

# Designed for disruption: Lessons learned from teacher education in Myanmar and its borderlands



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## Abstract

Due to protracted armed conflict, recurrent political crises, widespread structural disruption, and multi-dimensional oppression, teacher education in Myanmar and its borderlands operates within parallel state and nonstate systems. This article draws from a qualitative study that used complexity theory to examine how parallel ethnic and indigenous teacher education systems navigated disruption during the COVID-19 pandemic. The pandemic largely paralysed the provision of teacher education in Myanmar's central government system. In contrast, the actors interviewed for this study who work in parallel systems pivoted and re-developed their programming to meet the need on the ground. The use of de-centralised approaches and flexible programming, and their ability to adapt the response to emerging needs and to operate with minimal resources, may signal that these parallel teacher education systems are designed for disruption. How such systems have continued to function amid complex emergencies may offer insights for researchers investigating the ways in which teacher education systems work in other crisis contexts.

## Key Words

Myanmar, teacher education, complexity theory, education in emergencies

## Introduction

The global COVID-19 pandemic has shown that, without much notice, any presumably stable teacher education programme can find itself in a state of emergency. As the ratio of children learning in conflict zones has increased to a staggering one in five, ever more teachers undoubtedly will work on the frontlines of education in emergencies (EiE) (Fylkesnes *et al.*, 2019). As the number of protracted emergencies increases, teachers and the systems that support them will need an expanded toolbox of integrated skills, knowledge, and responses to enable them to navigate disruption (UNESCO, 2021).<sup>1</sup>This will affect how teachers are recruited, trained, and supported, and will have significant implications for the fields of teacher education and EiE (Lingard, Wyatt-Smith, and Heck, 2021).

The literature on teacher education in emergency contexts highlights the contents of teacher education programmes: disaster risk reduction, conflict prevention, mental health and psychosocial support, education for peace, and teaching multiple-perspective history. All of this supports what Burde *et al.* (2017) call the 'protective potential of education' during crisis (c.f. INEE, 2010; Burde, Lahmann, and Thompson, 2019). The Inter-agency Network for Education in Emergencies situates teacher training as a core educational strategy during emergency response. Per their guidelines, teacher education in emergencies should be 'periodic, relevant, and structured training according to needs and circumstances' (INEE, 2010, p. 83). However,

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<sup>1</sup> This paper uses 'disruption' to describe the root causes of education in emergencies: widespread insecurity; governance challenges; ongoing social, economic, physical and environmental hazards; and direct or indirect impacts of conflict (INEE, 2010).

Burde *et al.* (2015) note that there has been minimal inquiry into the extent to which teacher education in emergencies is tailored to teachers' needs and qualifications. They suggest that there is a need for deeper understanding of the ways teachers perceive their roles in crisis contexts. Ring and Reeves (2015), recognising that a solid evidence base can inform new policy and practice and support the retention of teachers, identify critical gaps in the grey and academic literature around how teacher education in emergencies operates.

As conflict and displacement continue to increase globally (UNHCR, 2022), systems-level recommendations for teacher education in emergencies will prove invaluable. Comparative lenses are needed to better understand, learn from, and advance teacher education systems across the globe. The ability to capture and compare the multi-dimensional and nuanced aspects of teacher education, especially teacher education in emergencies, requires comprehensive, multi-level approaches and frameworks designed specifically for the task (Sahlberg and Cobbold, 2021). The COVID-19 pandemic has revealed that there are lessons to be learned from emergency settings which may be applicable to all teacher education systems (UNESCO, 2021). The Myanmar context offers multiple long-standing examples of teacher education systems which have operated despite persistent disruptions, and may help to address gaps in the EiE literature. This article draws from the strategies and practices of parallel teacher education providers in Myanmar and its borderlands, highlighting their adeptness at managing disruption caused by the COVID-19 pandemic.<sup>2</sup> It situates the pandemic within a broader landscape of protracted conflict and disruption in Myanmar, and examines how complexity theory may help describe how teacher education systems are organised and how they operate.

## Teacher education in Myanmar

Over the past 70 years, the baseline state of education in Myanmar has been associated with protracted armed conflict, ethno-religious persecution, widespread displacement, and political unrest (South and Lall, 2016; Lopes Cardozo and Maber, 2019). The Myanmar context—for this study, the territory of Myanmar and its borderlands where displaced and/or migratory populations from Myanmar reside—contains a mosaic of teacher education providers linked to different education systems (Figure 1). These systems are of varying scale, scope, and demographics, but all include, to different degrees, pre-service and in-service training for teachers at the primary and secondary levels. The development of teacher education in this context reflects the distinct and pluralistic histories of a multi-ethnic and multi-lingual 'nation' marked by civil war since it won independence from Britain in 1948 (Lall and South, 2013). The two most prominent accounts include, on the one hand, the state-led education system governed by the centralised Ministry of Education,<sup>3</sup> which over the last decade has been enhanced by global policy isomorphism and education lending through partnerships with international actors (Lall, 2020). On the other hand is the range of parallel education systems within Myanmar and across its borderlands; namely, monastic, ethnic and indigenous, and refugee education, which have been born of and shaped by many decades of disruption. While operating against backdrops that meet much of the criteria to be considered EiE, most of these systems have existed for decades, which differentiates them from traditional emergency models. Within these parallel systems, teachers are trained and supported through a myriad of programmes, including:

- Teachers' colleges;
- Mobile teacher trainers who travel to support teachers;
- Zone teacher training, which brings together teachers from a geographic region;
- Summer vocational training;
- Classroom observations;

2 'Parallel' here refers to systems that exist alongside the formal state-run system and which often provide educational services to populations that might otherwise be overlooked or marginalised by the formal system.

3 The article uses the terms 'government' and 'state-led' to refer to education administered by the democratically elected, civilian governments serving from January 31, 2011 to January 31, 2021, under the 2008 Constitution of the Republic of the Union of Myanmar.

- Pre-service training for new teachers;
- In-service training;
- Individual coaching; and
- Intensive subject-based workshops (Johnson, 2016; RISE, 2021).

Despite their different origins and histories, these teacher education systems have been collectively instrumental in supporting Myanmar’s commitment to the Education 2030 Incheon Declaration. These systems complement the state-led system by filling in coverage gaps and providing educational services to many children who would otherwise be out of school. Together these parallel systems serve many hundreds of thousands of students, most of whom come from ethnic, linguistic, and/or religious minority

backgrounds; internally and externally displaced populations; and stateless groups. Although some has been written on the basic education provided by ethnic and indigenous non-state actors in Myanmar (c.f. South and Lall, 2016; Jolliffe and Speers Mears, 2016; Lall, 2020), there is scant exploration of how the teacher education systems run by these actors have operated and what characteristics have enabled them to continue in contexts of protracted emergency, marked by a lack of material resources. This study contributes to this literature by recognising that research into teacher education can promote better understanding of educational processes and offer suggestions for potentially applicable practices in diverse contexts.

**Table 1. Education systems in the Myanmar context**

System	Description	No. of Systems Within	No. of in-Service Teachers	No. of Students Served	Teacher Education Delivery
Government	Schools under administration of the Ministry of Education	One	322,514, most of whom have formal qualifications	8,853,480 (MOE, 2016)	<ul style="list-style-type: none"> <li>• Education Degree Colleges</li> <li>• Joint programmes with international development actors</li> </ul>
Monastic	Schools under shared administration of the Ministry of Education and Ministry of Religious and Culture Affairs, but often operating independently under the discretion of an abbot at the school level	Multiple	11,044, some of whom have formal qualifications	297,039 (MOE, 2016)	<ul style="list-style-type: none"> <li>• Programmes arranged by prominent monasteries</li> <li>• Joint programmes with international development actors</li> <li>• Programmes led by local NGOs or civil society actors</li> </ul>
Ethnic and Indigenous	Schools under administration of non-state resistance organisations and/or civil society actors, or under shared administration with the Ministry of Education	Multiple	20,000+, many of whom have non-formal qualifications	300,000+ (Lall, 2020)	<ul style="list-style-type: none"> <li>• Joint programmes with international development actors</li> <li>• Programmes led by local NGOs or civil society actors</li> </ul>

System	Description	No. of Systems Within	No. of in-Service Teachers	No. of Students Served	Teacher Education Delivery
Refugee	Schools under administration of civil society actors based in the Thailand refugee camps or the Cox’s Bazar Education Sector coordinating body in Bangladesh	Three	1,000+ in Thailand and 4,000+ in Bangladesh, many of whom have non-formal qualifications (KRCEE, 2021; Education Sector, 2022)	20,000+ in Thailand and 300,000+ in Bangladesh (KRCEE, 2021; Education Sector, 2022)	<ul style="list-style-type: none"> <li>• Joint programmes with international development actors</li> <li>• Programmes led by local NGOs or civil society actors</li> </ul>

## Analytical framework:

### Examining teacher education as a complex adaptive system

Attempts to describe teacher education systems and make actionable recommendations for their improvement have been criticised as being too narrow and too difficult to compare with and apply to other contexts (Cochran-Smith *et al.*, 2014). In response, a growing body of literature that applies complexity theory to teacher education has emerged. It draws from organisational studies of the application of complex adaptive systems. Complexity science allows previously regarded ‘messy realities’ to be examined more deeply and compared (Ramalingam *et al.*, 2008). Complexity theory is concerned with systems that have a large number of constituent elements that relate to and interact with each other in dynamic ways. The system is therefore characterised by ongoing (re-)organisation of its elements, which often leads to new and unexpected systemic behaviours and properties. Complexity theory, which has been applied to the social sciences and education studies, offers nuanced discourse on how systems change, evolve, adapt, and learn (Mason, 2008; Morrison, 2008; Walby, 2007; Wheatley, 2006). This study applies complexity as an analytical framework to identify whether teacher education systems possess

such elements as adaptive agents, self-organisation, non-linearity, organisational learning, inter-dependent components, and feedback processes (Ramalingam *et al.*, 2008). These traits have been considered an advantage in adapting systems to dynamic and turbulent contexts through feedback loops and bottom-up processes (Cilliers, 1998; Morrison, 2008), which may be especially relevant for teacher education providers operating against a backdrop of disruption.

### Research design

This research set out to identify the extent to which teacher education systems in Myanmar were able to navigate the COVID-19 pandemic and deliver relevant teacher education services. It specifically sought to answer two key research questions:

1. In what ways were teacher education systems able to continue during the COVID-19 pandemic?
2. To what extent did parallel teacher education systems exhibit the traits of complex adaptive systems?

Sixteen purposeful key informant interviews were conducted online in June and July 2021 with 24 senior management personnel who, at the time, represented 15 organisational actors across state and non-state systems (Figure 2).

**Table 2. Research participants**

System	No. of Interviews	Actors Represented
Government	4	Three international development partners
Monastic	3	Two teacher education centres and one national development partner
Ethnic and Indigenous	4	Two ethnic education departments, one national development partner, and one international development partner
Refugee	4	Two refugee education departments and two international development partners
Migrant	1	One international development partner

The qualitative findings were analysed using the comparative analysis technique (Mathison, 2005; Charmaz, 2006). The aim was to generate theory from data collected during the study to address the current general lack of theories and concepts to describe and explain teacher education systems in the Myanmar context. The comparative analysis involved three sets of coding, based on the framework presented by Robson and McCartan (2016). Open coding was first used to create initial categories of information regarding the navigation of actors within teacher education systems during the COVID-19 disruption. This focused primarily on coding behaviours, conditions, and values more broadly. Axial coding was then employed to assemble the insights from open coding in new ways, such as identifying with greater specificity the causal conditions, strategies, intervening conditions, and consequences of navigating COVID-19 disruption as traits relating to complex adaptive systems. Finally, a substantive-level theory relevant to the topic of interest was generated. Our research was limited to a single interview with each of the selected teacher education providers and development partners. The research therefore does not focus on the perspectives of teachers or the most senior decision-makers within the teacher education systems.

## Findings

The most prevalent features of complex adaptive systems were found in ethnic and indigenous teacher education systems, thus the findings focus mainly on these systems. Interviewees from ethnic and indigenous teacher education systems articulated three complex adaptive traits: sensitivity to the external environment; organisational adaptation and learning; and decentralised management structures. The sections that follow elaborate and provide evidence on these features.

**Table 3. Components of ethnic and indigenous teacher education systems that exhibit traits of complex adaptive systems**

Aspect of Complex Adaptive Systems	Traits Exhibited
Sensitivity to the external environment	<ul style="list-style-type: none"> <li>• Many providers operate in areas that are self-governed by non-state actors</li> <li>• Flexible funding from international donors</li> <li>• Experience of working in low-/no-resource environments</li> </ul>
Organisational adaptation and learning	<ul style="list-style-type: none"> <li>• Adapt programming to meet in-service teachers’ needs/demands relating to subject and pedagogical knowledge, as well as practicality of the education provision</li> <li>• Incorporate feedback cycles from teachers/schools to mid-tier managers and to the central management team within teacher education providers</li> <li>• Value adapting to meet teachers’ emergent needs more than general notions of teacher education quality</li> <li>• Leverage local human resources and delegate responsibilities to local-level actors</li> <li>• Change modalities of teacher education delivery from on-site to virtual during times of high risk</li> </ul>
Decentralised management structures	<ul style="list-style-type: none"> <li>• Local context awareness, inquiry, and responsiveness</li> <li>• Compassion toward teachers working in challenging circumstances</li> <li>• Decentralised decision-making</li> <li>• Flexible partnerships with international development actors</li> <li>• Horizontal relationships between local teacher education decision-makers and recipients</li> <li>• Flexible accountability relationships with central management</li> </ul>

### Sensitivity to the external environment

At the time of the interviews, teacher education systems operating in territories under the governance of the Myanmar state were required to follow the Ministry of Education’s COVID-19 National Response and Recovery Plan for the Education Sector (May 2020–October 2021). This severely limited what international development partners acting within the government system sought to accomplish. Most notably, all pre-service teacher education was halted and unable to pivot to online modalities, unlike what was seen in many other countries (Ellis, Steadman, and Mao, 2020). Although permissible under the Response and Recovery Plan, the MOE did not take steps towards initiating online pre-service teacher education. Consequently, teacher educators could not work with their student teachers and instead were engaged in ongoing professional development through online modalities. In-service training did occur through a combination of face-to-face and online modalities, although its duration was

significantly reduced. In 2020, attempts to reopen government schools across Myanmar failed, due to an increase in local COVID-19 cases, and learning continuity was limited at all education levels. Htut, Lall, and Howson (2022) suggest that the Response and Recovery Plan was not sufficiently comprehensive, was too centralised, and lacked coordination, which paralysed higher education, including pre-service teacher education at Myanmar’s education colleges.

Actors in the ethnic and indigenous teacher education systems paused their activities for at least a month, before moving much of their face-to-face training to online modalities, albeit in low-resource contexts. Some actors in non-state territories were able at times to continue face-to-face engagement with teachers, as these territories were not under the mandate of the Ministry of Education. In fact, one ethnic and indigenous actor moved its pre-service training programme from Myanmar government territory to non-state territory so it could continue using its face-to-face modalities. New teacher education content was designed to align with

emerging needs, such as health, hygiene, and mental health and psychosocial support. While remaining sensitive to the conditions and context, teacher education providers were able to offer new forms of provision, including remote training for teachers.

#### Learning and adaptation

Ethnic and indigenous teacher education providers described their ability and willingness to respond to emerging needs by rapidly altering both the content and duration of training, which at times extended beyond traditional pedagogical content to include topics such as first aid, COVID response, socio-emotional well-being, and disaster risk reduction and preparedness. Providers were found to operate in a non-linear fashion, to create and employ new responses for their specific contexts, and then to scale the responses they found effective. Given agency to adapt, these providers exhibited the trait of co-evolution, wherein different members learned from each other. As one interviewee reported:

We're not doctors...so teachers can make mistakes and can experiment. (Monastic teacher education provider)

The new tools and modalities were flexibly deployed and adapted to the circumstances providers faced. This elasticity was reported to motivate staff members, who knew that, when faced with sudden shocks, they were ready to act. Ethnic and indigenous teacher education was described as being in an ongoing state of emergency, as evidenced by examples of systems incorporating new foci, programmes, and curricula that continued to evolve in response to the environment. As one actor in an ethnic and indigenous teacher education system expressed:

We want our teacher education programme to be elastic and adaptable. The adaptability, willingness, and motivation of the staff [is essential] to work under this critical transition... We are trying to sustain educational activities so that the whole system doesn't collapse. (Ethnic and indigenous teacher education provider)

Most of the interviewees shared that their organisations consulted with school- and community-level stakeholders before adapting their programmes. They described the process as iterative, with multiple feedback loops occurring as

more communities became aware of the COVID-19 situation. Schools and communities would often make decisions to suit their own situations on how to move forward, as illustrated by this quote:

We meet with our partners to determine how to move forward...[Our response] will vary based on individual communities. Some don't feel comfortable sending their children to school. It has become very political whether you send your children to school. (Ethnic and indigenous teacher education provider)

Adapting educational programmes to emergency situations was considered necessary but difficult. Many interviewees described the growth and scaling that had occurred within their organisations in previous years and the unfortunate regression caused by the recent disruption. As one participant lamented:

In the future, I don't think we will be able to conduct coaching support for teachers and monitors. Our plan is to connect [them] with the local trainers. It is difficult to contact them by phone...We want to prepare some handouts and send them. No online options are possible. Everything is paper based. Oh my God! Even our videos were only sent to communities where they could play them using solar panels. We are going back to the way it was before. I worry that with paper-based [training] the teachers will not be motivated. There is not that person-to-person connection. We are trying to do the best we can. We are inspired and grateful for the teachers. We thank our teachers for their commitment, effort, and service for our children. (Ethnic and indigenous teacher education provider)

## Management and decentralisation

Actors in ethnic and indigenous systems reported their commitment to developing programming based on requests from teachers and school administrators. These systems thus can be characterised as having non-linear interactions by a range of stakeholders. Some aspects of teacher education were regarded as intimate and having a profound impact, such as the close relationships between communities and their teachers. Local and international development partners pointed out the importance of decentralised decision-making

and context appropriacy when working with local resource- and needs-based approaches. This was echoed by other participants, as in the following quote:

The greatest success is that we are trying to decentralise. We share a lot with our district and township [management] so that they can be more responsive to this emergent situation. The situation is different in different areas—they can decide to close the schools...Some of our schools have been damaged by the airstrikes but we haven't lost any children or teachers. This is because of the power structure for our staff to make appropriate decisions. The safety of the students and teachers is the most important. (Ethnic and indigenous teacher education provider)

This quote highlights how planning for education delivery may be explicitly underpinned by the need to keep teachers and students safe. This is significant, as many educational programmes prioritise teaching and learning processes. By including safety as a significant factor, ethnic and indigenous teacher education systems may be better placed to provide education in emergency situations. These responses highlight the importance of local ownership for decisions regarding parallel teacher education, as evidenced by collaborative relationships in which multiple perspectives informed policy and programme development.

### Analysis: 'Designed for disruption'

Over the past seven decades, teacher education providers in parallel education systems in Myanmar have had to navigate widespread political unrest, protracted armed conflict and displacement, and periodic natural disasters in order to provide critical support and training to their teachers. The contemporary context of COVID-19 brought new challenges, but these providers were equipped to handle it using the knowledge, tools, and resilience learned through decades of education provided during unstable times. Many of the teacher education systems our interviewees described may therefore be considered designed for disruption. During the COVID-19 response, these systems exhibited many traits of complex adaptive systems, such as organisational adaptation and learning, decentralised management structures, and the

ability to recontextualise within a dynamic external environment. These parallel systems were likely developed to withstand the hardships associated with protracted emergencies, which made them relatively better positioned to navigate the pandemic. The agility of these systems enabled them to pivot their programming and respond, despite operating in no-/low-resource environments. It also allowed for more distributed decision-making at the local level and enabled heightened flexibility, adaptability, and localisation in keeping with the emergent need in the dynamic contexts in which they operated. This contrasts with the centralised Myanmar government system, which was largely unable to help teacher educators provide support to their teachers during the first year of the pandemic.

### Discussion and conclusion

We believe that using complexity theory to further investigate parallel teacher education systems in the Myanmar context will provide additional insights into how these systems can be effectively supported amidst the current crisis resulting from the 2021 coup d'état. These systems are not defined by 'quality assurance' and 'accountability' in the traditional sense, but by their ability to endure and adapt during disruption and thus to continue serving some of the hardest-to-reach children from Myanmar. The resilience of these systems and their durable practices need to be recognised in their own right. These concepts may continue to be better understood through participatory inquiry, such as participatory action research (Chevalier and Buckles, 2019) and comparative case studies (Vavrus and Bartlett, 2022). The perspectives and participation of teachers and local decision-makers has the potential to underscore valuable lessons from emergency contexts, from which all teacher education systems can benefit.

In recent years, the educational needs of children in the Myanmar context have become more urgent and complex. Teachers on the frontlines must navigate the destabilisation caused by the COVID-19 pandemic and, most recently, the 2021 coup d'état. Education for children from Myanmar requires a transformation, but for many teachers this is not the first time they have been called to innovate. The expertise of parallel teacher education systems in the face of protracted disruption deserves greater



recognition by both academic institutions and international donors.

## Author Bios

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