MINDFUL, MEANINGFUL, AND JOYFUL LEARNING INTEGRATION TO IMPROVE STUDENT'S PARTICIPATION IN MATHEMATIC LESSON IN ELEMENTARY SCHOOL/MI

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis metode *mindful* (kesadaran penuh), *meaningful* (bermakna), dan *joyful* (menyenangkan) dalam meningkatkan partisipasi siswa pada pembelajaran matematika di tingkat sekolah dasar. Metode yang digunakan dalam penelitian ini adalah studi kepustakaan (*library research*) dengan pendekatan kualitatif. Data dikumpulkan melalui kajian dari beberapa sumber literatur yang relevan seperti jurnal akademik, buku, dan penelitian terdahulu di bidang yang sama. Setelah semua data terkumpul, analisis data menggunakan model Miles, Huberman, dan Saldana diterapkan, yang meliputi kondensasi data (*data condensation*), penyajian data (*data display*), dan penarikan kesimpulan (*drawing conclusion*). Hasil penelitian menunjukkan bahwa integrasi dari ketiga pendekatan ini menciptakan suasana belajar yang penuh kesadaran, kebermaknaan, dan kegembiraan. Alhasil, hal tersebut memberikan dampak positif terhadap peningkatan kognitif dan emosional siswa dalam pembelajaran matematika. Di sisi lain, pendekatan ini mendukung siswa untuk menjadi aktif dan reflektif, serta memiliki motivasi yang lebih tinggi. Penelitian ini berkontribusi dalam mendukung konsep integratif yang dapat digunakan oleh guru sebagai alternatif strategi pembelajaran matematika yang inovatif di sekolah dasar.

Kata Kunci: *mindful, meaningful, joyful,* partisipasi siswa, pembelajaran matematika.

ABSTRACT

This research is aim to analyze the method of mindful, meaningful, dan joyful in improving student participation on mathematic lesson in the elementary school level. The method used in this research is library research with qualitative approach. The data gathered through the learning from several relevan literature source such as academic journal, books, and former research on the same field. After all data are gathered, The data analilysis of Huberman, Miles and Saldana are used. Its include data condensation, data servive, dan taking conclution. The result of the research shows that the integration of these three approach create mindfulness, meaningfulness, and joyfulness. As a result its give a positive impact to student improvement on cognitive and

emotional side on mathematic learning. On the other side, this approach supports students to be active and reflective as well as higher motivation. This research contributes to support conseptual integrative that can be used bu teacher as the alternative innovative of mathematic learning strategy in elementary school.
Keywords: *mindful, meaningful, joyful, student participation, mathematic learning.*

INTRODUCTION

Mathematic learning in elementary school has an important role to build a logic, analythic and systematic thinking in students' mind. However, as a fact many studies shows that mathematic is still regarded as an abstract, difficult and uninteresting subject. This condition impact to student's ability that is still low in the process of learning in the side of cognitive level, emotional and behaviour. Students participation is such an important indicator of learning success because it is relate to learning process quality and its result, (Fredricks et al., 2019). The newest research by Wang And Eccles, 2020, also shows that student with high participation tend to show higher understanding of concept and stronger motivation to study. For that reason the improvement of student participation in mathematic learning is urgent that need to be respond through more relevant learning approach.

The urgence of student participation is highly required by means of 21st century learning that focus on communication skills, creativity, collaboration and critical thinking. In this context, learning is not only transferring knowledge, but also build active and meaningful learning process. Research by OECD (2019) shows that a success education system is a system that support student participation actively on learning process. However, there are still several mathematic learning that not give optimal focus on student participation. That's why its needed an approach that answer that challenge.

One of the factor that influence to the low of student participation is the domination of teacher in the learning process. Teacher is still the centre of the learning system. In this kind of method, student is the receiver of information and the teacher is the main source of knowledge. This situation gives a limitation to build an understanding actively and reflective. Research by Hattie (2017) strongly says that effective learning process require active student participation on the knowledge construction. In line of that research, Darling-Hammond et al. (2020)

explain that learning process with student oriented is able to improve learning participation significantly. On fact, student oriented learning on mathematic context in elementary school still face some problems, among others the lack of strategy used by the teacher. As the result it is need an approach that not only placing student as the subject but also accommodate emotional and cognitive aspect as well as learning with mindfulness.

Mindful approach become one of the relevant alternative in answering the need. Mindful learning emphasis to student mindfulness toward the leraning process, so that they are able to understand learning experiences deeply. Research by Renshaw dan Cook (2017) shows, the practice of mindfulness on learning process can improve attention and self regulation on student. A similar finding also said by Klingbeil et al. (2017). It is said that the intervention with mindfulness based improve student participation and decline destructive behaviour in classroom. In the elementary school context, this approach help student to be more focus, reflective, and aware toward the thinking process. The newest research also indicate that minfulness on the learning process contribute to students' psychological welfare and the quality of learning interaction (Dunning et al., 2019). Neverthelesses the application of mindful learning on mathematic have not been done comprehensively. It can be said that there is still an opportunity to develop that approach to improve mathematic learning quality.

On the other hand, meaningful learning also gives an important contribution in improving student participation. Meaningful learning emphasis on the relation between the concept and real experiences of the student. Therefore, the knowledge accepted is not only about memorise material. Research by Kember (2018) shows that meaningful learning can improve conceptual understanding and long retention student. On mathematic concept, this approach give the possibility to student for understanding concept more contextual and applicative. Research by Hadi dan Radiyatul (2019) disclose that the using of real life context on mathematic learning improve participation of student and achievement of student at elementary school. Beside that, research by Husna et al. (2021) shows that context based learning is able to improve the ability of student to solve mathematical problem. In fact, however, mathematic learning is still focus on procedure and symbol without relate

them to student experience. Therefore, the integration of meaningful approach is important to bridge the gap between the abstract concept and the reality of student real life.

On the other hands emotional aspect in the learning process is also can't be ignored. Joyful learning approach emphasizes to the situation of learning that enchanting the student. This situation is comforts the student and motivate them to study. Positive emotion has a significant influence toward student participation and achievement. Research by Bieg et al. (2017) explain that enchanting learning experiences improve intrinsic motivation and student participation. Boaler (2019) emphasize that positive learning condition reduce anxiety towards mathematic and improve student confidence. The new research by Putri dan Widodo (2022) also shows that joyful learning significantly influences student active participation on mathematic learning. On the context of elementary level, this approach is important since the student needs concrete and enchanting learning experiences. In facts mathematic learning is still being relate

There are many researches that study those kinds of approach as a single study. However, the study of those approaches as an integrated approach is still limited. In facts all of them have a potential to be integrated in order to improve student participation. Mindful learning contributes to the awareness aspect, meaningful learning pada on the aspect of the meaning, and joyful learning to the aspect of emotion. Research by Immordino-Yang et al. (2019) shows that effective learning should collaborate the interaction between cognitive, emotion, and awareness. The integration of those approaches produces more holistic learning and significantly impact to student participation. And there is still a few research on the integration of those approaches on mathematic learning of elementary level. It shows that there is still a chance to have research in this field.

In the context of education policy in Indonesia, the build of student participation also in line with the curriculum development that emphasize student centred learning and character building. Mindful, meaningful, dan joyful approaches have a similarity with the student profile which is not only smart at academic field, but also have self-awareness, the ability to think reflectively, and positive attitude to study. Research by Suryadi (2020) shows that in the learning

that integrate cognitive and affective aspect are able to increase learning quality at the whole. Therefore the integration is not only theoretical relevantly but also context based with the education need today.

Based on the explanation above the new thing of this research is on the try to develop the conceptual of integration that integrate mindful, meaningful and joyful on the mathematic learning. This integrative approach hopefully gives new perspective on the improvement of student participation as the whole. Therefore this research contribute not only to the development of theory but also gives a practical implication to the teacher to design an innovative and contextual learning.

In line of that this research is formulated in several questions such as, how mindful, meaningful and joyful approach on the mathematic learning of elementary school, how the integration of those approaches improve student participation, and how the implication of the approach in the practice side. The aim of this research is to analyse the integration of three approaches and develop conceptual framework that can be used as the reference in the mathematic learning.

METHOD

This research uses qualitative approach with library research. Data are gathered from any relevant source like academic journal, books and former research. The technique to gather the data is from documentation, while the analyse of the data use Miles, Huberman and Saldana models include data condensation, data serving and conclution, (Miles et al., 2018). This research gives possibility to another studies toward relate topic.

The integration of mindful, meaningful, dan joyful, hopefully mathematic learning will be more humanist, contextual, and enchanting to improve student participation.

DISCUSSIONS

Mathematic learning in elementary level is not only oriented to the concept, but also to the student active participation in learning process. Student participation on this field includes cognitive, emotional, and interactive behaviour that build learning experience as the whole. Theoretically, cognitive participation relate to

student efforts to understanding a material deeply. Emotional participation relate to student interest and behaviour toward learning process, and behavioural participation include active participation on the learning activity (Fredricks et al., 2019). Review related literature shows that the low level student participant on mathematic learning is caused by un contextual approach and it is also not variative.

Minful learning focuses on student awareness toward learning process. In concept, this approach helps student to understand how they are thinking, information processes, and how to respond challenge. In mathematic concept, mindful learning make student more focus to solve problem and reduce the tend of fallacy that caused by the lack of attention. The implementation of this approach can be done through simple activity like short breathe exercises before study, self-reflection after activity and give enough time to think. In conclusion mindful approach take role in cognitive and emotional participation.

Meaningful learning emphasizes the importance the relation between the concept and the experience of student real life. Its possible for student to understand the concept because the information is integrated with the knowledge that come before. Research by Hadi dan Radiyatul (2019) shows that mathematic with real context can improve concept understanding and student participation. Husna et al. (2021) find that the uses of contextual problem can improve the ability to solve mathematical problem on the student of elementary school. On the practice we can use concrete media, daily situation, and explorative activity that including student directly.

Joyful learning focuses on the create of enchanting learning situation and support student participation emotionally. Psychologically, positive emotion have a significant impact towards motivation and study's participation. In the mathematic learning, joyful learning can be done through educative toys interactive media, and also variety of learning method. On the other hands positive interaction between teacher and student, is also an important aspect in creating conducive learning atmosphere. Therefore joyful learning takes role in improving emotional participation and student behaviour that finally impact to the learning quality as a whole.

Integraton of mindful, meaningful, dan joyful approach on the mathematic learning produce a holistic learning framework. Those three approaches have characteristic which fulfil one to another in order to improve student participation. Mindful learning contributes to awareness aspect. at this point, meaningful learning on the understanding aspect and the relevancy, while joyful learning on the aspect of emotional and motivation. The following table shows how those three approaches integrate.

Tabel 1. The synthesis of Mindful, Meaningful, and Joyful approaches on the study of Mathematic.

No	Approach	Main Focus	Implementation on Mathematic learning	The impact to student participation
1	Mindful	Awareness and focus	Reflection, concentration, time thinking	Cognitive and emotional
2	Meaningful	Relate to the real experience	Contextual problem, concrete media	Cognitive
3	Joyful	Enchanting learning situation	Educative game, interactive discussion	Emotional and behaviour

Based on Tabel 1.the syntesis of mindful, meaningful, and joyful approaches on mathematic learning. It shows that three approaches fulfil to each other in improving student participation. It makes the learning become balance between cognitive, emotional and behavioural aspects. This in line with a Principe that effective learning must include the interaction between cognitive and emotion (Immordino-Yang et al., 2019). Therefore, the integration of three approaches can be effective strategy on mathematic learning.

From the implementation side this integration can be done through the learning which is systematic. Earlier level of learning use mindful to build focus, and student preparation. Main level use meaningful through the use of relevant conceptual problem. The next level use joyful through enchanting activities and

interactive. Research shows that learning process that is designed can improve student participation quality of student interaction. Darling-Hammond et al., 2020).

Result of the research shows there is a phenomenon of the increasing student participation after this integrated approach. The student become more active, have thr bravery to talk, and show the interest toward mathematic. Student also show the improvement in critical thinking and reflective.

However, the implementation of this approach still face many challenge. One of them is the teacher preparation in understanding and applicate this integrate approaches. Teacher needs to have pedagogic competence well and the ability to design innovative learning. Another problems some other time management and resource of the school. The success of innovative learning is influenced by the support of school and education policy. (Darling-Hammond et al., 2020). For that reason it is need a systematic efforts to support this approach implementation. It can be done through teacher workshop or the supply of resources.

As the result of this discussion shows that this integration has a significant potential in improving student participation on mathematic learining in elementary school. This approach can be an alternative learning strategy innovative that relevat with education today.

CONCLUSION

Based on the result of research the integration of mindful, meaningful and joyful on mathematic learning in elementary school have positive potential in improving student participation as the whole. mindful take roles in awareness development so that student more focus, and reflective. Meaningful take roles in help student in understanding mathematic deeply through the relation in real life. joyful create enchanting situation of learning that impact to the improvement of motivation in order to increase student participation. This integration produces learning experiences that is holistic because include cognitive, emotional and emotion simultaneously. The student also show the ability of critical thinking. Nevertheless, this research is a library research in which does not show the real experience in the classroom. For that reason it still need another field-based research to know the implementation of this approach. This research give a

framework to teacher to design an innovative, contextual and humanist learning, and also open a chance to a develop e research in order to increase the quality of education

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