

Mapping Informal Learning for Displaced Learners during the War on Gaza 2023- Application of Situated Cognition

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Abstract

War on Gaza since October 2023, presented a dire picture of the displaced children's situation, marked by psychological stress, health risks, educational disruption, and a profound impact on their physical, emotional, and cognitive development.

This paper explores the criticality of sustaining learning and development for Gazan young people, particularly those displaced, amidst challenging environments such as war zones. And the primary aim of this study is to propose a construct to help develop and initial informal learning to help displaced not to miss learning opportunities.

The researchers have taken into consideration the scenario of the ongoing conflict in Gaza and the Israeli occupation's increasing atrocities without seeing clear intentions for ceasefire. Then, the researchers propose a framework for informal learning that adapts to the realities of displacement and war, grounded in the concept of situated cognition. The constructs prioritize hands-on experiences and skills relevant to the displaced students' immediate context. It suggests a shift towards informal learning methods that foster cognitive reserve, resilience, and adaptability in children, utilizing play, storytelling, exploration, and cultural activities.



The paper concludes by discussing the vital role of informal learning in maintaining the continuity of education for displaced children in Gaza. It argues for immediate educational interventions alongside long-term strategies for rebuilding the educational system, tailored to the complex needs of students in the recovery and healing phases. The study recognizes its limitations in addressing the potential of technology in informal learning, given the severe constraints of the situation in Gaza.

Keywords: Informal Learning, Displacement, Situated Cognition, Displaced Learners, Children Development, Gaza, Palestine.

1. Introduction

The conflict in Gaza, ongoing since October 2023, has led to a humanitarian crisis with far-reaching consequences, especially for children. The displacement and disruption of normal life have profoundly impacted the educational journey and overall development of these young individuals. This paper seeks to address the critical issue of sustaining the educational development of Gaza's displaced children amidst the challenges of war and displacement.

The focus of this study is to explore the role of informal learning in mitigating the adverse effects of war on children's education and development. Informal learning, as opposed to the structured environment of formal schooling, offers a flexible and adaptable approach to education in crisis situations. It encompasses learning through play, storytelling, practical skills, and cultural activities, providing a crucial lifeline for the cognitive and emotional development of displaced children. Buheji and Khunji (2023)

This paper reviews the current literature on the impact of conflict and displacement on children's education, the challenges faced in providing quality education in emergencies, and the potential of informal learning in such contexts. It also proposes a framework based on situated cognition, emphasizing learning that is integrated with the children's immediate social, cultural, and physical context.

The aim is to present a comprehensive understanding of the educational needs of displaced children in Gaza and to offer practical strategies to support their learning and development. The findings and recommendations of this study contribute to the broader field of education in emergencies, providing insights and guidelines for educators, policymakers, and aid organizations working in similar conflict-affected regions.

The authors review first the importance of the sustainability of learning regardless of the environment of the learner, then the challenges of learning for displaced learners, and finally, the impacts on learning from displacement and disengagement. Then, the paper discusses the situation in Gaza since the war started in October 2023, emphasizing the importance of informal learning during displacement as an essential tool for resilience. The study nurtures their emotional, social, and cognitive development in an environment where formal educational structures may be temporarily inaccessible or disrupted. Re-engaging displaced learners in Gaza during and after the war requires immediate action to ensure continuity of education, as well as long-term strategies for rebuilding and enhancing the educational



system. This approach must be holistic, addressing both the academic and psychosocial needs of students in the context of ongoing recovery and healing.

2. Literature Review

2.1 Importance of the Sustainability of Learning Regardless of the Environment of the Learner

The UN Sustainable Development Goal 4 focuses on the quality of education. This term indicates the importance of young children and teens having access to education (Our World in Data team, 2023). This access is part of the ability for young people to acquire needed knowledge and skills, which are essential when reaching adulthood (Zhao et al., 2022), since many of them will be part of the workforce while some may continue their education further. Furthermore, the quality of education includes safe and inclusive learning environments (Edmondson & Lei, 2014; Washor & Mojkowski, 2014). To ensure the quality of youth development, the quality of teachers, teaching contents, pedagogical practices, and even involvement from parents and stakeholders are needed.

The relationship between quality education and the success of any community's economic and social development has been examined over the years (Newman, 1995; Rakowska & de Juana-Espinosa, 2021). It is generally accepted that quality education is essential for youth development and can contribute to an effective transition (of teens) into a productive workforce. Young children should be given an opportunity to develop a set of important life skills to manage their schoolwork, personal interests outside school, and social relationships. These skills typically include planning, emotional intelligence, reasoning, critical thinking, problem-solving, decision-making, and flexibility (Tikkanen et al., 2018; Santoro, 2023). Quality education implies that everyone has an opportunity to learn these skills through various means, including practice.

Learning is part of education, which enables young children to contribute to their communities and country in a meaningful way. The reason is that they need to tackle the challenges of tomorrow with the skills they acquire today. Learning allows young children to analyze complex issues and make informed decisions based on evidence and reason (Angus et al., 2009). This is essential when they become part of a country's workforce.

A productive workforce, based on successful youth development, is fundamental to success in a society and a country (Moustaghfir et al., 2020). The knowledge and skills of workers available in the labour market are key determinants for the growth and sustainable development of a country, especially in the era of Industry 4.0 (Blackman et al., 2016). Industry 4.0 implies that learning is an integral part of work due to the need for an organization to become more agile and flexible. This growth takes place as skilled workers can perform current tasks and learn new skills (and work). In addition, a productive workforce not only enhances existing industries but also allows a new business opportunity to emerge- start-ups, spin-offs, etc.

The gap between the skills and knowledge of the young workforce and the demands of current and emerging tasks/work has been a major concern in youth learning and



development (Argyris, 1991; Tikkanen *et al.*, 2018). This gap can lead to underutilization of human capital, business slowdown, divestment and relocation, stagnation, and eventually social divide. Thus, it is important that learning and work should be an integral part of young children's knowledge in today's economy (Clary, 2018; Decius *et al.*, 2019). In other words, an opportunity to learn (i.e., process and resources needed to achieve learning outcomes for students) should be assured and provided for future employability.

2.2 Challenges of Learning for Displaced Learners

Displacement represents an emergency that affects the livelihood and ways of living (Hubert, 2019). Displacement can last either temporarily (e.g., natural disasters, industrial disasters, temporary refugees, etc.) or permanently (e.g., border dispute, economic hardship, etc.).

Providing quality education in emergencies represents many challenges due to a situation's complexity and unpredictability (Hubert, 2019; Damm et al., 2022). Access to needed education infrastructure is the first challenge. Such infrastructure includes schools and roadways to schools- being damaged due to earthquakes, being occupied by armed groups or being used as shelters.

Safety and security are often cited as an important roadblock for displaced students. In military conflict-affected regions, school facilities often become a target of violence, which results in a fear of attending classes. Loss of educational records is also a challenge when dealing with an emergency due to the need for counselling and supervision. Buheji and Mushimiyimana (2023a).

Displacement due to armed conflicts tends to involve a large-scale population migration (Taghizadeh, 2020; Damm et al., 2022). A lack of resources required to sustain formal education (or even financial resources to set up temporary learning spaces, provide learning materials, and support educational personnel) hinders displaced students' learning. Maintaining temporary learning during a prolonged disruption period (from displacement) is often a difficult task. This is due to insufficiently trained teachers or educational-related personnel. An inability to provide a more flexible pedagogical method to address academic and psychosocial needs is also a challenge. Armed conflict-related displacement tends to contribute to a lack of qualified teachers and education personnel, which seriously hampers the ability to provide formal education.

Furthermore, many students (of all ages) likely have experienced traumatic events and violence, which result in displacement (Hubert, 2019; Taghizadeh, 2020). Generally, this experience affects their ability to engage in learning properly and effectively. Recognizing psychosocial needs becomes critical when organizing learning sessions and an educational system in an emergency. Displaced students, who are forced to migrate to another country, are also faced with language and cultural barriers. These barriers have resulted in the possibility of a lost generation of young children who miss out on education. Therefore, developing and innovating new ideas to provide safe learning spaces is needed to ensure continuous youth development.



2.3 Impacts on Learning from Displacement and Disengagement

Displaced and disengaged students share some common challenges that can be beneficial for further planning and assistance in education. For instance, the feeling of hopelessness and isolation is widespread among these students (Ferguson et al., 2007). A lack of attention and concentration, as well as a slow development of cognition (i.e., a mental process that incorporates thinking, language, learning ability, memory, and perception) have been consistently found among displaced and disengaged students (Hubert, 2019) and Schnitzler at al., 2021). Sometimes, non-participative or even disruptive behaviour can be expected.

It is generally recognized that displacement is much more serious than disengagement (Hubert, 2019; Fernández-Castro et al., 2022). This is due to more negative impacts on a student's opportunity, accessibility, and ability to learn. Displacement (from natural disasters, industrial disasters, armed conflicts, economic hardship, and school closure due to a decline in population) has been examined more extensively during the past few decades. The common psychological problems include isolation, post-traumatic stress disorder, depression, and anxiety (Taghizadeh, 2020; Damm et al., 2022).

When people look for safety by leaving their homes and communities (either forcefully or voluntarily), emotional distress should represent an area of concern (Damm et al., 2022). It is generally expected that displaced students experience a higher likelihood of depression, anxiety, and post-traumatic stress disorders. These symptoms are the result of circumstances that they need to deal with during their migration. Also, the difficulty in emotional regulation and cognitive functioning is expected to occur as part of the lasting severe stress which stems from a disturbing experience (Hubert, 2019; Taghizadeh, 2020). Emotional self-regulation is a critical skill a person needs to develop from childhood to adulthood (Chieng et al., 2023).

The inability to control emotion caused by displacement, contributes to negative emotions, socially unacceptable behavioural choices, and disruptive behaviour. Poor cognitive functions, often exhibited by displaced students, result in slow information processing, and inability to acquire reasoning and decision-making skills. Unfortunately, male and female students alike who are displaced from their homes and communities similarly exhibit these symptoms.

2.4 Development of Informal Learning for Displaced Students

Despite being ousted from their homes and communities, learning opportunities should still be created for displaced students. In addition, the conditions for providing formal education (e.g., an organized and regulated educational system which consists primarily of a curriculum, assessment and evaluation, and needed infrastructure such as teacher training and facility and laboratory for certificate and degree awards) are either limited or impossible. It is important to further note that formal education is often associated with schools, colleges, and universities. The learners or students attend lessons either in person or through an available digital platform. Unfortunately, a displaced student usually cannot participate in formal education (Damm et al., 2022).



Given the challenge of offering formal education to displaced students, there is a need to recognize that an individual learns 90% of the time informally- unstructured and self-driven without specific learning outcomes, as per 70-20-10 framework of learning (Blackman et al., 2016; and Clardy, 2018). In other words, informal learning reflects learning outside the classroom with no clear learning objectives. Informal learning is viewed to be unplanned and self-directed by the learner him/herself (Decius et al., 2019).

To integrate informal learning as part of educational opportunities for displaced students, many key takeaways from previous studies (displaced students due to war and military conflicts, tsunami, floods, earthquakes, economic migration, etc.) have emphasized the importance of a safe learning environment (learning freely while feeling safe enough), foods and nutrition, and engagement, logistics, and support services (especially emotional support to help overcome fear and despair as part of post-traumatic stress disorders).

3. Methodology

Based on the definitions and reviewed literature on learning during displacement, the authors set a construct that could address the specified needs of Gaza children during the war that started in October 2023.

The framework focuses on developing initial informal learning that would help the displaced students cope with the challenges and mitigate their losing learning opportunities and experiences while they are growing and developing. This is a very important move for Gazans if they would like to keep their struggle focused and bring back both economic growth and social advancement. The proposed constructs in the framework have taken into consideration the scenario if the war continues to be ongoing and the occupation continues its atrocities for a long time in Gaza.

The authors used a comprehensive review of the observations about the children from the camps and temporary shelters in Southern Gaza, specifically where the living conditions of the displaced children are recorded. The qualitative analysis of the observation notes from the social and mainstream media are used to identify key insights of the framework constructs so that the framework for informal learning is tailored to the needs of displaced children in Gaza. Inclusion of strategies for situated cognition, focusing on practical skills, emotional intelligence, and cultural relevance.

4. Situation of Gaza and the Need for Unique Displaced Learning Constructs

4.1 Situation of Gaza Displaced Children Today

The situation of displaced children in Gaza due to the war is beyond describing. Reports from UNICEF, and the United Nations Relief and Works Agency (UNRWA) show that children displaced by war are experiencing significant psychological stress. Gazan children and you are suffering every day and hour by hour from the deep exposure to violence, loss of loved ones, and the total disruption of their daily lives. This brings in a high probability of trauma, anxiety, and depression. NRC (2023)



The war on Gaza 2023 not only created a displacement or disrupted the Gazan children's education, but made many sources of life inaccessible, thus creating further sources of trauma and instability. There are no sources for wellbeing in Gaza today, Buheji and Khunji (2023). The displaced children face increased health risks, including malnutrition, lack of access to clean water and sanitation, and limited medical care. They are also more vulnerable to diseases and physical injuries. Aisha (2023)

Since the Gaza Strip is one of the most densely populated areas in the world, where just over 2 million people reside in the strip, in an area of 365km2, the forced displacement of almost the entire population to the South of Gaza. This is an area that is less than one-fourth of the strip where people, including children, are living horizontally in non-proper tents and have become entirely dependent on humanitarian aid. The terrible living conditions are putting people's health at risk. Relief Web (2023)

Many Gazan children are separated from their families due to the chaos of displacement, leading to increased vulnerability. The loss of a familiar community structure is also deeply destabilizing. Today, even at the time of writing this paper, all the basic necessities like food, clean water, and shelter can be scarce in displacement settings, impacting children's wellbeing.

The adverse experiences and environmental instability can have a long-term impact on Gaza's children's physical, emotional, and cognitive development. The amount of stress and instability can affect Gaza's children's social skills and emotional development, which can lead to struggling with forming relationships or having issues with trust and attachment.

The uncertainty of when Gaza-displaced children might return home or what their future holds can be a significant source of their stress and anxiety. However, on a positive note, many Gazan-displaced children are showing remarkable hardiness, resilience, and adaptability in the face of adversity, developing coping skills that can serve them throughout their lives. Buheji (2023), Shah (2015)

4.2 Role of Informal Learning During Displacement in Sustaining the Resilience of Gaza's Children

Informal learning during displacement can play a crucial role in sustaining the resilience of Gaza's children amid the adversities of war. In the context of the war on Gaza 2023, where formal education has been disrupted since October of that year and the living conditions are deteriorating immensely, informal learning is becoming the only vital means of maintaining continuity in children's development and providing psychological comfort. Buheji and Mushimiyimana (2023b)

Engaging in informal learning activities can offer a sense of normalcy and routine, which is essential for children dealing with trauma and stress. Activities like drawing, storytelling, or simple scientific experiments can provide a distraction from the harsh realities of war and displacement.

Informal learning environments can encourage problem-solving and critical thinking.



Activities that require children to find solutions, make decisions, or engage in creative thinking help maintain cognitive development and foster resilience. Learning new skills, whether it's a language, a craft, or practical life skills, can boost a child's confidence and sense of competence. This self-efficacy is a key component of resilience. Shah (2015)

Part of sustaining the spirit of resilience and coping among the children of Gaza is to maintain curiosity and love for learning every day, Buheji and Mushimiyimana (2023b). By keeping the spirit of inquiry and learning alive through informal methods, children can continue to grow intellectually. This continuity is essential for their long-term educational trajectory and for instilling a lifelong love for learning. Therefore, maintaining a connection to one's culture and heritage is vital. This includes engaging the learners in cultural stories, traditions, and practices to help reinforce a sense of identity and belonging, which is stabilizing for children.

4.3 Re-Engaging Displaced Learners – During & After Gaza War 2023

Re-engaging displaced learners during and after the War on Gaza, which started in October 2023, requires a holistic approach that addresses the immediate challenges posed by displacement and the risks generated by a fierce conflict that has now passed more than three months. The services offered to the displaced learners from Gaza are expected to be adaptive, resilient, and sensitive to the trauma experienced by the targeted learners, specifically the Gazan children.

The services planned can be described by a framework that focuses on the displaced learners during and after the war in Gaza. The most important part and the focus of this study is how to provide the environment and start the learning process during and immediately after the war. The provision of approaches that use emergency education along with psychosocial support should be the top priority for this flexible curriculum and schedule. The displaced learners should have proper support through community engagement approaches where possible.

Providing a safe and suitable learning environment is difficult especially if the deterioration of the displacement condition is meant to be is hostile and devastating, as the Israeli forces (IDF) are doing. Hence, the only compensation for this is to set up mobile classrooms and temporary learning centres (even in tents) in safe zones and shelters. Wherever possible, the informal learning team can utilize local radio and TV broadcasts to deliver educational content, as these can reach learners without internet access.

The educators should work to train educators in trauma-informed teaching practices to address the emotional and psychological needs of the displaced learners. They should also work to provide access to counselling and mental health support within educational settings.

Informal learning should focus on a curriculum that focuses on core competencies and life skills that are most relevant during times of crisis. The learning program should recognize that displaced students might not be able to adhere to traditional schedules and offer flexible learning options. The learning would be more fruitful if the leading delivery team managed to engage the parents and the guardians in the learning process to provide support and stability



for learners. Both teachers who are also displaced and other local volunteers should work to maintain a sense of community and continuity.

After the war, informal learning can gradually transform into formal learning once the educational infrastructure is reconstructed. Catch-up programs should be implemented for students who have missed significant amounts of schooling and are late in informal learning. Vocational training and skill development training programs for older students who may need to enter the workforce should be offered at this stage. Psychological support for students, teachers, and staff should stay for a long time, even after the war, where it could be integrated with social-emotional learning into the curriculum to support students' mental wellbeing.

5. Proposed Framework for Constructs of Informal Learning for Gaza-Displaced Children

5.1 Situated Cognition (Learning) as Part of Informal Learning for Displaced Students

5.1.1 Defining 'Situated Cognition Learning'

To ensure that displaced students are provided with quality education, it is essential to consider many issues, such as learning experience and motivation to learn. Due to the impracticality of organized teaching and learning (e.g., lack of facility, teachers and other supporting personnel, and safe learning environment), situated cognition is proposed as the foundation for informal learning. Situated cognition represents the study of a learning process which focuses on actual activity or work (i.e., doing something in the real world) (Brown et al., 1989). The concept stems from the premise that learning effectively takes place in a specific situation that has social, cultural, and physical contexts (Kumar, 2021). It is important that a learner (or a student) can relate to these contexts when he or she learns. This relatedness is expected to strengthen the motivation to learn among students.

For displaced students, it is important that they acquire a set of skills that is consistent with their contexts. A deep understanding of the expected behaviours, emotions, attitudes, beliefs, and perceptions of displaced students under the social, cultural, and physical contexts that cause the displacement is essential when designing informal learning. For instance, regulating the mood (or feeling) of a person can be part of the skill set required by displaced students. Moreover, learning survival skills such as building a shelter or signalling for help should be an integral part of informal learning.

5.1.2 Role of 'Situated Cognition Learning' in Ensuring Quality of Informal Education for Displaced Learners

Providing quality education through informal learning indicates that there is a need to construct the social, cultural, and physical contexts for displaced students. This construct needs to be shared and communicated clearly before informal learning can take place. It is essential that what is learned can be applied or adapted by displaced students now (or soon). Simply put, the construct needs to focus on doing so through hands-on experiences (or a combination of observing and practising) instead of knowing and understanding a subject or topic.



Thus, a proposed construct of informal learning for displaced students requires stakeholder engagement and partnership. Identifying a set of problems or challenges within the social, cultural, and physical contexts of displaced students is the first critical step that triggers their learning interests, even in unstable situations such as the violence in Gaza. Simply, these problems or challenges must be realistic and relevant to the situation that displaced students can relate to. Finding someone who can be a coach (or a role model) is an important next step. This person(s) needs to inspire belief and confidence in displaced students, which helps enable them to acquire and practice the skills (Vollmeyer & Rheinberg, 2005). Note that he or she can be in a virtual setting. Creating learning conditions and an environment which promotes trust, sharing, and reflection among displaced students represents another important step in introducing informal learning. It is essential that displaced students feel that they are given an opportunity to learn and succeed while being actively engaged (Washor & Mojkowski, 2014).

When learning contexts, stakeholder engagement, and establishment of learning environment are completed, the set of skills (e.g., survival skills, vocational or professional skills, emotional intelligence, etc.) for displaced students can be identified. These students need to feel that they can use the skill set now or in the future. There is no need to structure how they learn and how they are to be academically assessed and evaluated. Thus, displaced students can learn when they feel safe and comfortable.

5.2 Maintaining Cognitive Reserve in Informal Learning

Maintaining cognitive reserve in children, especially in challenging contexts like the war zone in Gaza, involves engaging them in informal learning activities that stimulate cognitive development and resilience. Informal learning refers to learning that occurs outside formal educational settings, such as schools. It can happen through play, exploration, social interaction, and other everyday experiences. Buheji (2021)

To maintain this cognitive reserve among the children of Gaza, we need to encourage them to have play activities that stimulate problem-solving and critical thinking. Games that require strategy, construction toys, and imaginative play can enhance cognitive abilities. Buheji and Buheji (2020).

Sharing stories, whether through books, oral narratives, or family histories, can improve the Gazan-displaced children's language skills, memory, and imaginative thinking. Reading can be encouraged through storytelling sessions, even if access to physical books is limited. The displaced learners of Gaza also need to be engaged in drawing, painting, songs, local dance, or drama that would boost their creativity and emotional expressions. These activities also support cognitive development by improving attention, memory, and spatial-temporal skills.

If it is safe to do so, exploring the natural environment around the displacement camps can be a rich educational experience. Activities like identifying plants, observing animals, and understanding ecological processes can enhance scientific thinking and curiosity. Part of the cognitive reserve should focus on teaching the children practical skills such as cooking, gardening, basic repairs, or sewing to enhance their problem-solving skills and understanding



of real-world applications of knowledge. Buheji (2021)

Participation in cultural or family traditions can provide children with a sense of identity and belonging, which is crucial in times of crisis. It also helps in learning about history, values, and social norms. Interactions with peers can be a valuable source of informal learning, where children learn social skills, empathy, and diverse perspectives.

It is important during displacement situations for the learners to be engaged in physical activities and sports can enhance not just physical health but also their cognitive functioning, especially in areas such as coordination, concentration, and teamwork. Practices such as mindfulness, prayer together to meditate, and even simple breathing exercises can help children manage stress and improve concentration and mental clarity.

These informal learning activities can be particularly valuable in contexts where formal education is disrupted, helping children to continue developing cognitive skills and resilience despite challenging circumstances.

5.2 Designing Constructs Gaza's Informal Learning Framework

For the proposed construct to be effective, the skills to be acquired should result in regular participation. This participation indicates that displaced students view the skills to be meaningful (e.g., can be immediately applied or can be useful in the future). Displaced students need to recognize that learning is not independent of the real world. In fact, learning is to help them survive in the real world.

There are many critical factors to ensure the proposed construct's effectiveness. The first one is the insights into tracking the development of displaced students (without formalized assessment and evaluation). In other words, how they can deal with or progress through the social, cultural, and physical contexts of their situation should be individually observed. The set of skills required in informal learning for displaced students can be dynamic and should be regularly reviewed and updated. As displaced students are older (especially displacement becomes unfortunately permanent), the skill set may likely change. Also, how the skills can be learned and acquired (e.g., use of user-generated content, etc.) needs to be considered at the beginning with active engagement with key stakeholders.

To illustrate all the constructed necessities for applying informal situated cognitive learning based on the situation of Gaza-displaced learners, the authors have proposed the following framework illustrated in Figure (1). The framework constructs focus on first creating a 'safe spaces for learning', then the second construct combines informal education with psychosocial services through the use of flexible curriculum and scheduling. The leading teaching team should use the construct for trauma-informed teaching practices to develop 'situated cognition learning'. This simple framework helps to address Gaza's displaced learners, especially the children today, as they are surviving under very difficult learning conditions.

It is worth mentioning that designing a framework from constructs that address Gaza's displaced learners, using both informal learning, and situated cognition frameworks, involves



creating an educational approach that is adaptive, context-sensitive, and responsive to the unique needs of these suffering youth and children. Implementing these constructs requires a deep understanding of the specific needs and circumstances of displaced learners in Gaza as per the displacement area. Thus, we need to be creative and flexible in creating a learning environment that is not only educational but also supportive and empowering for these learners.

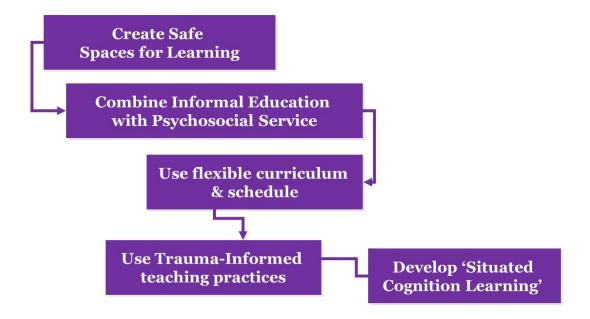


Figure 1. Represents the Proposed Theiritcial Framework for Steps Recommended for Applying 'Situated Cognitive Learning' for the Displaced Learners of Gaza during and after the War of 2023

6. Discussion and Conclusion

The research presented in this paper highlights the profound impact of displacement and conflict, like the ongoing war in Gaza since 2023, on the education and overall development of children. The study emphasizes the necessity of maintaining educational continuity and fostering resilience among displaced children through innovative and adaptable informal learning strategies. It underscores the importance of creating learning environments that are not only physically safe but also emotionally supportive, enabling children to cope with trauma and stress.

The framework proposed for informal learning, rooted in situated cognition, offers a practical approach to education in crisis situations. It focuses on developing skills and knowledge that are directly relevant to the children's current living conditions and future needs. By engaging children in activities that promote problem-solving, creativity, and cultural connectivity, the framework aims to sustain their cognitive reserve and foster a sense of normalcy amidst chaos.



This study serves as a crucial reminder of the resilience and adaptability of children, even in the most adverse conditions. It calls for a concerted effort from educators, policymakers, and international organizations to prioritize the education and psychological wellbeing of displaced children. The findings and recommendations of this research contribute to the broader discourse on education in emergencies, offering insights and strategies that can be applied in similar contexts globally.

In conclusion, while the study acknowledges its limitations in applying technology to this informal education framework, the authors emphasize that it focuses on the priority of sustaining the cycle of learning in war-torn Gaza. The focus of this paper is that we need to keep the community engaged, creative, and focused on bringing in culturally relevant and hands-on learning. We need to ensure that children's cognitive reserves continue to flourish and develop even in the midst of conflict. However, the authors say that future studies in informal learning cover more focused solutions, such as using low bandwidth learning, i.e. low-tech solutions, that help the displaced Gazans and similar communities overcome the oppressor's atrocities.

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Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

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