

Principal's Leadership in the Implementation of Quantum Leadership at Junior High School 16 Kerinci

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ABSTRACT

Leadership is an important aspect of educational institutions because it reflects a person's ability to influence, direct, and motivate others to achieve common goals. This article discusses the implementation of Quantum Leadership by the principal at SMP Negeri 16 Kerinci using a descriptive qualitative approach through observation, interviews, and documentation. The findings show that the principal has implemented the principles of Quantum Leadership, namely self-awareness, adherence to vision and values, acting quickly and adapting to circumstances, viewing problems holistically, being independent in decision-making, humility, understanding problems from different perspectives, identifying the root causes of problems, appreciating diversity, learning from difficulties, commitment to service, and carrying out responsibilities sincerely and wholeheartedly. The implementation of these principles has created a conducive school climate, increased teacher innovation, and strengthened communication and cooperation among school members. The implementation of Quantum Leadership is influenced by the principal's individual factors, internal school factors, and external environmental factors. Therefore, it is recommended that principals, teachers, and the government continue to support the development of effective and adaptive leadership in improving the quality of education.

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1. INTRODUCTION

Leadership is an important aspect of every organization, including educational institutions. Leadership reflects a person's ability to influence, direct, and motivate others to work together in achieving common goals (Hidayat, 2021). In line with this, (Syahril, 2019) states that leadership is a process of influencing and directing the activities of group members optimally in order to achieve organizational goals. This is reinforced by (Yukl, 2020), who argues that leadership is the process of influencing others to understand and agree on what needs to be done and how to do it effectively. In the context of education, the leadership of school principals plays a strategic role in creating an effective learning environment, building cooperation, and encouraging the achievement of educational goals (Febriani et al., 2025).

The leadership of a school principal is not limited to administrative functions, but also includes the ability to create a conducive, innovative, and collaborative school climate. Principals are expected to build good communication, motivate teachers, and involve all school members in the educational process. The success of an educational institution greatly depends on the principal's ability to manage all components within the school (Hidayah et al., 2025). This view is in line with (Razak et al., 2024) who emphasize that leadership is a process of guiding and directing, not merely controlling an institution, but leading all school members toward achieving organizational goals. In addition, (Bush, 2020) asserts that educational leadership plays an important role in

improving school effectiveness, while (Hallinger, 2020) states that principal leadership has a direct influence on the quality of learning. Furthermore, (Day, 2020) explains that effective leadership is capable of creating a positive school culture that supports teacher performance and student learning outcomes. Marno dalam (Tamrin, 2018) also states that the success of educational institutions is largely determined by the quality of the principal's leadership.

An adaptive and visionary leadership style is needed to address these challenges. One relevant leadership approach is Quantum Leadership. This type of leadership emphasizes interconnectedness within organizations, flexibility, and the ability to deal with dynamic changes (Cai et al., 2024). Quantum Leadership is also understood as an approach that integrates the principles of quantum physics, such as uncertainty, interconnectedness, and flexibility, in responding to the dynamics of modern organizations (Pane et al., 2023).

According to (Zohar, 2022), Quantum Leadership has several main principles, such as self-awareness, vision and value-led leadership, spontaneity, holistic thinking, and commitment to service, which emphasize the importance of self-awareness, values, and adaptability in leadership. Through these principles, school principals are expected to create educational environments that are innovative, collaborative, and responsive to change.

Several previous studies have examined Quantum Leadership. One of the studies discussing the theory of Quantum Leadership was conducted by (Mundiri, A., & Ningtias, 2019) in their research entitled Quantum Leadership of Teacher in Improving the Quality of Education Based on Pesantren. The study explained that quantum leadership was able to improve the quality of education at Pondok Pesantren Nurul Jadid. The implementation of a clear vision, persuasive communication, and the empowerment of teachers and educational staff not only made the learning process more effective, but also created a conducive and collaborative learning environment that supported the development of students' potential.

Furthermore, research conducted by (Celik & Ercetin, 2023), entitled Analysis of the Quantum Leadership Behavior of School Principals Through Metaphor, showed that teachers viewed principals who applied Quantum Leadership as visionary, adaptive leaders who were capable of building a collaborative work climate. This study used a qualitative method with a metaphor approach to describe the leadership behavior of school principals in Ankara. In line with this study, (Nita et al., 2025) in their research entitled The Influence of Visionary Leadership and Quantum Leadership on the Improvement of Learning Quality in Senior High Schools in South Aceh Regency, found that principal leadership based on Quantum Leadership and visionary characteristics had a positive impact on the quality of learning.

However, these previous studies still have several limitations. Most of the studies mainly focused on the influence of Quantum Leadership on the quality of education in general and were conducted in specific educational contexts such as Islamic boarding schools or schools outside the setting of this research. Studies that specifically examine the implementation of Quantum Leadership by school principals at the junior high school level, particularly at SMP Negeri 16 Kerinci, are still limited. In addition, discussions regarding the factors influencing the implementation of Quantum Leadership have not been explored in depth. This indicates the existence of a research gap that needs further investigation.

Based on observations and interviews conducted by the researcher in September 2025 at SMP Negeri 16 Kerinci, several phenomena were found that indicate leadership practices directed toward Quantum Leadership. The principal provides support for teachers to develop creative and innovative learning methods, encourages collaboration among teachers, and creates open communication. Furthermore, the principal is considered communicative, capable of creating a comfortable working atmosphere, and open in establishing communication with students and parents.

Nevertheless, it is still not clearly understood how the implementation of Quantum Leadership is carried out in practice and what factors influence it. Therefore, more in-depth research is needed to analyze the principal's leadership in implementing Quantum Leadership at SMP Negeri 16 Kerinci.

Based on the explanation above, this research is important to provide a clearer understanding of the implementation of Quantum Leadership in the real context of schools, as well as to fill the existing research gap. Therefore, this study is expected to contribute to the development of educational administration studies, particularly in the field of school principal leadership.

2. METHOD, DATA, ANALYSIS

This study employed a descriptive qualitative method to describe and understand a phenomenon in depth (Rifani Arsyad, 2023). In this research, the researcher examined the principal's leadership in the implementation of Quantum Leadership at SMP Negeri 16 Kerinci in order to understand the principal's role and leadership style. The study was conducted at SMP Negeri 16 Kerinci, located in Koto Patah Semerap, West Danau Kerinci District, Kerinci Regency, Jambi. The research was carried out from September 2025 for one month. Observations were conducted during the first week, interviews during the second and third weeks, and documentation activities continued until the fourth week. As explained by (Wibawa Lafaila et al., 2022), the research setting refers to the location where the study is conducted, while the research period refers to the duration of data collection (Izzati, 2021).

The instruments used in this study were observation, interviews, and documentation. Observation was conducted to examine the principal's behavior and actions in implementing Quantum Leadership. Interviews were conducted with the principal, vice principal, teachers, and related parties to obtain information regarding the principal's leadership. Documentation was used to complement the data in the form of activity photos, school programs, organizational structures, and other related documents. Research supporting tools included stationery, interview sheets, and mobile phones for recording audio and video. As explained by (Sugiono, 2022) research instruments are tools used to collect research data.

The data sources in this study consisted of primary and secondary data. According to (Sulung & Muspawi, 2024), primary data were obtained directly from the principal, teachers, students, and parents through observations and interviews. Meanwhile, secondary data were obtained from school documents, school profiles, vision and mission statements, organizational structures, and documentation of school activities related to the implementation of Quantum Leadership.

The data collection techniques used in this study were observation, interviews, and documentation to obtain research information. As explained by (Iba & Wardhana, 2023). data collection techniques are carried out through observation, interviews, and documentation as methods for obtaining research information. Data analysis in this study used the Miles and Huberman (1992) data analysis model, which includes data collection, data reduction, data presentation, and conclusion drawing. Data were collected through observations, interviews, and documentation. The validity of the data was ensured using triangulation. According to (Alfansyur, A., & Mariyani, 2020), triangulation is used to test the validity of data through multiple sources and techniques. This study applied source triangulation by comparing data from the principal, vice principal, and teachers. In addition, technique triangulation was also used by comparing data obtained from observations, interviews, and documentation to ensure that the data were more accurate and trustworthy.

3. RESULT AND DISCUSSION

Result

Analyzing the Principal's Leadership in the Implementation of Quantum Leadership at SMP Negeri 16 Kerinci

Based on the first research objective, namely to analyze the principal's leadership in the implementation of Quantum Leadership at SMP Negeri 16 Kerinci, the findings indicate that, in general, the principal's leadership reflects the characteristics of Quantum Leadership. These findings were obtained through data validity techniques in the form of triangulation, namely source triangulation and technique triangulation. Source triangulation was conducted by comparing data from the principal, vice principal, and teachers. Meanwhile, technique triangulation was carried out through observation, interviews, and documentation. The results from these three sources and techniques showed consistency of data, indicating that the research findings were valid.

In general, the principal's leadership at SMP Negeri 16 Kerinci is characterized as collaborative, communicative, adaptive, and oriented toward values and service. The principal not only acts as a decision-maker, but also as a leader who is capable of building harmonious working relationships, encouraging teacher participation, and creating a conducive and innovative school environment. This leadership is also reflected through openness in communication, providing opportunities for teachers to innovate, and the ability to respond flexibly to various situations. In

addition, the principal is able to direct all school members to work together in achieving the established goals.

Based on this general description, the findings of the study show that there are 12 dominant principles of Quantum Leadership reflected in the principal's leadership at SMP Negeri 16 Kerinci, as follows:

a. Self-Awareness

The principal demonstrates good self-awareness in carrying out responsibilities as a school leader. This can be seen from the way the principal understands duties and responsibilities well as a leader who directs all school activities. The principal is also capable of self-evaluation regarding decisions and actions taken in the leadership process. In addition, the principal is open to receiving criticism and suggestions from teachers and school staff as a form of self-improvement in order to enhance leadership quality. This attitude shows that the principal is aware of both strengths and weaknesses and continuously strives to improve for the advancement of the school and the achievement of the expected educational goals.

b. Vision and Value-Led

The principal has a clear vision for advancing the school and uses this vision as a guideline in implementing various school programs. The vision is not only understood by the principal but is also communicated to all school members so that it can become a shared goal. In every decision-making process, the principal always considers the values established by the school so that all activities remain aligned with the direction and objectives of education. The principal also encourages teachers and staff to work together in realizing the school's vision through well-directed programs. With clear vision and values, school activities become more organized, and all school members share the same goal of improving school quality.

c. Spontaneity

The principal is able to act quickly in dealing with various situations and problems occurring within the school. In solving problems, the principal does not rely on only one approach but is able to adjust strategies according to the conditions being faced. This attitude shows that the principal has the ability to adapt to changes and challenges that arise in the school environment. In addition, the principal is capable of taking appropriate actions according to the needs of the situation so that school activities continue to run effectively. This adaptability helps the principal maintain a conducive school environment and supports the creation of a comfortable learning atmosphere for all school members.

d. Holistic

The principal has the ability to view and understand every problem in the school comprehensively before making decisions. In dealing with a problem, the principal does not only look at it from one perspective, but also considers various aspects related to the school's condition. Every decision made also takes into account its impact on teachers, students, staff, and school activities in general. Through this approach, the decisions made become more appropriate and can minimize the occurrence of new problems. The principal's attitude in considering various aspects demonstrates carefulness in decision-making, so that the school environment remains well maintained.

e. Field Independent

The principal demonstrates an independent and firm attitude in making decisions regarding various situations occurring within the school. In carrying out leadership responsibilities, the principal is able to determine appropriate actions for the benefit of the school without being overly dependent on others. Nevertheless, the principal still considers suggestions and input from teachers and staff before making decisions. The principal's firmness is also reflected in the implementation of rules and the resolution of problems, ensuring that school programs run according to the established goals. This independence in decision-making shows that the principal has a strong sense of responsibility in leading and developing the school.

f. Humility

The principal demonstrates humility in carrying out leadership within the school. This can be seen from the principal's openness to criticism, suggestions, and opinions from teachers and school staff without distinguishing positions or status. The principal also values every contribution given as part of a collective effort to improve school quality. This humble attitude strengthens the relationship between the principal and school members, making it more

harmonious. In addition, the working atmosphere within the school becomes more comfortable due to the presence of mutual respect and openness in communication. Through this attitude, cooperation among school members can function more effectively in achieving the school's goals.

g. Ability to Reframe

The principal is able to understand problems from various perspectives before making decisions. In dealing with an issue, the principal does not immediately determine actions, but first considers the different interests and conditions related to the problem. This attitude shows that the principal strives to be fair and wise in resolving every issue within the school. By understanding different perspectives, the decisions made become more appropriate and acceptable to all school members. This ability also helps the principal maintain good relationships among school members and create a harmonious atmosphere within the school environment.

h. Asking Fundamental "Why"

The principal demonstrates strong ability in identifying the main causes of a problem before determining solutions. In dealing with problems, the principal does not only focus on the visible effects, but also seeks to understand the factors that cause the problem to occur. By identifying the root causes, the principal is able to determine more appropriate and effective solutions according to the conditions within the school. This attitude shows that the principal possesses good analytical skills in problem-solving, so that decisions are not made hastily. In addition, this approach also helps reduce the possibility of similar problems occurring in the future.

i. Celebration of Diversity

The principal appreciates diversity within the school environment, including differences in opinions, backgrounds, and abilities among school members. This attitude is reflected in the way the principal provides opportunities for all school members to express opinions and participate in various school activities. The principal also treats teachers, staff, and students equally, thereby creating a fair and comfortable atmosphere within the school. Through mutual respect, relationships among school members become more harmonious and cooperation can run effectively. This attitude of appreciating diversity also helps create an inclusive school environment that supports the achievement of common goals.

Identifying the Factors Influencing the Principal's Leadership in the Implementation of Quantum Leadership at SMP Negeri 16 Kerinci

Based on the second research objective, namely to identify the factors influencing the principal's leadership in the implementation of Quantum Leadership at SMP Negeri 16 Kerinci, the findings indicate that there are several factors that support and influence the implementation of such leadership.

These findings were obtained through data validity techniques in the form of triangulation, namely source triangulation and technique triangulation. Source triangulation was conducted by comparing data obtained from the principal, vice principal, and teachers. Meanwhile, technique triangulation was carried out through observation, interviews, and documentation. The results from these three sources and techniques showed consistency of information, indicating that the data obtained were valid and trustworthy.

In general, the factors influencing the principal's leadership in the implementation of Quantum Leadership at SMP Negeri 16 Kerinci can be grouped into internal and external factors. Internal factors originate from the principal personally as well as conditions within the school, while external factors come from the outside environment that also influences the implementation of leadership.

Based on this general description, the findings of the study show that the factors influencing the principal's leadership in the implementation of Quantum Leadership are as follows:

a. Factors Related to the Principal

The factors influencing the principal's leadership in the implementation of Quantum Leadership that originate from the principal are as follows:

- 1) The principal possesses strong leadership abilities, such as being able to direct teachers, provide motivation, and make appropriate decisions according to the situations faced. In

addition, the principal's experience and professional competence also help in managing the school effectively.

- 2) Good communication skills are also an important factor, as the principal is able to build harmonious relationships with teachers and staff. This is supported by interview results with teachers, who stated that the principal is approachable, open to discussion, and receptive to suggestions.
- 3) The principal's visionary and adaptive attitude makes it easier to face changes and develop the school toward a better direction.

b. Internal School Factors

The factors influencing the principal's leadership in the implementation of Quantum Leadership that originate from within the school are as follows:

- 1) A school culture that supports cooperation and good communication is one of the main supporting factors. Teachers and staff demonstrate a spirit of collaboration and harmonious working relationships, making it easier for the principal to implement school programs.
- 2) The readiness of teachers and staff to accept change is also an important factor. Based on interview results, teachers are willing to follow the principal's directions and are open to innovation in learning.
- 3) The availability of facilities and infrastructure also supports the implementation of leadership. Based on documentation and observations, the school facilities are sufficiently adequate to support learning activities and school programs.
- 4) A conducive school climate, characterized by a comfortable working atmosphere and good relationships among school members, also strengthens the principal's leadership.

c. External School Factors

In addition to internal factors, external school factors also influence the principal's leadership in the implementation of Quantum Leadership, namely:

- 1) Educational policies from the government are one of the factors influencing the direction of the principal's leadership. The principal needs to adjust these policies to the school's conditions.
- 2) Technological development is also an important factor, as the principal needs to keep up with these developments to support learning and school management.
- 3) Community expectations regarding the quality of education also encourage the principal to continuously improve school performance and quality. This can be seen from the good communication established between the school and external parties.

Discussion

Analyzing the Principal's Leadership in the Implementation of Quantum Leadership at SMP Negeri 16 Kerinci

Based on the research findings presented previously, it can be interpreted that the principal's leadership at SMP Negeri 16 Kerinci generally reflects the characteristics of Quantum Leadership through the implementation of twelve main principles. In the principle of self-awareness, the principal demonstrates the ability to recognize strengths, weaknesses, and strategic roles as a leader in managing the school. This is reflected in a reflective attitude in decision-making and openness to feedback. This finding is in line with the theory of (Zohar, 2022), which states that self-awareness is the foundation of quantum leadership because it enables leaders to act authentically and meaningfully. The contributing factors include leadership experience and a culture of self-evaluation that has developed within the school. The implication is that good self-awareness strengthens the quality of decision-making and the trust of school members.

In the principle of vision and value-led leadership, the principal has been able to make the school's vision the basis for every policy. This indicates that the direction of leadership is not merely situational, but oriented toward long-term goals. According to (Zohar, 2022), a quantum leader must be rooted in strong values and vision as guidance in facing the complexity of change. The contributing factor is the continuous internalization of the school's vision. The implication is the creation of alignment between individual goals and organizational goals.

In the principle of viewing problems holistically, the principal is able to consider various aspects before making decisions. This is in line with the theory of (Zohar, 2022), which states that a quantum leader must be able to understand the interconnectedness among systems. The

contributing factors are the leader's experience and analytical abilities. The implication is that the decisions made become more comprehensive and sustainable.

Furthermore, in the principle of acting quickly and adapting to situations, the principal demonstrates flexibility in dealing with change, especially in responding to educational dynamics. This is consistent with the concept proposed by (Zohar, 2022), which emphasizes the importance of adaptive spontaneity rather than reactive behavior. The contributing factor is the dynamic demands of the educational environment. The implication is that the school becomes more responsive to change.

In the principle of independence in decision-making, the principal demonstrates independence without excessive dependence on others. This is consistent with (Zohar, 2022), who explains that quantum leaders possess autonomy in thinking and acting. The contributing factors are self-confidence and experience. The implication is the improvement of leadership effectiveness. In the principle of humility, the principal demonstrates an open and non-authoritarian attitude. This is in accordance with (Zohar, 2022), who emphasizes that humility enables leaders to continue learning. The contributing factor is an organizational culture that values togetherness. The implication is the creation of harmonious working relationships.

In the principle of understanding problems from different perspectives, the principal is able to consider various viewpoints before making decisions. This is consistent with (Zohar, 2022), who highlights the importance of flexible thinking. The contributing factor is good communication with school members. The implication is that conflicts can be minimized.

In the principle of identifying the root causes of problems, the principal does not only solve problems at the surface level, but also explores their underlying causes. This is in line with (Zohar, 2022), who emphasizes the importance of deep thinking. The contributing factor is critical analytical ability. The implication is that problems are less likely to recur.

In the principle of appreciating diversity, the principal demonstrates an inclusive attitude toward differences. This is consistent with (Zohar, 2022), who emphasizes the importance of valuing plurality. The contributing factor is the diverse background of school members. The implication is the creation of an inclusive environment.

In the principle of learning from difficulties, the principal views challenges as opportunities for learning. This is in line with (Zohar, 2022), who states that quantum leaders are able to transform difficulties into opportunities. The contributing factor is a positive mindset. The implication is that the organization becomes more resilient.

In the principle of commitment to service, the principal demonstrates a service-oriented attitude toward school members. This is consistent with (Zohar, 2022), who explains that true leadership is based on service. The contributing factor is the moral values of leadership. The implication is the increased trust of school members.

Finally, in the principle of carrying out duties with full responsibility, the principal demonstrates a high level of dedication in performing responsibilities. This is in accordance with (Zohar, 2022), who emphasizes integrity as part of quantum leadership. The contributing factor is professional commitment. The implication is that school goals can be achieved optimally.

Overall, the findings of this study indicate that the principal's leadership at SMP Negeri 16 Kerinci has reflected the practice of Quantum Leadership in accordance with the theory proposed by (Zohar, 2022), although several aspects can still be further developed. The implication of these findings is the need for continuous strengthening of quantum leadership values in order to improve the overall quality of education

Identifying the Factors Influencing the Principal's Leadership in the Implementation of Quantum Leadership at SMP Negeri 16 Kerinci

Based on the research findings, it can be interpreted that the factors influencing the principal's leadership in the implementation of Quantum Leadership at SMP Negeri 16 Kerinci consist of three main factors, namely internal factors related to the principal, internal school factors, and external school factors.

The first factor is the principal's internal factors, which include leadership skills, experience and competence, communication abilities, as well as visionary and adaptive attitudes. The findings show that these factors serve as the main foundation in determining how the principal leads and makes decisions. This finding is in line with the opinion of Rahayu dkk. dalam (Morgan, 2024), who state that a leader's personality, experience, and values influence how leaders act. The contributing

factor is that the principal acts as the main actor in determining the direction of school policies. The implication is that improving the principal's competence and self-capacity is very important in supporting the successful implementation of Quantum Leadership.

The second factor is internal school factors, which include teamwork, the readiness of human resources, facilities and infrastructure, and a conducive working atmosphere. The findings indicate that harmonious relationships and a culture of cooperation strongly support leadership effectiveness. This finding is consistent with the opinion of (Marpaung & Munte, 2025) , who emphasize the importance of human relations and communication within organizations. The contributing factor is that schools are social organizations that highly depend on interaction and cooperation among school members. The implication is that principals need to continuously build a collaborative work culture so that leadership can function optimally.

The third factor is external school factors, which include changes in educational policies, technological developments, as well as societal demands and globalization. The findings indicate that these external factors require the principal to be adaptive and responsive to change. This finding is in line with the opinion of (Tjahjadi, 2025) , who states that leadership is always related to change and dynamic situations. The contributing factor is that the field of education continues to develop and demands innovation. The implication is that principals need to improve their adaptability and innovation skills in order to remain relevant to current developments.

Overall, these three factors are interconnected and demonstrate that leadership is influenced not only by the individual abilities of the leader, but also by the internal conditions of the school and the dynamics of the external environment. Therefore, synergy among these three factors is necessary so that the implementation of Quantum Leadership can be carried out effectively and sustainably.

4. CONCLUSION

Based on the results of the study conducted at SMP Negeri 16 Kerinci, it can be concluded that the principal's leadership in the implementation of Quantum Leadership has been carried out effectively. The principal has been able to apply the principles of Quantum Leadership in daily activities, such as self-awareness reflected through an understanding of personal strengths and weaknesses, adherence to the school's vision and values in every decision-making process, the ability to act spontaneously and adapt to situations, and a holistic perspective in viewing problems. In addition, the principal also demonstrates independence in decision-making, humility and openness to feedback, the ability to understand problems from different perspectives, and efforts to identify the root causes of problems before determining solutions. Other values are reflected in the appreciation of diversity, the ability to turn difficulties into learning opportunities, commitment to serving school members, and responsibility in carrying out duties consistently. Therefore, the implementation of these principles shows that the principal's leadership has contributed positively to the creation of an effective, harmonious school environment that is oriented toward improving the quality of education.

The successful implementation of Quantum Leadership is certainly inseparable from various factors influencing the principal's leadership, both those originating from within the principal and from the surrounding environment. The factors influencing the principal's leadership in the implementation of Quantum Leadership include factors related to the principal personally, factors from the school environment, and external environmental factors. The principal possesses leadership skills, experience, communication abilities, as well as visionary and adaptive attitudes that support successful leadership. In addition, a positive school culture, the readiness of teachers and staff, and the support of facilities and infrastructure also strengthen the implementation of leadership. External factors such as educational policies, technological developments, and community expectations are also managed effectively by the principal.

5. ACKNOWLEDGE

Based on the findings of this study, the researcher provides several suggestions as follows:

- a. It is expected that the principal will continue to maintain and improve the implementation of Quantum Leadership principles in leading the school, as well as continuously develop personal capabilities in facing increasingly dynamic educational changes.

- b. It is expected that teachers and staff will continue to support the principal's leadership by strengthening cooperation, openness, and readiness to accept change, while also continuously improving their professional competence.
- c. It is expected that the government or policymakers will continue to provide support through policies, training programs, and facilities that support the improvement of principals' competencies in implementing effective leadership.

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