Beyond Conventional Boundaries: A Literature Study on Madrasah Management and the Construction of Online Learning Innovations

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Abstract: In the current era of the new normal, substantial transformations are unfolding within the education sector. E-learning has emerged as a prevalent alternative for augmenting individual proficiencies and abilities. Madrasahs have transcended the confines of scientific dichotomy, instead embracing innovation and change. The online learning process, when effectively implemented, significantly impacts student quality improvement. This research aims to comprehensively analyze the dynamics of online learning, thereby discovering an online learning model in madrasas. The study is qualitative, using library analysis techniques. Data sources are derived from the results of scientific journal research or primary books. The study results identify various online learning modalities, namely (1) the contribution and significance of leadership roles in policy and building a culture that supports the learning process; (2) the enhancement of teacher and manager professionalism, specifically emphasizing technical skills (cognitive-practical); (3) the implementation of continuous monitoring and evaluation of the program's success, as well as a means of feedback on the direction of online learning. The research results also reveal that resource availability, teacher readiness, self-confidence, student accessibility, and motivation play essential roles in learning integrated with information technology.

Keywords: Curriculum management; madrasa management; organizational effectiveness; online learning.


Article info: Submitted: 26th February 2022 | Revised: 11th May 2023 | Accepted: 31th July 2023

INTRODUCTION

The implementation of technology-based learning is a crucial and time-sensitive (Prasongmanee et al., 2021). This phenomenon necessitates innovation in the realm of education. As the foundation of educational services, learning serves as the benchmark for the quality of school education, enabling the creation of adaptable and competitive graduates in the era of Industry 5.0 (Fukuyama, 2018; Shinno et al., 2016). The current situation is that society needs a flexible and resilient education system because we face an unpredictable future disruption (Minello et al., 2021; Reimers, 2022).

In the context of managing Madrasah educational institutions, referring to the results of research to achieve the target of qualified graduates, effective learning is needed which cannot be separated from the teacher competency factor (Albrahim, 2020; Muhammad et al., 2021). The essence of educational services is the learning process, which has been the subject of numerous research studies. Suwanda, Zuhairi, and Wei, for instance, have conducted research on online learning that emphasizes the need for continuous quality assurance in the learning process to guarantee customer (Suwanda et al., 2021; Wei & Chou, 2020; Zuhairi et al., 2020). In addition, Dias et al and Berkowitz et al.
suggest that there is a need to increase collaboration with parents and the government as a support system for online learning (Berkowitz et al., 2021; Dias et al., 2021).

In the conditions of uncertain situations, teachers need to improve competence in several aspects, operatively in terms of information technology competence. In the context of madrasa management, the urgency of technology is crucial for sharing experiences between education practitioners (Sugiarto & Fitri, 2023; Umah et al., 2023). The pattern of technology-based education is carried out to stop the movement of global competitiveness, so the madrasa policy relies on diverting most learning activities online (Solahudin & Fakhruroji, 2019). Problems arise if some institutions do not have a wealth of online resources that can be used for teaching, with appropriate duration of materials and guides for students, as well as opportunities for co-creation of teaching resources.

Madrasahs have difficulty implementing changes quickly to complete the specified learning targets (Prasetyo & Fadhillah, 2022). Doubts about the quality of learning can be seen from the material's content, as well as responses to the material in all its varieties used by students when they are involved (Yuzar et al., 2022). Pressure from multiple sources can minimize the rigorous engagement that complex planned learning outcomes often require (Hikmawati & Hosnan, 2022).

The sector of education would never return to the way it was before, and the use of electronic platforms is a major component in the preparation of future educational curricula. The learning experience new normal period is a crucial moment for educational institutions in the process of transforming change towards the era of the Industrial Revolution 5.0 (Li, 2020). For learning is not something that would only be used by a few people but also access for everyone, so that in the end people who take formal classes are not a guarantee of quality (Rapanta et al., 2021).

It should be noted that educational service providers are already several steps up the learning curve and have relatively good resources. The introduction of learning innovations shows that many global faculty colleagues are far below the learning curve, and are much more resource-constrained (Lailisna, 2020). Online learning modalities are a set of strategic solutions used by school administrators to develop innovative, technology-based learning processes. This necessitates collaboration among school components such as principals, teachers, students, and education stakeholders (Bonfield et al., 2020; Hanafi et al., 2021). Learning modalities are the various means by which experiences (inputs) and outcomes (outcomes) are accessed and demonstrated (Rekalde-Rodriguez et al., 2022).

Coming from a positive perspective, the new normal era is also a unique opportunity as well as an opportunity to observe how teachers acquire new knowledge quickly in active practice. The practice of online learning has overcome the challenge of sharing professional knowledge about what seems to be more effective in learning methods, especially in the aspect of teaching material.

This study discusses the theoretical construction of online learning and places it in a curriculum understanding rooted in continuous technological innovation. The research seeks to summarize the results of the assessment or various findings of the panel of experts as well as diagnostic conclusions in the implementation of online learning. Emphasizing the implementation of an integrated online curriculum is a challenge for madrasa managers because it requires cultural and technological adaptation that may have been planned for a much longer period.
METHOD

This research is a qualitative. This method was adopted for the study of literature related to effective learning models. The interesting collection of relevant studies visited to capture the essence of sustainable bold learning. The fundamental analysis approach of identifying and examining content involves four steps; first identifying relevant text to be examined and determining the theoretical frameworks. Second, using academic databases (scopus, crossref, WOS and Sinta database). Third, the research conducted a literature search for publications whose titles, abstracts, or keywords contain the selected search phrases. Fourth, the phrases and keywords used in the literature search include learning management activities, classroom management, Islamic school activities, school curriculum, teacher capabilities and competencies, academic outcome, academic achievement, and SWOT strategies. Readers will comprehend the purpose of data analysis in the theory-generating meta-synthesis research (Harris, 2019; Ruecker & Svihlal, 2019).

We also included book chapters, working papers, and other articles not subjected to the peer-review process. We then examined the selected articles in-depth to determine the theoretical frameworks (Finfgeld-Connett, 2018). Library research is essential when researching online learning methods. This study has a large collection of journals, books, periodicals, and other academic resources (Frau-Meigs et al., 2020; Gournelos et al., 2019). Researchers can now access a vast body of literature on online learning modes, including the most recent research findings and best practices. This is critical for ensuring the research findings' validity and reproducibility in future studies. The development of theoretical frameworks that underpin research on online learning modalities.

RESULT AND DISCUSSION

The Development of Madrasa Learning

Considering that in the globalization era, national education is required to pay attention to the developments occurring internationally, therefore external adaptation is needed, in this case, making the study of teacher competence the main element in the implementation of formal education, it is also necessary to consider how teacher competence is fostered and developed in several other countries. This empirical study was conducted to enrich the details of the competence and efforts to develop the teacher's competence (Nuraini et al., 2021).

Learning Model Based on Technical Skills

Learning can be defined as an attitude or behavior (psychologist) that is relatively permanent to make changes as the result of individual experience. Learning is also defined as how individuals always prepare for change by doing activities that never stop during their life. Operational activities in learning are reading, counting, and writing (Yeh & Wan, 2019). Reading is an activity to observe, study, and analyze situations and circumstances of the surrounding environment. Counting is an activity to compare and find out the profit and loss from each activity in the environment (Uline, 2022). While writing is an activity of taking notes, and taking an inventory of all activities related to the recorded activities of the human mind which is then used as a data center (data based) for individuals (Kem, 2022; Tarchi et al., 2022).

The important part of curriculum improvement consists of skills training. The beginning of the implementation of distance learning invites various kinds of reactions. Some education practitioners have a sceptical view, especially regarding professional skills.
programs that are not possible to teach skills online. Many requirements must be met to become a teacher, including administrative, technical, psychological, and physical requirements (Driskill, 2018; Kitchen et al., 2020). Then a teacher must have physical and spiritual maturity as well as social education.

A more comprehensive teacher will have three levels of professional qualifications, namely, capability, innovator, and developer. To carry out their duties operationally, the teacher has several roles, including informatorily, organizer, motivator, facilitator, mediator, counsellor, and evaluator (Chondekar, 2019; Woolf, 2019). In carrying out all these tasks, madrasa teachers as professionals, require a teacher's code of ethics, which becomes a behavioural guide for teachers in interacting with student subjects. The teacher's code of ethics in principle is a form of teacher empowerment in helping the success of the teacher's work for the benefit of students.

Clinical reasoning is needed in creating skill-based online learning. The focus of learning is to form cognitive skills, procedural or academic skills that can be taught online effectively (Daulay & Ritonga, 2021; Hanushek & Rivkin, 2012). It is to design an effective pattern of online skills training and education the learning process is promoted when learners are involved in solving real-world problems. The principles that are used as references are the principles of instructional design which consist of several stages, namely (a) the pattern of material activation which aims as a reminder of relevant prior knowledge; (b) the pattern of task demonstrations accompanied by explanations depends on the skills of the teaching instructor; (c) feedback patterns, namely the provision of new knowledge or skills-based assignments; and (d) patterns of integration of newly learned skills in practice made by students (Albrahim, 2020; González-Pérez & Ramírez-Montoya, 2022).

The process of applying the pattern can be carried out online in the form of quizzes (activating prior knowledge), tutorials and videos (explanation and demonstration of skills), and assignments or simulations (applying newly learned skills).

![Figure 1. Focus of the Study on Technical Skills Improvement](image)

In emergencies, many online learning models have been developed. Apart from that, it needs the support of the madrasa principal's policy in its implementation (Prasetyo & Fadhillah, 2022). Policy-making runs a high risk when madrasas are judged on their capacity to achieve high student outcomes without the support of an effective learning system (Benoliel, 2021). Learning from is said to be effective if it reaches the set goals. It is not only relying on assignments but also re-learning on the aspect of teacher professionalism.
Furthermore, teachers of online learning are more concerned with teaching and curriculum design than learning (Uline, 2022; Zajda, 2023). In the context of distance learning teachers have different roles due to the complexity of educational institutions in modern society. Some tasks such as administrative fulfilment have the potential to divert them from active participation in teaching activities thereby undermining the implementation of distance learning (Prasetyo & Fadhli, 2023; Wedasuwarri et al., 2023). Educational units must reflect on how to maintain a balance between the use of a normative approach to ensure learning effectiveness. On the other hand, principals can also give the freedom to make innovations and create new opportunities for school development.

The Principal's Leadership Role in Building a Supportive Culture

In addition to strategic decision-makers, in the aspect of social relations, principals are able to build awareness of technological awareness for the organization's community. Technically, principals have human relations skills so that teachers can improve their competence independently in terms of technology to create overall stability. At the end, when teachers individually have the awareness to learn, a learning environment will be formed. In the concept of a learning organization, the implementation of the program is free to focus on the strategic side (Kools & George, 2020).

Principals can accommodate transformative leadership styles so that they have the insight to quickly manage the implementation of educational technology in organizations (Prasetyo & Kifla, 2023). Online learning is not a single entity but a collection of modalities and technologies that are constantly evolving. However, madrasa managers are fully aware of the limitations of the current and actual use of technology. With overall accountability to optimize the capabilities of educator infrastructure, especially in technology competence, providing high availability and optimal performance.

Likewise, social factor is important to be known by principals and teachers to be used as a foothold in delivering learning materials and managing learning activities. This information is also urgent for developers of media and learning resources so that the strategies and learning media used in learning are in line with the socio-cultural conditions in which students live. Good and ideal leadership grows not only based on the length of work experience a leader has but also how a leader can take advantage of every potential within himself/herself, have a competent behaviour, attitude and work style to face the digital era. (Robbins et al., 2016) mention that the importance of leaders adopting their leadership methods in the digital era.

Two factors affect teacher productivity namely technology and individual performance. Teacher performance factors in learning are determined by two things, namely ability and motivation, this is in line with Hidayati and Campbell's research (Campbell et al., 2021; Hidayati & Mubarak, 2021). The descriptive analysis provides a detailed description of aspects that affect teacher competence, which consists: the first, is individual variables, including abilities, skills, mental physical, family background, social level, experience, demographics (age, origin, gender); the second, is organizational variables, including resources, leadership, rewards, job design structure; and the third, is psychological variables, including perception, attitude, personality, learning and motivation (Ghani et al., 2021; Trullàs et al., 2022).

The long-term prospect of this leadership emphasizes the main principles and practical insights for educators in Islamic educational institutions, both madrasas and
Islamic boarding schools who can be at the forefront in optimizing the potential of online learning in the realm of madrasa education.

**Learning Strategies and Stages for the Effective Instruction**

Learning strategy is one of the factors that influence the achievement of student competence. Learning strategies have developed quite rapidly along with the development of information and communication technology. One of them is online learning (Santoso et al., 2022). Online learning is based on a paradigm shift, from teacher-centred to learner-centred. This encourages madrasas to develop e-learning as a learning method that is perceived as being learner-centered. The use of e-learning can motivate the improvement of the quality of learning and teaching materials, the quality of activities and independence of students, as well as communication between teachers and students as well as between students. This e-learning learning process utilizes information and communication technology systematically by integrating all learning components, including learning interactions across space and time, with guaranteed quality.

In quality studies, attention to the fulfilment of technological aspects for madrasas should be welcomed positively because it is a madrasa benchmarking strategy. For being effective, local education authorities (madrasah policymakers) can examine what policy actions are being implemented to regulate madrasahs and how principals respond to and address these policy actions. Benchmarking strategy through its quality assurance system and intervene if the results are poor.

Innovation can be done by a teacher in every lesson in the classroom. This innovation should be one of the important agendas for every teacher. Starting from curriculum analysis, preparing a mature lesson plan by adopting new things, for example: the adoption of learning approach steps, the adoption of classroom management ideas, and the adoption of learning models and so on without compromising the characteristics of students and the characteristics of institution. Starting from adoption, it will be found things that can be developed for the perceived shortcomings during the implementation of the adoption. The slightest thing found will be a big thing if the teacher succeeds in developing something in learning that is designed by himself and it will be useful for the teacher in achieving learning objectives as well as solving problems. All forms of development and design carried out by teachers in the classroom are a form of innovation (Martinez, 2022).

![Figure 2. Technical Development of Online Learning Design](image-url)
The prolonged pandemic requires madrasas to re-plan. The orthodoxy of learning and teaching in madrasas is also carried out through an original change approach with a new style of self-organizing school concept (Purbonuswanto, 2018; Zimmerman, 2023). This concept assists madrasas in building a comprehensive learning and teaching model on an organization-wide scale. The implementation of the model refers to several behavioural modalities. The first refers to teachers, namely the existence of a measure of teaching and learning standards and increasing teacher professional growth. Refers to students for developing student-centred programs and providing better feedback. Referring to the organization is the fulfilment of a more efficient and effective organizational design and the use of strong technology, and there is a legitimate balance between quality and productivity.

In realizing effective learning, madrasas need to build a safe and conducive psychosocial learning environment so as to provide time for students to study with teachers in their respective fields. This assumption is reinforced by research by Zamroni and Abdullah (Abdullah, 2019; Zamroni, 2019). Dialogic interactions that are closer to the family at home provide high learning motivation at the school level. In addition, the harmonization of peer relations when implementing the learning process in madrasas can support principals and teachers to promote more effective learning transitions (Pritchett & Viarengo, 2015). This effort is in line with the research results, but teachers need more support through concrete policies.

The advantage of online learning is flexibility, a condition where a student can schedule or plan their time to complete courses available online. Some madrasas in areas that are considered safe have carried out normal learning. When the madrasa finally carried out normal learning, one of the challenges faced was the strategy of meeting the individual needs of students who had contrasting experiences between participating in online and offline learning. This would require very different academic and non-academic interventions and support when madrasas operate normally. Madrasah managers share knowledge about technology from best practices, and technical workflows, to resource allocation and approach to strategy implementation.

**Effective Learning Modalities**

As a modality in learning system innovation, schools make the following synergistic efforts: (1) using the principles of organizational change to anticipate the direction of adaptation to online learning; (2) making good instructional design guides available for all online modalities; (3) implementing online learning is part of the development and part of the curation of existing resources; (4) implementing mixed learning including synchronous self-study with live online group discussions that synchronously can be applied quickly; (4) encouraging the joint creation of resources by students and educators; (5) provide examples of the adaptability of health professionals to new learning approaches; and (6) planning for sustainability facing Industrial era 5.0 (Aheleroff et al., 2022; Chourasia et al., 2022; Tavares et al., 2022).

An important technical step is to form a curriculum content team consisting of teachers who have educational design expertise. Effective collaboration is needed for the achievement of learning outcomes. Learning evaluation includes identifying the roles and responsibilities of teaching instructors, setting deadlines, and the effectiveness of clearly delivering goals and expectations (Cahyadi et al., 2022).
Collaborative efforts and also as an increase in the effectiveness of the learning process is the contribution of external roles, especially family support (Willis et al., 2021). Discussion and application of knowledge in the family play an important role in increasing students' understanding of the study of knowledge gained in madrasas. The direct application gradually affects not only students who apply but also those who receive applications.

The application of knowledge in the family also forms a positive mentality so that efforts are created to make positive changes in life. In the context of Islam, useful knowledge is that which draws closer to Allah SWT (Salabi et al., 2022). Positive changes are also created by relying on Allah so that our students will gain spiritual strength to make changes. After that replace our thoughts with positive thoughts, this will affect the condition of the soul.

Unfortunately, parents are skeptical about online learning. For this reason, parents need specific and accurate information, so that online learning is not perceived as negative, resulting in pessimism. Information with positive narratives can educate and advocate for parents and their children (Aziz et al., 2022). Sound information is generated through an evaluation and monitoring process. The data collected contributes positively to stakeholders in generating policies. One is a diagnostic assessment of individual student needs and has expressed concern about the potential loss of learning time and excessive student remediation. Lake's research reveals an evaluation model with a panel task model, namely a field assessment of the status of diagnostic testing: what type of assessment is best used for what purpose.

Learning strategies during in new normal era need to be rearranged. Operational activities that can be carried out, First, the strengthening of the government's role in this case the education office as a leader at all levels, both province, district and city. Second, to give policy authority to the education unit in setting a comprehensive strategy, all components of the control strategy can systematically be pursued in synergy with the capacity of the available resources. Third, the strategy is implemented systematically through a SWOT analysis study consisting of efforts to analyze weaknesses and strengths and externally look at opportunities and threats.

Fourth, build sustainable community participation. This activity is important to do as a provision for the future. We realize that this pandemic cannot just be left to the government. Joint solidarity is needed, taking real actions hand in hand in synergy. As a
sustainable program, educational institutions can also carry out risk assessments and worst-case scenarios. Readiness and response need to be well planned.

![Figure 4. Change Phases](image)

Technology-based learning is an ideological construct that reflects a particular material interest and has specific implications for education and training. The link between learning modalities and digitalization and artificial intelligence is urgent. For some researchers, this causes learning to be ineffective because it is not ready, while for others, even though it is constrained by facilities and facilities, it does not cause learning to stop. Online learning is a must at this time, therefore the implementation of the system will quickly resolve the crisis that cannot be solved.

The strong relationship between learning modalities as a requirement for learning effectiveness is taken. The researchers is adopting a qualitative analysis of organizational development systems. These experts suggest that the relationship between technology and skills is somewhat more complex than the protagonist of technological unemployment would describe.

The review concludes by stating that technology and competence enhancement are related to social relations. How synergistic components in the system between policymakers, professional competence of teachers is the result of a balance of leadership, not only in social formations but also globally. The extent to which system development is supported by policies is in line with the concept of organizational effectiveness, namely the extent to which schools are able to achieve curriculum targets amidst limited infrastructure. This research is interesting because it has implications for considering the response of progressive education. However, such practices need to be regulated within the broader politics committed to the development of a tech-savvy society.

As the main driver in the learning process, the teacher’s role is to design learning paths according to each individual’s capacity (Wekke, 2016). Meanwhile, institutions are required to respond through policies that support the achievement of technology-based learning (Utami et al., 2022). Various video conferencing platforms also play an important role in fostering a sense of community, as well as promoting a sense of solidarity in demonstrating the indirect social impact of the technology as well as research (Fahmi et al., 2020) and Prasetyo (Prasetyo et al., 2023).

In Indonesia, madrasa managers believe that the recovery of education in new normal era begins by providing optimal services to students, in this case, access to
technology from infrastructure procurement and the availability of professional human resources. Mainly, the approach strategy adopted by madrasas prioritizes equality to ensure access to learning for students. Not only external factors, but the results of the study also show that the achievement of these targets can be realized through the commitment of teachers to the learning process on the aspects of quality and equity.

The expected implication in the future is that the process of learning activities is carried out by combining face-to-face learning with technology so that integrated learning and classrooms are reversed. A learning environment that is adaptive to technology can also increase the learning potential of students because unlimited access to information can be obtained through technology. Learners can learn anytime and anywhere, thereby developing new skills in the process towards lifelong learning. The government also recognizes the growing importance of online learning in this dynamic world.

**CONCLUSION**

The findings reveal that madrasas are increasingly moving towards online learning or e-Learning. Online teaching carried out by madrasas causes problems such as the absence of official distance learning curriculum implementation guidelines, all learning activities from technical and operational aspects are submitted to each madrasa. In addition, the lack of resources and learning facilities is a basic aspect that must be met. Weak supervision of students, especially regarding technical issues such as the lack of strong signals in remote areas, and the high cost of quotas are challenges in online learning. The results showed that students had the basic facilities needed to participate in online learning. Online learning apart from being a benchmarking tool for madrasas also has flexibility in its implementation and is able to encourage the emergence of independent learning and motivation to be more active in learning.

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