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SWOT Analysis in Entrepreneurship Based Mathematics Learning Planning

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Abstract: The era of economic recovery after the Covid-19 pandemic has made entrepreneurship a skill that everyone is expected to have from an early age. In the implementation of learning, quality schools will introduce entrepreneurship both as an extracurricular activity and in their learning activities, not least in learning mathematics. The planning of learning mathematics at MBS Zam-Zam Cilongok Junior High School is planned to be inserted with entrepreneurial skills. The purpose of this study is to analyze the planning of entrepreneurial-based mathematics learning through SWOT analysis. The research method used is qualitative research by describing the phenomena that are in the research location. The subjects of this research are students, mathematics teacher, and principal of MBS Zam-Zam Cilongok Junior High School. The results of the research are SWOT analysis in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School, Indonesia, namely strengths in the form of quality teacher and student factors, weakness in the form of lack of facilities and funds, opportunities in the form of opportunities to get sponsored funds and opportunities to become excellent schools, threats in the form of the health of teachers and students that cannot be predicted during a pandemic.

Keywords: SWOT analysis, Mathematics learning, Enterpreneurship

Introduction

In human life, education is important in educating mankind for the better. In the process of educating mankind, an educational management is needed so that it is more systematic and can achieve educational goals. Educational management is activities to achieve a goal or process of organizing work to achieve a goal in educational institutions (Andi Rasyid, 2017: 7). The new paradigm of education management gives broad authority to schools in planning, organizing, implementing, monitoring, and controlling education in schools. In addition, today's world developments make school institutions adapt to dynamic developments. School institutions are no longer able to accept a change as it is, but must respond to that change into something more useful for schools, students, and society. The key for educational institutions to survive in the midst of change, is to understand the position, and what is going on, as well as readiness to be part of a new world that is undergoing change. The world is currently in a recovery period after a major disaster in the form of the Covid

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19 pandemic, so the factors that support the survival of mankind are also in the recovery process, namely economic recovery. The era of economic recovery after the Covid-19 pandemic has made entrepreneurship a skill that everyone is expected to have from an early age. In the implementation of learning, quality schools will introduce entrepreneurship both as an extracurricular activity and in their learning activities, not least in learning mathematics. So that in early recognition, the entrepreneurial spirit grows in students.

According to Buchari (2000: 35) currently competition in the world of work is getting tougher and unemployment in Indonesia is also increasing. This is coupled with the increasing number of companies, both large and small, that are terminating their employment, retiring their employees early, and even closing or relocating their businesses to other places. This makes the level of competition among college graduates to get a job even tighter. Relying entirely on the government to create new jobs is not possible. Waiting for investors from abroad to invest in Indonesia takes a long time, and expecting domestic investors in the current conditions is very difficult. For this reason, the education sector is expected to play a role in changing the mindset and paradigm of students so that they are oriented towards creating jobs, not looking for work.

In educational institutions, educators play a role in educating students through a learning process, both inside and outside the classroom. Learning is a process of interaction between students and educators and learning resources in a learning environment. Learning is assistance provided by educators so that the process of acquiring knowledge and knowledge, mastering skills and character, and forming attitudes and beliefs in students can occur. In other words, learning is a process to help students learn well (Moh Suardi, 2018: 7). In learning the entrepreneurial spirit, students can also learn through the material obtained while studying at educational institutions. These further supports students to learn entrepreneurship if educators introduce and apply it in the learning process. No exception in learning mathematics. In the 2013 Curriculum (K-13) mathematics lessons that are currently being implemented, where the learning process is no longer teacher-centered, but student-oriented, the use of teaching methods and approaches is very necessary, as stated in the Curriculum Technical Instructions guide 2013 mathematics that: "The understanding of mathematics teachers will be more interesting if delivered with innovative and creative methods, for example by using information and communication technology, such as the internet, teaching aids, other multi-media tools." The use of these learning media will create a pleasant learning atmosphere for students and can solve problems independently (Rahmiati and Didi Pianda, 2018:9). Mathematics learning which is dominated by arithmetic is considered appropriate if it is inserted with the introduction of entrepreneurship for students. Of course, this can also be analyzed in advance when planning learning by looking at strengths, weaknesses, opportunities, and challenges. Through an analysis that is in accordance with the SWOT (Strength, Weakness, Opportunities, Threats) analysis, the entrepreneurship-based mathematics learning will identify strengths, weaknesses, opportunities, and threats.Through observations made by researchers to one of the educators in a school institution, namely SMP MBS Zam-Zam Cilongok Indonesia, it was found that in the analysis of entrepreneurship-based mathematics learning planning, it has advantages in strengths and opportunities, while less in weaknesses and threats. So that researchers will discuss more clearly about SWOT analysis in entrepreneurship-based

mathematics learning.

Method

Types of Research

The research method used is qualitative research by describing the phenomena that exist in the research location. Qualitative research is research that is descriptive and tends to use an inductive approach to analysis. The research process utilizing the theoretical basis is carried out so that the research focus is in accordance with the facts on the ground. In addition, the theoretical basis is also useful for providing an overview of the research background and as a material for discussing research results (Rukin, 2019:8). The research method used by researchers in this study is a qualitative approach with a descriptive method. The research method used is a qualitative method. "Methodology is the process, principles, and procedures that we use to approach problems and seek answers" (Mulyana, 2008: 145). According to Sugiyono (2007: 1), qualitative research methods are research used to examine natural objects where the researcher is the key instrument, data collection techniques are carried out in a combined manner, data analysis is inductive, and qualitative research results emphasize meaning rather than generalization. . Qualitative research aims to maintain the form and content of human behavior and analyze its qualities, instead of turning them into quantitative entities (Mulyana, 2008: 150). The purpose of this descriptive research is to make a systematic, factual and accurate description, picture or painting of the facts, characteristics and relationships between the phenomena being investigated.

Data Source

According to Lofland in Moleong (2006:157), qualitative research main sources are words, actions, the rest are additional data such as documents and others. The data in this study were collected through interviews, observation, and through documentation. The data that must be collected are in the form of primary data sources (primary data) and secondary data sources (secondary data).

Research Target

In the research entitled "SWOT Analysis in Planning for Entrepreneurship-Based Mathematics Learning" the research targets were students, mathematics teachers, and the principal of MBS Zam-Zam Cilongok Junior High School, Indonesia. In this study, the data taken were the results of observations, interviews, and documentation, namely data regarding the implementation plan of entrepreneurship-based mathematics learning.

Research Instruments

The instrument of this research data is to use a list of questions (attached) so that the interview process can take place well. With the procedure for making the instrument as follows, first it is necessary to prepare several

questions that represent the SWOT analysis, then expert validation is needed to produce questions that have a basis for knowing the causal factors in the research problem.

Data Collection Technique

Data collection is an important step because the collected data will be used to solve research problems. The data collection techniques used in this study were interviews, observation, and documentation. An interview, also called an interview or an oral questionnaire, is a dialogue conducted by the interviewer (interviewer) to collect information from interviewees (Arikunto, 2010:155).

Observations were made to find out the incident directly to the incident and the behavior of the subject. So that the data obtained through observation as additional data from the data that has been obtained. The data obtained through documents are internal and external data related to research. Then the data is processed and presented in writing. Data obtained from documentation is done by asking for archives, as well as personal documents, and from photos taken by researchers.

Data Analysis Technique

Descriptive data analysis is an in-depth study of the SWOT analysis of mathematics learning planning in grade 7th MBS Zam-Zam Cilongok Junior High School and draws conclusions from the results of the interviews. In general, descriptive research is non-hypothetical research so that in this research step it does not require a hypothesis. So the data analysis technique used is a comparative descriptive technique, which aims to generalize a fact in determining the unit or unit of study of a case study.

Research Steps

The steps in this research consist of research planning and research implementation. Research planning is in the form of submitting a research application to the mathematics teacher of SMP MBS Zam-Zam Cilongok, preparing research equipment consisting of: mobile phones, cameras, and stationery. Prepare and arrange interview procedures. Then the procedure for conducting research is in the form of procedures for conducting research. In this study, the research seeks to obtain information and collect complete data from various sources that can be accounted for through interviews, observations and documentation of several objects under study. Data collection is not limited, as long as it is possible to collect data, during that time data collection activities are carried out.

Results

From the results of observations, interviews and documentation that have been carried out, researchers found

data relating to Strength, Weakness, Opportunity, and Threats (SWOT) in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School, Indonesia.

Strength

The strengths possessed in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School Indonesia based on the results of interviews with school principals and mathematics teachers can be described as follows:

Teacher Quality

The quality of Mathematics Teachers at MBS Zam-Zam Cilongok Junior High School is said to be good, this can be seen from the recruitment of teachers who have met the criteria for experience in the field of learning mathematics, with a bachelor's degree in Mathematics Education. This was confirmed by Mr. Drs. M. Djohar, M.Pd, as principal of the MBS Zam-Zam Cilongok Junior High School: "Students at MBS Zam-Zam Cilongok Junior High School are taught by math teachers who are experienced in mathematics and have the appropriate qualifications, namely Bachelor of Mathematics Education" With good quality trainers, it will strengthen them to carry out entrepreneurship-based mathematics learning.

Entrepreneurship Spirited Students

MBS Zam-Zam Cilongok Junior High School students have started to have an entrepreneurial spirit, this is proven by the presence of students, namely Taufan Hisbulloh and his friends who managed to make a product in the form of young coconut pudding which won the competition. This was confirmed by Mrs. Hepy Nanda Rahmawati, S.Pd.: "There are several of our students who have won an entrepreneurship competition by making young coconut pudding in 2020, namely Taufan Hisbulloh and his friends" With students who have entrepreneurial spirit, it will strengthen them to carry out entrepreneurial-based mathematics learning.

Weakness

Weaknesses in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School based on the results of interviews with mathematics teachers and students are as follows:

Learning Facilities and Infrastructure

The learning facilities and infrastructure owned by MBS Zam-Zam Cilongok Junior High School for the implementation of entrepreneurship-based mathematics learning are still inadequate, especially the classrooms that are not too large. This was clarified by Mrs. Hepy Nanda Rahmawati, S.Pd.: "Students' classrooms are not

too wide, only enough for learning, so in entrepreneurship-based mathematics learning, we need to prepare classes in such a way as to be able to practice buying and selling." With this explanation, it is evident that the quality of the class area has not received special attention from the school. Whereas a large class will be freely used for the implementation of entrepreneurship-based mathematics learning.

Fund

One of the weaknesses in the implementation of entrepreneurship-based mathematics learning is funding. There is no special funding from the school to support this practice. Students will collect funds and set aside their pocket money for the purposes of practicing entrepreneurship-based mathematics learning. This was confirmed by one of the students, namely Atha Favian Farras: "We set aside pocket money for the implementation of practices related to entrepreneurship, and if there will be entrepreneurship-based mathematics learning then we will also set aside money, there is no budget from schools for practical programs like this" With this explanation, it is evident that there is no special funding from schools to support this practice. Whereas funds from schools for the implementation of entrepreneurship-based mathematics learning will increasingly support and encourage teachers and students to carry out entrepreneurial-based mathematics learning.

Opportunity

Opportunities, every school has the opportunity to develop everything that is in the school. Similarly, planning for entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School also has opportunities, namely:

Opportunity to Get Sponsor

Sponsorship is also important for coaching in schools because with sponsors it can increase income funds for the development of entrepreneurship-based learning, entrepreneurship-based mathematics learning planning at MBS Zam-Zam Cilongok Junior High School has a great opportunity to achieve this sponsorship because entrepreneurship at MBS Zam-Zam Cilongok Junior High School has many achievements and does not yet have a main sponsor so it has the opportunity to get a main sponsor in the development of student entrepreneurship in learning mathematics.

Opportunity to Become an Excellent School

Being a superior school is a dream for every school, indirectly becoming a superior school can be a reference that the student is successful in developing the potential of the players owned by the school. Likewise, the existence of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School can also bring opportunities for this school to become an excellent school for entrepreneurship. This is evidenced by

several students who won entrepreneurship competitions and were able to make innovative products.

Threat

Threats or obstacles that are owned in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School based on the results of interviews with mathematics teachers, namely.

Unpredictable Health of Students and Teachers During a Pandemic

The form of threats or obstacles faced in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is the unpredictable health of students during a pandemic, this is certainly one of the threats or obstacles in entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School. As explained by Mrs. Hepy Nanda Rahmawati, S.Pd. as a math teacher: "As teachers, although we have tried to maintain health and always remind students to maintain health during the pandemic, but sometimes we neglect cleanliness and health so that we or students get sick and cannot carry out learning according to plan" Based on this information, it was explained that the planning of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School could not be carried out when some students were sick or even the teacher was sick.

Discussion

To get a broad picture of the strengths, weaknesses, opportunities and threats or obstacles that are owned in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School, the researchers will analyze SWOT. In accordance with the formulation of the problem and research objectives, the results of research on SWOT analysis are obtained as follows:

Strength

The strength factor is a superior factor that can be developed or maintained in conducting coaching in order to achieve maximum achievement. From the results of the study, it can be seen that the strength or superiority factor in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is the quality of teachers and students who meet the qualifications in implementing entrepreneurship-based mathematics learning.

Teacher quality is one of the strength factors in planning entrepreneurship-based mathematics learning at SMP MBS Zam-Zam Cilongok. A teacher plays a major role in the success of the students he guides, besides that the teacher must also be required to master several disciplines such as mathematics and entrepreneurship to support a career as a teacher. This is in accordance with the theory of Darmadi (2018: 5) teachers are the spearhead of

education, because they directly try to influence, foster, and guide students. As the spearhead, teachers are required to have the basic skills needed as educators, mentors, and instructors. This ability is reflected in the teacher's competence.

Students who are talented in entrepreneurship and have achievements are also one of the strength factors in entrepreneurship-based mathematics learning planning at SMP MBS Zam-Zam Cilongok. This is in accordance with the theory of Mirna Apriyani Lestari (2020:42-43), someone in this case a student, in carrying out activities has a lot to do with the abilities he has. High ability because it continues to be trained, the tendency of someone's achievement will be high as well. For this reason, the planning of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is expected to be carried out with the strengths or advantages that exist in the school.

Weakness

The weakness factor in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is the learning facilities and infrastructure, especially classrooms which are still not wide enough in the implementation of entrepreneurship-based mathematics learning. Whereas the factors of good training facilities and infrastructure also affect the quality of learning implementation. This is in accordance with the theory of Ardhariksa Zukhruf Kurniullah (2021: 27) that one of the factors that support the success of educational programs in the learning process is facilities and infrastructure. Facilities and infrastructure are one of the resources that become a benchmark for school quality and there is a need for continuous improvement in line with the development of science and technology.

In addition, funds are also one of the weakness factors in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School. The lack of funds can hinder the learning process and fostering entrepreneurial achievement. This is in accordance with the theory of Isjoni (2006: 103) to support the implementation of a new paradigm in the education system and human resource development, it is necessary to carry out research and development activities, especially in terms of curriculum and learning models that support academic and skills education, the use of electronic media and communication in education, education quality assessment and control systems, staff training and development (HR) systems, school-based education management, education financing systems, and other relevant innovations.

The recapitalization program includes the provision of funds to support research and development activities, including the implementation of pilot projects on educational innovation, or the development of superior model schools, and so on. This program is to be implemented by the institution. education (schools) and universities. With these weaknesses, the planning of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School will be constrained or even impossible, this must be immediately eliminated or other alternatives are sought so that the planning of entrepreneurship-based mathematics learning at MBS Zam-

Zam Cilongok Junior High Schools can run and are able to foster students in entrepreneurship-based mathematics learning.

Opportunity

The opportunity factor in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is the opportunity to gain sponsorship and become a leading school in entrepreneurship-based mathematics learning by creating students who are able to excel in mathematics and entrepreneurship. If this school becomes a flagship, it will certainly attract sponsors to work together for mutual benefit. This is in accordance with Fathul Mujib and Tutik Saptianingsih's theory (2020: 80) school brands should use a character base as an identity that is specifically owned by the school.

At the final stage of the communication transaction, what happens is the realization of collaboration between school expectations and stakeholder interests. For that, create a message that is able to educate stakeholders to work together through display materials that are needed by prospective users specifically. For example, such as the school's flagship program that is able to jump-start students and its supporting "sponsors" who have a positive image so that stakeholders become interested in supporting them.With these opportunities, it is hoped that the planning of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School can develop opportunities for the achievement of better entrepreneurship-based mathematics development.

Threat

Threats or obstacles in planning entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School are very influential in the implementation of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Middle School. The obstacle faced is the unpredictable health of teachers and students. The way to anticipate threats in planning for entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is to implement health protocols during a pandemic and always think positively to live a healthy life so that you are motivated and have no fear during a pandemic. This is in accordance with the theory of Ardi Ansah Rambe (2021: 118) in order for the learning and teaching process activities during the pandemic to remain safe, there are several things that all school members need to do, namely implementing health protocols and maintaining health. The school community referred to here are teachers, students, and everyone in the school environment.

If the existing obstacles are not immediately minimized, the implementation of entrepreneurship-based mathematics learning planning at MBS Zam-Zam Cilongok Junior High School will be hampered, making it difficult to achieve the goal of achieving achievement in mathematics and entrepreneurship.

From the results of the above discussion, it can be concluded that the factors of strengths, weaknesses, opportunities and obstacles are very influential on the achievement of Hayam Wuruk Trengg's football school planning entrepreneurship-based mathematics learning at SMP MBS Zam-Zam Cilongok. And this is in accordance with the SWOT analysis which is based on the logic that the dominance of strengths and opportunities becomes a supporter of entrepreneurship-based mathematics learning planning at MBS Zam-Zam Cilongok Junior High School then weaknesses and threats can be minimized and alternatives are sought together by the school community, so that learning planning Entrepreneurship-based mathematics at MBS Zam-Zam Cilongok Junior High School is feasible.

Conclusion

From the results of the research and discussion, the SWOT analysis of entrepreneurship-based mathematics learning planning at MBS Zam-Zam Cilongok Junior High School is strength in the form of quality teachers and students, this can be seen from the recruitment of teachers who have met the criteria for experience in the field of learning mathematics, with an undergraduate degree. Mathematics Education, while MBS Zam-Zam Cilongok Junior High School students have also started to have an entrepreneurial spirit, this is proven by the presence of students, namely Taufan Hisbulloh and his friends who succeeded in making a product in the form of young coconut pudding which won the competition. Weaknesses in the form of lack of facilities and funds, such as the lack of provision of classrooms and the absence of funding for the practice of learning mathematics based on entrepreneurship. Opportunities in the form of opportunities to get sponsored funds through sponsors who are interested in entrepreneurship-based mathematics learning and opportunities to become excellent schools through student achievements in the field of entrepreneurship-based mathematics. Threats are in the form of unpredictable health of teachers and students during a pandemic due to neglect of health protocols.

Recommendations

Researchers can recommend some suggestions on the results of the study, namely: Planning for entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School when it will be carried out must evaluate better and more structured coaching, in order to maximize strengths and opportunities and minimize weaknesses and challenges. Then, the planning of entrepreneurship-based mathematics learning at MBS Zam-Zam Cilongok Junior High School is expected to be carried out in real terms by considering the results of the SWOT analysis that the researchers did in order to advance and develop entrepreneurship-based mathematics at MBS Zam-Zam Cilongok Junior High School, Indonesia.

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