust her teaching because she was better equipped this time.

“The second cycle (in the line drawing) was when I started to get more comfortable... I get to implement my plans and evaluate what worked and what didn’t. And I am trying to be content and satisfied with what I was doing and implementing from my previous training. I am more prepared, ... Compared to last year's experience where it was completely new, where I have no idea about it. For now, I just need to combine the offline and online approaches. For the online approach I already know the technology and I also already know about the offline approach. I just needed to figure out how to
Mr. Budi also found that his school community could adapt quickly to the change, despite they were still circumventing the situation where distance learning was mostly “a lecturing video call”. Mr. Arjuna also showed his adjustment to his teaching process, seeing it as more of a discussion instead of just a conservative teaching approach.

“I am proud of the school because the teachers could adapt to the technology quickly... We could do it and we are able to do it quickly. However, when it comes to the usage of a variety of apps to aid our teaching, that is a new challenge for us... to make the teaching interesting on-screen, without making the students bored. That was the most challenging part. In the classroom (offline), we could read the classroom and physically approach the students who were bored and change our approach right away ... In distance learning, there are a lot of limitations to reading the classroom’s ambiance. It is true there are plenty of apps out there to help and we could learn about it, but we might not be fluent in it.”- (Mr. Budi)

“In this distance learning, we are not teaching in conservative ways; it is more towards the discussion instead. Also, when I am sending invitation links to my students, I included our learning activities, and links to resources such as videos, books, or simulations, with the hope that they come to class without a blank mind.”- (Mr. Arjuna)

Mr. Chandra mentioned that in his line drawing even though he didn’t scale his confidence as 100%, he sees himself as a better version after the adversity.

“If you notice it is not 100% in my confidence level because I think there is always something to improve.”

“Not really 2.0 but 1.1, because 2.0 is a very new version and 1.1 is just an improvement of the previous version (update). ”- (Mr. Chandra)

3.6. Theme 6: Moving to the Right Direction, But Have Not Arrived at the Destination

The last, but not the least, theme that occurred is a realization that with more experience and knowledge, teachers are more prepared for the uncertain situation in ‘new normal’ teaching. This notion is aligned with the growing phase of resilience (Patterson and Kelleher, 2005). The teachers’ stories suggest some visible improvements in themselves, compared to the beginning of the pandemic in March 2020. However, they also acknowledged the need for improvement along this process, there was so much more to learn to help teachers to deliver better learning in this pandemic.

Here are some matters that show that the ‘moving forwards’ does not mean we have arrived at the destination: Mr. Arjuna emphasized the need for solid methods for distance learning, while they had found a better way to conduct paper examinations. Ms. Delima felt better about using an online whiteboard for visualizing Math problems, while there were still things to figure out. Mr. Chandra noted his confidence in using more variety of digital assessment tools, even though he didn’t improve much on his other aspects of teaching. Mr. Budi noted the teachers in his school, himself included, adapted pretty well in using online platforms, and what they still need to think about is keeping students’ engagement high.

“We are better than before, we are progressing.... We monitor students through Google Meet and their camera must be kept on throughout the exam... we are trying to figure things out from trial and error by keeping on doing this and that. Yes, we will always
be learning, because we haven’t found the final, solid method for distance learning even after 2 years.” - (Mr. Arjuna)

“I am more prepared...compared to last years’ experience where it was completely new... I was so confused in the beginning, how could I teach without the board, because it is impossible to teach math without writing for visualization. That is the main challenge for us, Math teachers. Now I am way better than the beginning of the pandemic, but there are still things to figure out - (Ms. Delima)

“Before the pandemic, it was just as it is -paper and pen-, but now I could use so many different tools because we are indirectly forced to learn. I am not really the 2.0 version of myself but 1.1, because 2.0 is a very new version and 1.1 is just an improvement of the previous version.” - (Mr. Chandra)

“What I am quite proud of about our school is that the teachers here could adapt to the technology quickly... but when it comes to making the teaching interesting on-screen, without boring the students, that was the most challenging part...It is true there are plenty of apps out there to help and we could learn about it, but we might not be fluent in ist.- (Mr. Budi)

In order to further meet students’ needs, some teachers went to the extent of taking a deliberate decision of teaching differently, compared to what the school mandated. Mr. Chandra confidently mentioned that he was ready to take responsibility for the changes he made because he was trying to do what was good for his students.

“I believe that as a school, they need to be open-minded, because in the end what we are doing is for the students, so if it is okay for the students, it shouldn’t be a problem. The rule I am breaking now is not a very significant rule in which I abused my power as a teacher, but it is just a minor rule...Because, I think that rules are there to help, however as a teacher and students as the end-user. It will be up to us (teachers) what works or not, and as long it is okay for the students and they still could learn, the school will be alright too. I am well aware that (his teaching approach at the time) is not according to the school’s rule, but at that time, that is the best circumstances for me and my students and after evaluation, the school allowed this method which I have used before.” - (Mr. Chandra)

4. Conclusion

The result of this study discovered that teachers’ resilience development was evident, in alignment with the trajectory of experiences moving through crisis as Pattterson & Kelleher (2005) defined in a four-cycle phase. Teachers started at the deteriorating phase and finally managed to strive and move to the growing phase in this metamorphosis journey. Despite the limited evidence of them being in the adaptation and recovery phase, the participants informed us about, and proved, their willingness to be better teachers, showing that they have moved beyond the adaptation and recovery phase into the growth phase. This finding is aligned with the teachers’ resilience quality, where the participants are not primarily just bounce back or recover from adversity, but they are able to maintain equilibrium, commitment, agency, and moral purpose in everyday teaching worlds (Gu and Lee, 2013). From this growth experience, they get to allocate resources and clarify what they want to accomplish accordingly. Managing their expectations related to content delivery, students’ performance, and their personal task as one of their strategies to cope with the adversity. The experience made them feel more confident, despite the unresolved obstacles and future challenges related to hybrid learning. Professional learning communities support their metamorphoses journey. Teachers noted how
the school community hugely supports them during these difficult times, mainly by sharing their struggles, class experiences, teaching strategies, technological knowledge and the solutions they have tried. The sharing opportunity, though may not be the determining factor, yet it clearly supports the growth. Notably, they have been rethinking their teaching practices, as well as adjusting their expectations towards the class.

5. Recommendation

Further study in a more diverse school background is recommended to enrich the data and by a wider range of teachers’ demographic, the research could investigate deeper into potential factors influencing teachers’ resilience growth. This study focused on a school with a combination of international and Indonesian national curricula. In this school context both teachers and students are supported with personal devices and proper internet connection. They are able to interact throughout video call meetings on a daily basis.

References


Gu, Q. (2018). (Re)conceptualising Teacher Resilience: A Social-Ecological Approach to Understanding Teachers’ Professional Worlds. In *Resilience in Education* (pp. 13–33). Springer. [https://doi.org/10.1007/978-3-319-76690-4_2](https://doi.org/10.1007/978-3-319-76690-4_2)


