

Hypnohappy Learning Model Development In State Madrasah Alyah 2 Barru District

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Abstract

This paper discusses how to develop a hypnohappy learning model in biology subjects at MAN 2 Barru". This type of research is development research using the four D development model which consists of four stages, namely defining, designing, developing, and disseminating. The learning model developed is a neuroscience-based learning model, namely the hypnohappy model. Learning tools developed in the form of model books, syllabus and lesson plans, teacher books, student books and LKPD. The data obtained were analyzed using descriptive statistics. The results showed that the analysis of the validity results for the model book was 3.90 and included in the valid category with an R value of 0.9583 (high reliability); for book fragments of the syllabus of 3.6166 and included in the valid category with a value of R = 0.9583 (high reliability); for the teacher's book of 4.08 and included in the very valid category with a value of R = 0.9939 (high reliability); for student books of 3.70 and included in the valid category with a value of R = 0.9708 (high reliability); for LKPD of 3.67 and included in the valid category with a value of R = 0.9573 (high reliability). The practicality of teaching materials was analyzed based on (1) observation sheet on the implementation of the learning model, (2) observation sheet on the teacher's ability to implement the learning model, (3) teacher response questionnaire sheet on hypnohappy learning models and tools, (4) student response questionnaire sheet on hypnohappy learning models and tools. Thus, the learning tools developed have met the valid, effective and practical criteria. Theoretically, this research has implications for further research to explore more deeply and broadly, and for practitioners to become material for improving their performance so that biology learning is more effective and efficient.

Keywords: Learning Model, Hypnohappy, Development

Introduction

Indonesian citizens are expected to know their basic rights and obligations and have the ability to be able to meet their own needs, participate in efforts to meet the needs of the community, and strengthen unity and integrity as well as efforts to defend the nation and state. Such knowledge and abilities can be obtained from the national education system. This is intended to give meaning to the mandate of the 1945 Constitution, Chapter XIII, Article 31 paragraph (1) which states that "Every citizen has the right to receive instruction". The learning process is a complex process, uniting various components such as learning objectives, competencies to be achieved by students, materials used as teaching materials, methods, media

and learning resources (Sukirman et al., 2009). All these components must be mixed properly before being applied in the learning process so that the expected results are in accordance with the objectives to be achieved.

The young generation is the front line in building the nation, state and religion. Competent abilities and knowledge must be possessed through the learning process so that education has an important role to advance a country. To produce superior human resources (HR) and have high competitiveness, the quality of education and the quality of educators must be maximal and professional. Therefore, innovation and development activities in the national education sector need to be increased to produce quality, superior and reliable Indonesian human resources, especially in the field of science and technology. The generation of the nation that is smart and still has noble morals and spirituality as a reflection of the 2013 curriculum. The education process is carried out in educational institutions which are divided into several levels, one of which is the high school level consisting of SMA / MA / SMK. Through the educational process a person will have knowledge that will create an intelligent society intellectually, emotionally and spiritually, as the word of Allah swt. in QS Az-Zumar/039: 9.

According to Shihab (2002) in his book Tafsir al-Misbah, it is said that the verse above emphasizes the differences in attitudes and rewards that polytheists will receive with attitudes and rewards for believers. Indeed, those who can draw lessons are *ulul albab*, that is, people who are bright in mind.

Bright thinking is obtained through education that emphasizes providing learning experiences through process skills and scientific attitudes. Schools or madrasas are a place for students to study, and for Muslims the law of studying is obligatory.

The 2013 curriculum development activity carries the theme of creating productive, creative, innovative, and moral Indonesian people through a process of strengthening attitudes as a process to find out why; skill improvement as an action to know how; and equip knowledge as action to know what. The development of life and science in the 21st century has experienced a shift in both characteristics and learning models so that the learning process must also be adjusted. Children must be provided with the knowledge they need to live their lives.

Based on the results of interviews and data obtained from the questionnaire research instrument, the responses of teachers and students to biology learning, it was found that the obstacle to the implementation of the teaching and learning process in education in the millennial era is the psychological pressure felt by students who are forced to construct a mindset. and look at it. This is caused by the application of learning methods that are monotonous, tense and unpleasant. These conditions make students respond to the learning process by activating the reptile brain. Students feel threatened and insecure which ultimately are unable to think properly so that it has an impact on the low soft skills and learning outcomes of students.

Another problem faced is that educators have difficulty in finding solutions to problems experienced by their students. Learners who live in the digital era are greatly influenced by the pace of modernization and lifestyle demands that threaten their future. The problems that are often experienced are lazy to study, forget quickly, not enthusiastic and difficult to concentrate in following the learning process, addiction to online games, low awareness and a less conducive classroom atmosphere. In addition, the world of education is also worried about the character of students who dare to fight their teachers, are not happy with certain teachers and hate the lessons they teach. Educators or schools have not been able to provide the right solution to overcome this. So far, what educators have done is only limited to providing advice or punishment for those who experience these problems.

Examining these facts in the field, especially in schools or madrasas, will find many causes. The trigger factors for these problems can come from parents, family, friends, and the environment. Errors in

socializing and the factor of teachers who cannot understand the character of their students contribute to the source of the problem. Educators as facilitators in the teaching and learning process are tasked with creating situations and conditions that allow the teaching and learning process to be more effective, efficient and enjoyable by considering the character of students in the millennial era.

The teaching and learning process is a process that contains a series of actions based on reciprocal relationships that take place in educational situations to achieve certain goals. This interaction between educators and students is the main requirement for the teaching and learning process to take place. A student is said to be learning if he can know something that he could not understand before, can do or use something that he could not previously use, including certain attitudes they have. On the other hand, an educator is said to have taught if he has helped students to get the desired change (Nata, 2020).

Jensen (2008) emphasizes that educators must ensure that all learners have and develop a set of social skills that are essential to interacting productively in this world which is very important. The assumption that low soft skills and learning outcomes are caused by psychological instability of students is based on observations made by researchers in the field. Furthermore, Hasib et al. (2021) investigates the association of culture and cognition in students. It is suggested that the range of learning model is considered an essential factor influencing learning productivity.

The low soft skills are thought to be due to the lack of opportunities for students to experience and construct their own knowledge and the lack of positive suggestions. Not all educators are able to understand and implement soft skills education development programs. Educators have not created a pleasant learning climate that can explore soft skills and improve student learning outcomes.

Educational practices in Indonesia tend to focus on hard skill-based education (technical skills) which are more in the nature of developing intelligence quotient (IQ), but lack of developing soft skill abilities contained in the emotional quotient (EQ). Soft skills are a sociological term for emotional quotient (EQ) to be able to know a person's ability to work together, solve a problem and even motivate to provide a solution with other people in a field of work (Widarta, 2020).

The Job Outlook Survey held in 2019 entitled "Career Readiness Competencies" organized by NACE (National Association of Colleges and Employers), obtained data that the order of competencies that employers rated the most in the form of career readiness essential competencies consisted of: critical thinking/solving skills, teamwork/collaboration, professionalism/work ethic, oral/written communication, digital technology, leadership, career management, global/multicultural fluency; while the career readiness competencies for new graduates consist of: teamwork/collaboration, digital technology, critical thinking, problem solving, oral and written communication, leadership, global fluency, multi culture, career management.

From these data, it can be concluded that there is an imbalance between the competence of human resources prepared by the world of education and the competencies needed in the world of work, all of which are components of soft skills or mental skills which are the main part of the right brain. Education develops the left brain more than the right brain, even though to be smart both hemispheres of the brain must get a balanced task to get optimal results.

In the world of education, biology subjects occupy a very strategic and unique position in the scientific structure as part of natural science. Biology is currently at its peak, marked by the presence of approximately 500,000 new articles every year (Nahdi & Solihah, 2007).

However, the real condition that is often experienced by students in the field is that the biology subject matter taught in schools/madrasas is considered scary and difficult to understand because it uses Latin and scientific language which results in a lack of motivation, enthusiasm and low learning outcomes of students.

Another factor is that studying reproductive system lessons is still considered taboo by some students, especially female students who grew up in rural areas such as the contours and culture at the research location, let alone taught in less attractive methods. Educators seem to have no time to find and create new learning models that can be a solution to these problems. If material that is considered taboo and difficult is presented using an uninteresting method, it will cause inconvenience for students to learn it. Therefore, it is not surprising that the soft skills and learning outcomes of students are also affected by these factors.

Some of the problems found by researchers in the field regarding the causes of the low soft skills of students based on the initial data collection instruments will be described one by one. Biology learning model is more focused on mastering biological concepts which have significantly less implications for the real life context of students. Currently, biology lessons are still emphasized on the methodological aspects that are deductive (textbooks). These competencies include pedagogic, personality, professional and social competencies that must be possessed by an educator because being a teacher is not an easy and trivial thing because not everyone is able and can do it (Sukmadinata, 2009).

The next cause is the lack of creativity of educators to invite students to be actively involved to hone cognitive, psychomotor and affective abilities which results in the low quality of students who will be carried away when they are in the community and enter the world of work. Students who are tough and good are expected to be born and printed from educational institutions that instill hard skills and soft skills. Students who are strong in these two aspects will automatically be embedded in themselves as intelligent and virtuous individuals who are able to bring the Indonesian nation to compete in the era of globalization which is full of challenges (Muhaimin, 2014).

Next is the less than optimal interaction that occurs between educators and students, students and students, educators with students and the environment as well as interactions in many directions causing low soft skills. In the world of education, if communication and interaction between educators and students occurs intensively, the educational process will run effectively. Biology subject matter delivered by educators is a message in the learning communication process which is the heart or core of learning activities. Communication in learning is one form of educative interaction, where educators act as communicators and students as communicants. The educational interaction must have well-planned goals and procedures that are carried out with full discipline and have a time limit (Inah, 2015). Between educators and students, a comfortable and harmonious relationship must be created so that the brain as an organ that experiences learning experiences feels happy to learn and wants to continue to carry out one of its functions to think.

Educators tend to continue to use the old paradigm which generalizes the ability of students in biology lessons so that educators have not made good efforts to map the potential of students based on their characteristics. The paradigm of thinking must be changed because it does not provide progress for the quality of education so that it is necessary to reorient a new paradigm for educators. Educators who know the characteristics of their students will teach using a teaching style that is in accordance with the type of learning style preferred by students by creating learning activities that involve all the elements of the five senses. The teaching strategy preferred by students is the representation of learning according to how the brain works (Said, 2017).

Educators in teaching must realize that what is used by students to learn is the brain organ. For this reason, educators must create a brain-friendly learning atmosphere. The art of brain-friendly teaching begins with an educator's understanding of how the brain learns. Brain-based teaching is the most sophisticated way to maximize the performance of students' intelligence machines. Activities that involve the brain during the learning process are applications of neuroscience.

The main problems raised in the previous discussion greatly affect the final results of the learning process, to overcome this, the authors conduct development research, namely the development of learning models. The development of a learning model is a plan that is used as a guide in planning the learning process by making the necessary learning tools such as teacher books, student books, student worksheets, learning media such as films, computers and curriculum as guidelines and others. The learning model leads to a particular learning approach including its objectives, syntax, environment, and management system. Student learning outcomes and soft skill abilities can be seen if the learning model used by educators is in accordance with the goals to be achieved and on target.

To overcome the problems stated above, educators must innovate by developing learning models that are relevant to the character of students, one of which is to integrate several practical strategies by considering the ability of the brain and the working principles of the brain by understanding neuroscience, namely the study of the brain.

Neuroscience leads educators to create a learning atmosphere that is liked by the learner's brain. Neuroscience-based learning is the main choice because the process of learning and constructing knowledge occurs in the brain. This is confirmed in the word of Allah swt. in QS Al-Ankabut/29:43 (Ministry of Religion RI, 2002).

M. Quraish Shihab in his commentary on al-Misbah discussing verse 43 of Surah Al-Ankabut explains that the parables in the Qur'an have deep meanings, not limited to the meaning of the words. Each person, according to their scientific abilities, can draw from the matter a different understanding, and no one understands it except those who are knowledgeable (Shihab, 2002).

From this description, the researcher agrees and views that education is very important to produce knowledgeable people through the hard work of an educator who is supported by facilities and infrastructure that facilitate the educational process. Educators must formulate a brain-friendly learning model. Designing a fun learning process for the brain to function properly. The brain that learns happily will be able to understand and contemplate the signs of the greatness of Allah swt.

Educators who master neuroscience-based innovative learning will be able to deliver students to have the knowledge and skills to be able to face the various challenges they will face in the 21st century, the era of the industrial revolution 4.0 and in the era of digital society 5.0. Learning with the brain is actually a process of linking the neurons in the brain so that they are interconnected to form synapses. The more synapses that are connected, the more information is stored in a person's brain and the task of education is to help connect these synapses.

According to the researcher, a suitable and relevant learning model to be developed is the hypnoteaching learning model. Hypnoteaching is a learning model that emphasizes the subconscious mind, because the subconscious mind has greater dominance over how the brain works. The conscious mind has an influence of 12% while the subconscious mind has a greater influence, namely 88% on the behavior, thought patterns, attitudes, and habits of each individual (Yustisia, 2012).

Hypnoteaching is a form of developing learning methods to deal with various problems in the increasingly complex world of education. Hypnoteaching is a combination of five learning methods, namely quantum learning, accelerated learning, power teaching, neuro linguistic programming (NLP) and hypnosis (Hidayatullah et al., 2020). Hypnoteaching is identical as the art of teaching by giving suggestions and imagination into the minds of students to become smarter. In this learning process, an educator is required to bring students into a subconscious relaxed state, because something that is implanted in the subconscious will be stored permanently in memory.

Educators use language that can make students feel relaxed, happy and comfortable in following lessons. When students are in theta brain waves, or at least in alpha conditions, at that time, the teacher gives suggestions that will make them aware that there is extraordinary potential that has been hidden so far.

Positive suggestions have tremendous power and continue to ring in the brain, able to lead a person to what he thinks. While imagination will make a person more relaxed, able to explore new ideas he has. Being a suggestive teacher requires the ability to choose and use suggestive words, open critical factors from the minds of students and provide positive affirmations to generate potential.

The hypnoteaching learning model is implemented in the classroom by paying attention to the learning modalities of students. There are three main learning modalities, namely the VAK modality (visual, audio, and kinesthetic) but it is often found that a child has a combination of several of these modalities (Sumarni, 2011). The learning process must utilize the senses owned by students.

Information that reaches the brain is obtained through stimuli received by the five human senses, namely visual (sight), audio (hearing), kinesthetic (touch, touch, feeling), olfactory (smell) and gustatory (taste). These senses will collect and provide information, perception and response to what is known. As the word of Allah swt. in QS Al-Mulk/67: 23 (Ministry of Religion of the Republic of Indonesia, 2002).

In this verse, M. Quraish Shihab explains in the interpretation of al-misbah that the verse above only mentions two of the five senses possessed by humans, because it is possible that both are the most important or both represent the other so that what is meant is the five senses (Shihab, 2002).

The development of learning models is an attempt to solve problems that exist in teaching and learning activities. The development of the learning model consists of a set of activities that include all forms of planning, development, and evaluation of the developed learning system (Danasasmita, 2013).

To overcome the various problems in the learning process stated earlier, it is necessary to conduct research on the development of neuroscience-based learning models. Neuroscience is a branch of science that originates from cross-disciplinary fields of science which are basically nerve cells (neurons) in the human brain where this science will become future science or the ultimate science whose application is very broad ranging from education known as neuro-education; learning (neuro-teaching); leadership (neuro-leadership); computer (neuro-simulation); parenting (neuro-parenting); sales (neuro-marketing); pharmacy (neuro-pharmacology) (Pledge, 2015). This development research develops a neuroscience-based learning model, namely the hypnoteaching learning model.

Based on the needs survey, the learning tools needed to complete the research on the development of the hypnohappy learning model consist of a draft book of learning model development models, teacher books, student books, syllabus fragments and lesson plans (RPP), student worksheets (LKPD) and instruments. field research and validator assessment instruments.

Theoretical Review

Research and Development of Four-D Models

Definition of Research and Development

Research is a scientific way to obtain data with a specific purpose and use. The scientific method means that research activities are based on scientific characteristics, namely rational, empirical and systematic (Mulyatiningsing, 2012). Development is a process or steps to develop a new product, or improve an existing product, which can be accounted for. The product is not always in the form of objects or hardware (hardware), such as books, modules, learning aids in the classroom or in the laboratory, but can also be in the form of software (software), such as computer programs for data processing, classroom learning,

libraries or laboratories, or models of education, learning, training, guidance, evaluation, management, and others.

Four D. Development Research Model

A development model can be interpreted as a representation of both visual and verbal. The model presents something or complex information into something simpler and easier (Setyosari, 2016). The development model is the basis for developing the product. The development model can be in the form of procedural models, conceptual models and theoretical models. The procedural model is a descriptive model, showing the steps that must be followed to produce a product. The conceptual model is an analytical model, which mentions the product components, analyzes the components in detail and shows the relationship between the components to be developed. Theoretical model is a model that describes a framework of thinking based on relevant theories and supported by empirical data (Emzir, 2013).

The Four D development model is a development model that is structured in a systematic sequence of activities in an effort to solve learning problems. This model was developed by S. Thiagarajan, Dorothy S. Semmel, and Melvyn I. Semmel in 1974 which was used to develop learning tools. The Four D development model that is the reference in this study consists of 4 main stages, namely: (1) define (define), (2) design (design), (3) develop (development) and (4) disseminate (spread) (Batoq et al., 2015).

Neuroscience

Understanding and Purpose of Neuroscience

Neuroscience etymologically is a neural science that studies the nervous system, especially studying neurons or nerve cells with a multidisciplinary approach (Pasiak, 2012). In terminology, neuroscience is a field of science that specializes in the scientific study of the nervous system. With this basis, neuroscience is also referred to as the study of the brain and all the functions of the spinal cord.

Scope of Neuroscience

Neuroscience studies humans as a whole or in other words the science that studies humans in an interdisciplinary manner. According to Aminul Wathon, neuroscience has several dimensions, including: cellular-molecular, nervous system, behavioral neuroscience, social neuroscience (socioscience) (Wathon, 2016).

Neuroscience Theory in Education

One of the most well-known neuroscience theories is the triune brain theory. This theory was put forward by Paul D. Maclean starting from his hypothesis in the 1960s. He is an American Neuroscientist who explained the evolution of the vertebrate brain in his book *The Triune Brain in Evolution* in 1990.

This triune brain theory study continues to be developed by experts to this day. Based on this triune brain theory, the human brain is divided into three parts, namely the reptilian complex (reptile brain), the limbic system (the limbic system/old mammalian brain), and the neo cortex. The three layers of the brain are intertwined in one overall organization and engage each other in their work in complex but decisive ways. According to this theory, the layer of the human brain consists of three different basic parts, namely the reptile brain, the limbic system, and the neocortical brain, also known as the learning brain (Wijaya, 2018). The neuroscience theory was further put forward by Roger Sperry, a neuropsychologist who discovered that the human brain consists of two main parts, namely the left brain and the right brain. According to Sperry, each part of the brain has a special function without having to depend on one another.

Roger Sperry, the founder of the theory of "dual brain" and "hemispheric specialization" stated that the two hemispheres of the brain, namely the left and right have the same important role, although each has a different function. When the brain is in a lateral condition and does not work together between the left and right brain, then a person tends to have negative prejudices, use the left brain, use the reptile brain, and the conscious mind. A person's ability depends on how he or she is able to optimally activate both hemispheres of the brain (Sentanu, 2007).

Expansion of neuroscience studies

Neuroscience studies humans in a holistic sense, including behavior (character) through understanding the workings of nerve cells, especially the interactions between brain-mind, soul-body, and heart-mind. The main foundations of neuroscience are neuroanatomy and physiology, which is a science that discusses the architecture and special functions of nerves with a more macro and specific approach. In this case, including the microscopic structure of nerve cells and how these nerve cells relate to one another to form a circuit (wiring diagram) and there is much scope in neuroscience studies.

INS (Indonesia Neuroscience Society) maps the scope of neuroscience studies as follows: clinical neuroscience, educational neuroscience, cognitive neuroscience, Social and Cultural, Developmental Neuroscience, Neuroscience, Health and Spirituality, Cellular and Molecular Neuroscience, Nutritional Neuroscience, Neurotoxic and Criminological Neuroscience, Drugs Addiction and Neuroscience, Psychoneuroimmunology, Computational Neuroscience, Neuroinformatics and Neuroengineering (Suyadi, 2020).

Ten Laws of the Brain

Neuroscience is really the study of the brain. Broadly speaking, there are ten basic laws of the brain that are relevant and in synergy with the world of education, especially learning. The ten basic laws of the brain are as follows: unique, special, synergistic, hemispheric, graphic verbs, nerve cell plasticity, imagination and empiricism, simultaneity, symbiosis, male and female brain differences (Pasiak, 2006).

Neuroscience in the Qur'an

The brain is located in the cranium and continues to become the spinal cord (spinal cord). The brain weighs approximately 1400 grams or approximately 2% of body weight. There is no direct relationship between brain weight and head size with intelligence level. The brain gets bigger, but remains in the skull so that over time it will become more and more curved. The deeper the indentation, the more information is stored, and the smarter the owner (Irnaningtyas, 2014). According to neuroscientists, the nerve cells of our brain receive 4 million items of information per second. The information enters into our minds through the role of nerve cells or axons.

Neuroscience has traces in Islam (Muhadjir, 2016). Traces of neuroscience in the Qur'an are found in the terms used in the Qur'an to refer to brain activities such as tafakkur (thinking), tadabur (contemplating), tabashshur (understanding), nadzara (thinking, contemplating) and so on (Suyadi, 2012). The meaning of the sentence is creatively constructed (meaning of creativity) as the Qur'anic verse uses the term neuroscience (Rusdianto, 2015). Several verses using the term neuroscience include QS Al-Baqarah/2:219; QS Al-Imran/3: 191; Surah Al-An'am/6:50; Surah Al-A'raf/7: 176 and 184; QS Yunus/10:24; Surah Al-Ra'd/13: 3; Surah An-Nahl/16: 11, 44 and 69; Surah Ar-Rum/30: 8 and 21; QS Saba' /34: 46; QS AzZumar/39:42; QS Al-Jatsiyah/45: 13; Surah Al-Hasyr/59: 21; QS Al-Mudatstir/74: 18; so that neuroscience in Islamic education allows it to be integrated.

Hypnoteaching Learning Model

Learning Model

According to Soekamto et al in Trianto, the purpose of the learning model is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve certain learning goals, and serves as a guide for learning designers and teachers in planning teaching and learning activities (Trianto, 2007).

Hypnoteaching

Hypnoteaching comes from two words, namely hypnosis and teaching. Hypnosis comes from the Greek, namely hypnos which means "sleep". Hypnosis as a technique to master the consciousness of people so that the person will subconsciously obey if given suggestions or orders by the hypnotist. Teaching is an absorption from English which means "to teach". The word hypnoteaching is a combination of two words, namely hypno and teaching, which in language can be interpreted as a learning method using techniques that apply in hypnosis (Pertwi, 2014).

Soft Skills

Human resources play the most important role in determining the progress of a nation and state. A nation that becomes advanced is not only caused by abundant natural wealth, but must be supported by reliable human resources who are able to build the character of its people so that they have high soft skills. Soft skills are increasingly being realized in achieving success for themselves, organizations, companies, as well as nations and countries. The term soft skills is the development of EQ (Emotional Quotient) (Widarto, 2011). Emotional Quotient is a collection of personality traits, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people.

Methods

Type and Location of Research

The type of research conducted is research and development using a quantitative approach. Researchers used instruments to collect data and then the data were analyzed using statistical procedures. This research is directed at the development of learning models and their devices. The main objective of this development research is to produce a neuroscience-based biology learning model and its tools that are valid, practical, and effective to improve soft skills and learning outcomes of students in Senior High School/Madrasah Aliyah. The research and development location were carried out at MAN 2 Barru. 2. Research Approach

The scientific approach used in this research includes; (1) The neuroscience approach is used because the learning process used uses a brain-friendly learning model by taking into account the working principles of the brain; (2) The pedagogic approach is used because the discussion of the dissertation is related to the management of biology learning activities; (3) Psychological approach, to determine the soft skill development (mental skills) of students during the learning process; (4) The religious approach is intended to measure the level of students' understanding of the values of religious teachings related to the material of the reproductive system being taught.

Data and Data Sources

The data and data sources used in this study consisted of (1) data and data sources for the development of the learning model consisting of data on the validity of the model, the practicality of the model, and the effectiveness of the model; (2) data and data sources for the development of learning devices consist of data from expert assessments of learning tools, data from trials of learning tools.

Research and Development Procedure

The procedure for research and development of neuroscience-based learning models is guided by the research model proposed by S. Thiagarajan, Dorothy S. Semmel, and Melvyn I. Semmel, namely the Four D Model consisting of define, design, develop and disseminate. This research model was chosen by comparing each of the existing research models from various aspects such as suitability with the objectives of the learning model to be developed, sequences and stages that are practical, brief, clear and understood by researchers and the consideration that the Four D development model is also very useful. Perfect for use during the COVID-19 pandemic.

Results and Discussion

The quality of the validity of the hypnohappy learning model and learning tools used in MAN 2 Barru was obtained from the analysis of the learning tools developed and validated by 3 (three) validators. Based on the results of data analysis, a valid learning device was obtained through validity analysis. Based on the results of the analysis, the validity results for the model book are 3.91 and are included in the valid category. The syllabus and lesson plans are 3.62 and are included in the valid category. Furthermore, the teacher's book is 4.08 and is included in the very valid category. The student's book is 3.70 and is included in the valid category and the last is the LKPD book of 3.67 and is included in the valid category.

The quality of the practicality of the hypnohappy learning model and learning tools used in MAN 2 was obtained using an instrument of the practicality level of the model and its devices including: (1) observation sheet on the implementation of the learning model, (2) observation sheet on the teacher's ability to implement the learning model, (3) response questionnaire sheet teachers on learning models and devices, (4) student response questionnaire sheets for learning models and tools. The implementation of the hypnohappy learning model showed an increase in data from meeting 1 to meeting 8 with a value of 3.00 increasing to 4.00 with an average score of 3.57 which means that the syntax of the hypnohappy learning model can be implemented entirely; the teacher's ability to implement the hypnohappy model increased from meeting 1 to meeting 8 with a value of 3.29 increasing to 3.95 with an average score of 3.74 which means that overall the model teacher implemented the hypnohappy model syntax, the teacher's response to the hypnohappy model increased from meeting 1 to meeting 8. with a score of 3.29 increased to 4.00 with an average score of 3.55 which means that the model and its devices are in the category of easy to implement; Student responses to the hypnohappy model increased from meeting 1 to meeting 8 with a value of 3.01 increasing to 4.00 with an average score of 3.65 which means that the material is easy to understand using the hypnohappy model. Overall, the hypnohappy learning model and its devices have met the criteria for practicality. Practical because it has high applicability and is easily understood by students.

The quality of the effectiveness of the hypnohappy learning model used in MAN 2 was obtained by using the model's practicality level instrument and its devices including (1) learning outcomes tests and (2) student soft skill observation sheets. The results of student learning tests in the experimental class obtained an average value of 30.50 and in the control class obtained an average value of 10.50 which means that the value of learning outcomes is significantly different, which means that the hypnohappy

model is effective in improving student learning outcomes while the results of observing the soft skills of students in the experimental class obtained an average score of 27.10 and in the control class an average value of 13.90 was obtained, which means that the increase in students' soft skills is significantly different, which means that the hypnohappy model is effective in improving students' soft skills. Overall, the hypnohappy learning model and its devices have met the criteria for effectiveness. Effective because it is able to provide results in accordance with the objectives and help students to achieve competencies that must be possessed during learning in the form of improving learning outcomes and soft skills.

Conclusion

The practicality of teaching materials was analyzed based on (1) observation sheet on the implementation of the learning model, (2) observation sheet on the teacher's ability to implement the learning model, (3) teacher response questionnaire sheet on hypnohappy learning models and tools, (4) student response questionnaire sheet on hypnohappy learning models and tools . Based on the observation sheet on the implementation of the learning model, the result is 3.57, which means that the syntax in the hypnohappy learning model can be implemented entirely; based on the observation sheet the teacher's ability to implement the learning model, the results obtained are 3.32 which means that it is fully implemented and is in the good category; based on the teacher's response questionnaire sheet to the learning model and device, the result is 3.56, which means that the teacher's response to the hypnohappy learning model and tool is easy to implement; based on the questionnaire sheet of student responses to the hypnohappy learning model and tool, the result is 3.65, which means that the student's response to the hypnohappy learning model and tool is easy to understand. The effectiveness of the learning model was analyzed based on learning outcomes tests and student soft skill observation sheets. Based on the learning outcomes test, the results were 30.50 for the experimental group and 10.50 for the control group, which means that the hypnohappy model is effective in improving student learning outcomes; based on the observation of students' soft skills, the score was 27.10 for the experimental group and 13.90 for the control group, which means that the hypnohappy model is effective in improving students' soft skills. Thus the learning tools developed have met the valid, effective and practical criteria. Theoretically, this research has implications for further research to explore more deeply and broadly, and for practitioners to become material for improving their performance so that biology learning is more effective and efficient.

References

- Batoq, I., Susila, I. W., & Rijanto, T. (2015). Pengembangan Perangkat Pembelajaran Model Kooperatif Tipe Jigsaw Berbasis kurikulum 2013 Pada Mata Pelajaran Sistem Pendinginan Bahan Bakar dan Pelumas Di SMKN 3 Sendawar. *PENDIDIKAN VOKASI: TEORI DAN PRAKTIK*, 3(02).
- Danasasmita, W. (2013). Model pembelajaran dan pendekatannya. Bandung: Direktori Universitas Pendidikan Indonesia.
- Emzir, E. (2013). Metodologi penelitian pendidikan: kuantitatif dan kualitatif. Jakarta: Rajawali Pers.
- Hasib, M., Yassi, A. H., & Nasmilah, N. (2021). Synchronizing Students Learning Styles in Promoting Learners' Grammatical Knowledge; a Cultural Dimensions Study. *International Journal of Multicultural and Multireligious Understanding*, 8(2), 264-272.
- Hidayatullah, S., Khourouh, U., Windhyastiti, I., Patalo, R. G., & Waris, A. (2020). Implementasi Model Kesuksesan Sistem Informasi DeLone And McLean Terhadap Sistem Pembelajaran Berbasis Aplikasi Zoom Di Saat Pandemi Covid-19. *Jurnal Teknologi Dan Manajemen Informatika*, 6(1), 44-52.

- Ikrar, T. (2016). Ilmu Neurosains Modern. r2kn.litbang.kemkes.go.id
- Inah, E. N. (2015). Peran komunikasi dalam interaksi guru dan siswa. *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, 8(2), 150-167.
- Irnaningtyas, Yossa Istiadi, *Biologi* (Jakarta: Penerbit Erlangga, 2014), h.89
- Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching*. Corwin Press.
- Muhadjir, N. (2016). Metodologi Penelitian: paradigma positivisme objektif fenomenologi interpretif logika bahasa Platonis, Chomskyist, Hegelian & hermeneutika paradigma studi Islam recursion-, set-theory & structural equation modeling dan mixed. opac.isi.ac.id
- Muhaimin, M. (2014). Peranan Guru dalam Membina Akhlak Mulia Peserta Didik di MTs DDI Lapeo Kec. Campalagian Kabupaten Polewali Mandar (Doctoral dissertation, Universitas Islam Negeri Alauddin Makassar).
- Mulyatiningsih, E. (2012). *Metodologi Penelitian Terapan*. Yogyakarta: Alfabeta.
- Nahdi, M. S., & Solihah, J. (2007). *Buku Ajar: Biologi Umum*. UIN Sunan Kalijaga Yogyakarta
- Nata, H. A. (2020). *Pendidikan Islam Di Era Milenial*. Prenada Media.
- Pasiak, T. (2006). *Manajemen Kecerdasan: memberdayakan IQ, EQ, dan Sq untuk kesuksesan hidup*. Bandung: Mizan.
- Pasiak, T. (2012). *Tuhan dalam Otak Manusia: Mewujudkan kesehatan spiritual berdasarkan neurosains*. Bandung: Mizan.
- Pertiwi, H. (2014). *Hypnoteaching untuk PAUD dan TK*. Jogjakarta: DIVA Press
- Rusdianto, R. (2015). Interaksi Neurosains Holistik dalam Perspektif Pendidikan dan Masyarakat Islam. *HUNAFA: Jurnal Studia Islamika*, 12(1), 71-94.
- Said, A. (2017). *95 Strategi Mengajar Multiple Intelligences*. Prenada Media.
- Sentanu, E. (2007). *Quantum ikhlas: teknologi aktivasi kekuatan hati*. Elex Media Komputindo.
- Setyosari, H. P. (2016). *Metode penelitian pendidikan & pengembangan*. Prenada Media.
- Shihab, M. Q. (2002). *Tafsir al-misbah*. Jakarta: lentera hati, 2.
- Sukirman, E., Adi, W. A., Purwamargapratala, Y., & Mulyaningsih, T. R. (2009). *Sintesis dan Karakterisasi YBCO Skala Nano*.
- Sukmadinata. (2009). *Metode penelitian pendidikan*.
- Sumarni, S. (2011). *Pengaruh Penerapan Model Problem Based Learning terhadap Prestasi Belajar Fisika Ditinjau dari Motivasi pada Siswa Kelas X SMK Negeri 3 Boyolangu Tulungagung*. (Tesis). DISERTASI dan TESIS Program Pascasarjana UM.
- Suyadi, M. P. I. (2020). *Pendidikan Islam dan Neurosains: Menelusuri Jejak Akal dan Otak dalam Al-Qur'an Hingga Pengembangan Neurosains dalam Pendidikan Islam*. Prenada Media.
- Suyadi, S. (2012). Integrasi Pendidikan Islam dan Neurosains dan Implikasinya Bagi Pendidikan Dasar (PGMI). *Al-Bidayah: Jurnal Pendidikan Dasar Islam*, 4(1).
- Trianto (2007). *Model-model pembelajaran inovatif berorientasi Konstruktivistik*. Jakarta: Prestasi Pustaka.

Wathon, A. (2016). Neurosains dalam pendidikan. *Jurnal Lentera: Kajian Keagamaan, Keilmuan dan Teknologi*, 14(1), 284-294.

Widarta, F. O. (2020). Persepsi Siswa Terhadap Keterampilan Dasar Mengajar Mahasiswa Program PLP II Program Studi Pendidikan Biologi PSDKU Universitas Syiah Kuala Gayo Lues di SMP Negeri 1 Blangjerango. *BIOTIK: Jurnal Ilmiah Biologi Teknologi dan Kependidikan*, 8(1), 106-118.

Widarto (2011), *Pengembangan Soft Skills* (Yogyakarta: Paramitra Publishing, 2011), h. 17

Wijaya, H. (2018). Pendidikan Neurosains Dan Implikasinya Dalam Pendidikan Masa Kini. repository.sttjaffray.ac.id

Yustisia, N. (2012). *Hypnoteaching: seni ajar mengeksplorasi otak peserta didik*. Yogyakarta: Ar-Ruzz Media