Implementation of Thematic Learning on the Material of Unity in Diversity using the Spider Web Model in Natural School Jigs Field

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Abstract. This study aims to describe the implementation of thematic learning on the material "Unity in Diversity" using the spider web model at Sekolah Alam JIGS Medan. Thematic learning with the spider web model is designed to integrate various subjects through a central theme, which allows students to gain a holistic and contextual understanding. In this study, a descriptive qualitative approach was used to explore how it is applied in thematic learning. Data were collected through direct observation, interviews with teachers and students, and analysis of documents related to curriculum implementation. The results of the study indicate that the application of the spider web model in thematic learning at Sekolah Alam JIGS Medan successfully connected learning materials with a broader and more relevant context. The findings of this study indicate that the use of the spider web model in the context of thematic learning can increase student engagement and support understanding of the material in an innovative way. The spider web model helps students link various concepts and skills through a central theme, while the Artsteps media provides a visual platform that facilitates exploration and presentation of information. This study contributes to the understanding of the effectiveness of digital media integration in thematic learning and suggests the use of similar methods in other educational contexts.

Keywords: Thematic Learning, Spider Web Model, JIGS, Nature School.

1 Introduction

Curently, the 2013 curriculum is applied to primary and secondary education. Student success is assessed not only in terms of understanding, but also in terms of attitude and skills. The 2013 curriculum adheres to the concept of complete learning and optimal talent development, providing space for students to achieve learning goals according to their personal progress and abilities. The curriculum is humanistic and directed at cognitive, affective and psychomotor development. Furthermore, the 2013 Curriculum encourages the learning process not only in the classroom but also outside the classroom based on experiences that allow students to interact

with the school environment and the surrounding community, thus increasing their social sensitivity (Islam et al., 2022).

Educational goals can only be achieved if education managers have a set of guidelines known as the curriculum. The definition of "curriculum" comes from the Greek meaning "circle of instruction," describing the interaction between teachers and students in the learning process. The curriculum serves as a standard or measure of achievement of learning outcomes, which describes the subject matter to be delivered and learned in the classroom (Islam et al., 2022). The challenges in the world of education are very dynamic, especially in the current era of information development, as seen from the many things that affect the pattern of social relations and community life activities from various aspects of life. (Novrida, 2023)

The presence of nature schools is triggered by the idea of creating a learning system that is fun and capable of generating excitement, which in turn can enhance students' natural intelligence. The main goal is to attract students' interest and develop their talent abilities and interests. The nature school model is designed to create an exciting and interesting learning atmosphere (**Dzaky, 2019; Utaberta, Othuman Mydin, N Ismail, 2015).**

The curriculum for nature schools was designed six years before the establishment of the first nature school, known as Sekolah Alam Ciganjur, in 1998-1999. In that period, Lendo Novo was the initiator of the nature school who started to develop the concept of education with the aim to create a liberating and enjoyable learning environment for students, allowing them to develop their potential. Several like-minded people joined Lendo Novo. After 6 years, Sekolah Alam, located in Ciganjur, was established, and the curriculum that had been designed at the playgroup level was implemented.

In addition to Ciganjur Nature School, North Sumatra, especially Medan City, also has a Nature School. Johor Islamic Green School, located in Pangkalan Masyhur, Medan Johor sub-district, Medan City, North Sumatra, is one of several nature schools in the region. The school is led by Mrs. Meriesta Dewi, who works as a doctor, so is not easy to find. Ms. Eka Lismawati, as the homeroom teacher of Johor Islamic Green School This non-formal education institution focuses on developing students' mindset and character education through interaction with nature. The establishment of this nature school aims to introduce children to nature as a source of knowledge and learning materials.

The scientific article entitled "The Role of the Moral Curriculum in Character Building at SOU Parung Bogor Nature School" reveals several main findings: 1) The moral curriculum is implemented continuously and is a top priority at the School; 2) The moral curriculum serves to strengthen students' relationship with God and improve their interactions with the surrounding environment and fellow humans; 3) The moral curriculum plays a crucial role in shaping student character, with the implication that effective curriculum implementation will result in positive character building in students (Fatmawati & Yusrizal, 2020) (Nabilah & Basri, 2021). The importance of character building in school-age children, of course, needs to be supported by learning tools that can support strengthening the character of students. (Deni Setiawan, 2022)

Many problems faced in the modern era are the decline in the character of students. Character is something that has become a hot topic among educational people today. The low morale of students and the problems that hit the world of education are a warning of the decline in noble character that was once closely embedded and became a personality. (Wawan Akbar dkk,

2022). In addition, according to Hasan et al , there are several problems found in learning in the modern era, namely the lack of teacher creativity in using learning methods, dependence on conventional methods such as lectures, and lack of media support in these methods (**Hasan et al., 2021**: 1). Conventional learning methods with lectures are quite often used by educators because lecturing is mastered by most educators. As a result, the learning atmosphere in the classroom becomes boring, which has an impact on the effectiveness and optimality of learning outcomes. To overcome this problem, it is very important to pay attention to the suitability of determining and using media so that it can attract students' attention and become a learning media that provides easy access to it (Hasan et al., 2021: 3).

The educational strategy at Johor Islamic Green School aims to motivate the spirit of competition through cooperation in goodness. The school is based on four main pillars: morals, leadership, logic and business. These pillars form the main basis for achieving the school's learning objectives. Johor Islamic Green School has excellent facilities, including a prayer room, six saung (for Kindergarten-A, Kindergarten-B, and Elementary), tire play, swings, trampolines, several animals, a river, and various trees. However, observations showed that although the school had a rock climbing facility, it was not maintained and was in disrepair, making it unusable.

The curriculum used at Islamic Green School Johor is a combination of the 2013 Curriculum and the Nature School Curriculum. As in regular schools, educators in this school are required to prepare PROTA, PROSEM, and RKM. Learning at Johor Islamic Green School focuses on four main pillars: (1) Akhlak (2) Leadership (3) Logic (4) Business in Hasan et al view is an entrepreneurial activity that has economic value, starting from ideas and being realized in practical action (Hasan et al., 2021: 101).

Nature School implements the 2013 Curriculum as well as a specialized curriculum at all grade levels, from grade one to grade six. In addition, the teaching and learning process at Sekolah Alam integrates education that focuses on developing environmental awareness and character. All subjects are thoroughly applied to the curriculum. The learning model applied is the spider web model, which provides opportunities for educators to act as facilitators, as well as guide and direct students in their learning through experiments relevant to each subject (**Miftachurrozaq & Widodo, 2023**). The Spider Web model emphasizes thematic learning, where theme development is determined and approved in advance, and connected to other subjects. This theme serves as a link in the learning process, either across fields or one specific field (**Sugiarti, 2022**).

The Ministry of National Education (2006:6) defines thematic learning as an integrated approach that utilizes themes to connect various subjects, with the aim of providing significant learning experiences for students. **Mardianto (2011:38)** states that thematic learning involves the use of themes to integrate a number of subjects, thus creating meaningful learning experiences. On the other hand, **Sungkono (2006:76)** explains that thematic learning is a learning method that combines material from various subjects in one theme of discussion (**Ananda & Abdillah, 2018**).

Thematic learning can be applied to learners through various learning models. Fogarty (1991, 61) identified ten learning models, namely fragmented, connected, nested, sequenced, shared, webbed, threaded, integrated, immersed, and networked. In 1997, the D-II PGSD Development Team decided to develop three models, namely the Spider Webbed Model, the Connected

Model, and the Integrated Model. The development of the Spider Web Model begins with the determination of the main theme. Once the theme is set, if necessary, it can be expanded into subthemes that show the linkages between various subjects. Furthermore, various learning activities that support themes and subthemes are developed (Ananda & Abdillah, 2018).

Learning activities can be done anywhere and anytime as needed. In nature schools, the role of teachers goes beyond teaching; they must also function as motivators, friends, friends, and sometimes even as challenges, depending on the situation faced by students. **Sutomo (2018:89)** explains that the learning process in nature schools can stimulate children's naturalistic intelligence. Here, children are taught to be more sensitive to the surrounding environment, so that they develop awareness to help maintain and preserve the environment in the future (**Siddik Lubis et al., 2020**).

In terms of discipline, nature schools have a different perspective. The measurement of discipline in nature schools is not only seen from the aspect of uniforms and homework, but also through daily activities such as queuing, discussing in group tasks, and following outbound activities in an orderly manner. In addition, outdoor learning also indirectly hones children's logical and creative abilities, as they are often faced with real problems that require creative solutions (Siddik Lubis et al., 2020).

Basically, a learning model is a learning structure that is systematically designed from beginning to end, by educators in a typical way. In other words, the learning model serves as a framework that includes approaches, methods and learning strategies. In Curriculum 2013, the learning model adopts a scientific or science-based approach. This scientific approach can be applied through various strategies, one of which is the contextual learning strategy.

Based on the explanation above, the researcher wants to explore the use of Artstep media with a spider web model as a learning media at the Islamic Green School Alam Johor. This research will focus on the concept of natural schools, the unity of differences in learning theme 2 subjects with independent materials in Indonesia, and the use of Artstep media with a spider web model as a learning medium in these natural schools, The app helps create an online exhibition space where users can upload, organize and display artwork or educational materials in a real virtual environment.

2 Research Methods

This Study qualitative research methods through a field study at the Islamic Green School in Alam, Johor. The researcher collected data through observation, interviews, documents and other methods to understand the theory of natural schools, thematic learning in natural schools and the advantages and disadvantages of Islamic Green School in Alam, Johor. Observation was done by going to the field for direct observation and through social media, using interview techniques to educators and students to understand the concept and learning as it happens. According to Bogdan & Biklen (1992), The study process in the social, cultural, and philosophical domains that produces descriptive data in the form of words or notes relating to meaning, value, and understanding is called qualitative research Similarly, Moleong (2007) defines qualitative research as a method of collecting qualitative information from observer behavior in both written and oral forms. In contrast, descriptive research according to Hamdi &

Bahruddin (2014) is a type of research that tries to characterize current events that have occurred in the past or present. Sukmadinata (2010) states that descriptive techniques see how an action is different or comparable to other events in terms of its form, characteristics, relationships, and similarities.

Similarly, Moleong (2007) states that Similarly, Moleong (2007) states that qualitative research is a research procedure that produces qualitative data in written and oral form from observer behavior. Meanwhile, according to Hamdi & Bahruddin (2014), descriptive research is a research method that aims to describe existing phenomena that have occurred in the present or past. According to Sukmadinata (2010), descriptive methods investigate changes in form, characteristics, relationships, similarities and differences between an activity and other phenomena. In contrast, qualitative research, as defined by Silalahi (2009), is a methodical approach to understanding social issues through the use of language to create a comprehensive picture, detailed reporting of interviewees' points of view, and systematic organization of the natural world. According to John Creswell (2008) and Raco (2010), international qualitative research goes through many stages. 1) Determining the research purpose question is the first step in the process. 2) The conversation and literature search stage of the first stage carries over to the second stage. Selecting research aims and objectives is the third step. 4) Data collection is the main emphasis in the fourth stage. Identification and selection of potential participants is another aspect of this step. 5) Data interpretation is the fifth step. 6) Reporting in the final stage

3 Result and Discussion

1. Thematic Learning

The School of Nature curriculum integrates nature components into every lesson, transcending the boundaries of the classroom. The dimensions of the curriculum are a key area of variation: The Nature School logic curriculum emphasizes attitudes, knowledge and abilities, while the 2013 curriculum does the same building links between all lessons and nature outside the classroom. The curriculum dimension is a key area of variation: While the Nature School logic curriculum includes the four ideas of ethics, leadership, logic and business rolled into one called natural roots, the 2013 curriculum focuses on attitudes, knowledge and skills.Connect every lesson with elements of nature, not just the classroom. The main difference lies in the dimensions of the curriculum: The 2013 curriculum focuses on attitudes, knowledge and skills, while the Sekolah Alam logic curriculum includes four concepts of ethics, leadership, logic and business rolled into one called natural roots. This learning process uses a spider's web model now known as theming and involves four methods that are always related to nature so that it becomes the main medium in all learning activities (Masyati, 2007).

The extent to which the planning and integration of learning is in accordance with students' conditions, including interests, skills, needs, and learning capacity, is a determining factor in the successful implementation of subject-based learning using the spider web model. The purpose of theme learning, according to Pappas (1995, in Sri Anitah W, et al., 2008: 3.10), is to encourage students' active involvement by concentrating on subjects of interest and carefully selecting learning activities. This method connects the cognitive, psychomotor, and emotional domains of the subject to provide a thorough and meaningful learning process. This is in accordance with Marzuki assertion (2015:21) that learning is a "knowledge creation process" in

which students participate in the construction and interpretation of meaning (FKIP Untan, 2020; Halidjah Master of Elementary Teacher Education Study Program).

2. Nature School

The word "sechool" now refers to a structure or organization that serves as a teaching location, where students acquire and disseminate knowledge. An institution set up specifically to educate students under the direction of an instructor is called a school in Indonesia. On the other hand, nature is described as an environment that is not affected by human activities and remains in a protected and natural state, so that it can sustain the existence of animals and other living things. In addition, nature is also a vital resource for the survival of living things. Therefore, it is our duty to protect the environment from harm. Nature schools are educational institutions that aim to encourage learning through direct engagement with nature.

Students are allowed to engage with the outdoors in nature schools, which allows them to learn firsthand about different aspects of life in nature. The aim of nature schools is to enhance children's understanding of the value of nature for human existence. Nature can be used as much as possible in the teaching process, including learning in natural environments and using learning resources such as plants, animals and rocks. This kind of educational process can also be a direct reminder for students of the greatness of Allah SWT who has created the universe and everything in it for the benefit of living beings on our planet. Everyone will feel obliged to respect and preserve nature in this way, which will reduce the adverse impact that humans have on the environment. In general, a good education is one that integrates people, technology and nature. Nature is a source of knowledge that has been utilized since ancient times.

Nature provides a lot of inspiration and teaches us to think realistically based on nature. Therefore, nature schools are a good educational tool to meet the needs of today's society. The basic idea of nature schools is to return to the purpose of human creation, which is to benefit nature. Nature schools have the same functions and levels as traditional schools, have the curriculum of the Ministry of National Education and are complemented by the unique curriculum of nature schools, namely leadership and ethical subjects that have the spirit of the natural order, and the emphasis on the natural order on visual-spatial, kinesthetic and naturalistic aspects (Sihotang et al., 2022).

Nature school is a nature-based educational institution that offers a unique educational experience. The environment at Sekolah Alam feels very natural, with school buildings shaped like houses on stilts or saung, surrounded by fruit, vegetable, flower and livestock gardens. In contrast to the high-rise and grand building atmosphere commonly found in conventional schools, Sekolah Alam provides a feel that is closer to the real world. At Sekolah Alam, children are introduced early to the real-life environment. They are given the freedom not to wear school

uniforms, but instead wear play clothes complete with boots, allowing them to explore their surroundings freely. Diversity is considered unique and valuable at Sekolah Alam. Diversity is not measured by the clothes worn, but by the morals, behavior, attitude, learning spirit and curiosity of the students. With this approach, Sekolah Alam emphasizes not only academic learning, but also character development and life skills relevant to the natural environment. This creates a holistic and integrative educational experience, bringing children closer to the values of diversity and creative exploration (Masyati, 2007).

The nature school concept was developed by Lendo Novo, an ITB alumnus petroleum engineer who went on to study in the Energy Resource Management Program. Lendo, who has had a distinguished career and served as head of the investigation team at the ministry of SOEs, received an independent education from his parents. He learned the business world from his mother, Zaenab, and the integration of faith and knowledge from his father, Zuardin Azzaino. Zuardin, a thinker and researcher at Bank Indonesia, wrote a work on scientific and divine integration, asserting that the scientific process begins with belief in the Qur'an and Sunnah, and that the development of science and technology is influenced by scientists' divine beliefs (Islam et al., 2022).

Curriculum development according to Nana Sudjana is based on three main aspects, namely: (1) Philosophical Foundations, which include in-depth analysis of the nature of man and life, including logic, ethics, and aesthetics, which are important for determining the direction and purpose of education; (2) Socio-Cultural Foundations, which emphasize the need for the curriculum to adapt to existing social conditions and anticipate changes that may occur in society; and (3) Psychological Foundations, which focus on changes in children's behavior towards maturity through theories of behavioral development in the teaching and learning process (Sanjaya, 2009: 42) (Dan & Sulistyowati, 2014).

The curriculum for nature schools began to be designed six years before the establishment of the first nature school, known as Sekolah Alam Ciganjur, in 1998-1999. During this period, Lendo Novo as the initiator of the nature school began to develop the concept of education that aims to create a liberating and enjoyable learning environment for students, allowing them to develop their potential. Six years later, Sekolah Alam Ciganjur was established, and the curriculum that had been designed was applied to playgroups, kindergartens and primary schools (Islam et al., 2022). The learning system approach in nature schools involves three stages and four steps. The first stage is the delivery of material, focusing on the absorption of new knowledge and triggering students' curiosity. The second stage is the learning process, which actively engages students so that they gain meaningful experience. This process ultimately encourages students in their development process (becoming) (Islam et al., 2022).

In nature school, students not only receive information verbally from the teacher, but also experience learning through their senses of feeling, seeing and touching and are involved in the whole learning process. They are encouraged to understand their own basic potential, with recognition of the diversity of individual characters, appreciating each child's strengths and understanding their weaknesses. The educational process implemented in Sekolah Alam, both through direct experience and additional activities, effectively hones children's social skills (Triana T, 2020).

The combination of classroom instruction, outbound training, outings, market days and other activities provides a more thorough understanding and awareness of life. This contributes to a stable emotional structure and mentality, and fosters daily attitudes that become more enlightened over time. The school serves as the center of life for students, where they enjoy a pleasant environment without pressure and stress. School becomes a living reality that they experience with full appreciation, serving as a source of joy rather than a source of stress that

often reduces their motivation (Masyati, 2007). In Sekolah Alam, students not only receive information verbally from the teacher, but also experience learning through their senses - feeling, seeing, and touching as well as being involved in the whole learning process. They are encouraged to understand their own basic potential, with recognition of the diversity of individual characters, appreciating each child's strengths and understanding their weaknesses. The educational process implemented in Sekolah Alam, both through direct experience and additional activities, effectively hones children's social skills (Triana T, 2020).

According to the Big Indonesian Dictionary, character refers to the psychological or moral traits that distinguish individuals from one another. This term is often used to assess a person's good or bad character, but in practice, a person is considered to have character if they apply good values in their behavior (Triana T, 2020) Nature school is a form of alternative education that is different from traditional learning concepts. The purpose of this education is to change the mindset and mentality of students to be more creative, innovative and productive, as well as to improve social traits and interpersonal attitudes with Allah SWT and fellow humans (Setiawati, 2020: 37). Setiawati argues that natural schools are different from ordinary formal schools, one of which is the learning method. In teaching activities, learning methods and media play a very important role in realizing the learning process. The learning approach with nature will make it easier for educators to provide knowledge to students, and students will be more effective in improving learning outcomes and attitudes towards everyday life. (Setiawati, 2020: 37).

Some of the methods used in nature school activities include:

- 1. Use, observation and research of educational media
- 2. Productive capital development and entrepreneurship (apprenticeship and trade)
- 3. Human Development Facility
- 4. Estabshment of leadership skills
- 5. Spider web model, not limited to subject chapters (Ningrum & Purnama, 2019)
- 3. Spider Web Model

The Spider Web model is a process-based learning apporoach that spans a period of time and places a strong emphasis on problem solving. This method integrates ideas from several disciplines or areas of expertise to produce a pertinent learning module. The Spider Web paradigm is used to conduct collaborative learning activities in various organizations (Karo et al., 2021). This nature school uses a more traditional spider web style of learning, meaning the subject matter is not divided into chapters. This approach allows students to acquire the necessary foundational knowledge while understanding the material in a comprehensive, integrated and useful way.

The basic information, attitudes and skills that children need are meant to be provided through this basic education. The aim of primary education is to help children become better able to read, write and count. It also aims to improve their character by providing fundamental information and skills that they may need in the future. The term "playful learning" refers to the enjoyable environment in which learning takes place at Nature School. Learning outdoors naturally fosters an atmosphere free of stress and boredom, thereby increasing the appeal and enjoyment of learning. Alam School has been able to transform the classroom environment into a beautiful, comfortable and realistic miniature of life by implementing the "fun learning" strategy. Learning becomes a fun activity, making children realize that school is a place where happiness goes hand in hand with learning (Masyati, 2007).

Nature school uses a "spider web" (thematic) learning approach, where one topic is incorporated into each course, to enhance this atmosphere. This method helps students understand the content in a more integrative, complete and precise way that is more practical in real-world situations. This approach encourages the development of basic skills such as scientific thinking, curiosity, observation skills, and hypothesis formation. According to Masyati (2007), the "spider web" paradigm allows students to learn through direct experiences such as seeing, touching, and feeling-and instructor explanations.

The integration technique used by MoEC adopts a thematic approach to integrated learning and highlights nature and culture through the Spider Web model (Ramadhani, 2020). In contrast to traditional teaching approaches, this model is built on organized experiences that link education to environmental values, culture and the use of second-hand goods. The emphasis is on entrepreneurial materials that include biotechnology, information and communication technology, retail, and distribution, in order to foster children's independence. The utilization of Artsteps as teaching material for the History of the Proclamation of Indonesian Independence Theme 2 Unity in Diversity in grade 6 SD is a practical example in fostering the independence of information and communication technology. (Pratiwi B & Puspito K, 2020).

With this method, several disciplines are combined in one theme and then practiced through hands-on activities to students. Students should be able to investigate the importance and use these teachings in their daily lives. An illustration is to acknowledge the past hardships faced by the soldiers. In addition, by analyzing the surrounding environment and sharing postclimbing experiences in Indonesian, students also deepen understanding in Arabic and English (Nisa Sulis, 2023). The Spider Web model brings together several subjects in one theme using a thematic approach. The following steps are included in the implementation process:

1. Theme Setting: Themes are determined through discussions between teachers, interactions with students, or based on school policy. This theme is placed at the center of the web.

2. Detemination of Basic Objectives/Competencies: Learning objectives from different subjects are identified based on the chosen theme. For example, if the chosen theme is weather, teachers should consider how students can understand related concepts. The basic competencies of the various subjects are written in the appropriate nets.

3. Theme Introduction: the initial activities are designed to introduce the theme thoroughly, with the aim of building basic knowledge that triggers students' curiosity. This could include reading a book or screening a movie relevant to the theme.

4. Learning and Activity Design: The lessons and activities are designed to link the theme to the competencies to be achieved, including knowledge, skills and attitudes. For example, students can be asked to monitor the weather for a week, take pictures according to weather conditions, and summarize the data collected.

5. Integration of Activities: All activities undertaken are linked to each other to provide students with a comprehensive understanding of the theme from multiple perspectives.

6. Supporting Activities: Additional activities such as bringing in a resource person to provide information or displaying student work on a display board for discussion, support further understanding of the theme.

This spider web model can integrate courses and topics in depth, support connections between various concepts, and expand students' learning repertoire. The implementation of effective learning steps can have a significant impact on the success of the learning process. The application of innovative learning models in the context of integrated learning is one of the strategies that educators can use to create an interesting learning atmosphere so as to reduce boredom among students. By integrating various subjects into one subject, integrated learning aims to provide students with a comprehensive and meaningful educational experience. Choosing the right learning mode can facilitate the delivery of material and encourage students to actively participate in class activities. The spider web learning model is expected to provide the best method to improve students' learning efficiency.

The model is gaining popularity as an integrated approach for primary school students, which allows them to develop social, emotional and creative thinking, as well as their ability to connect different ideas related to various subjects (Iskandar et al., 2024). According to research, the spider web-themed learning model or commonly called spider web can improve the learning efficiency of primary school students (Pramita, 2022). This network approach uses a theme or topic to integrate various related theories into a unit of study. Aisyah (2007:3-4) explains that this model uses the term spider web because its design resembles a web spun by a spider and centered on the subject in question. This concept is in line with the idea that subtopics are chosen based on the underlying skills to be honed in interpreting the topic (f et al., 2024).

4 Conclusions

Research on the implementation of thematic learning with the material "Unity in Differences" using the spider web model at Sekolah Alam JIGS Medan shows that integration can significantly improve the quality of learning. The spider web model has proven effective in integrating various subjects around the central theme of "Unity in Differences". The model allows students to connect concepts and skills from various disciplines, thus providing a more holistic and relevant understanding of the subject matter.

This research contributes to the understanding of the effectiveness of digital media integration in thematic learning. The findings suggest that methods such as the spider web model can improve the quality and effectiveness of learning and offer a new approach that can be applied in other educational contexts. Overall, this research suggests that the implementation of innovative digital learning models can enrich students' learning experience and enhance their understanding of the subject matter in a more dynamic and engaging way.

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