

Differentiated Learning Integrated with Social Emotional Awareness and Digital Learning Media in Improving the Students Motivation and Learning Outcomes

Seri Amalia¹, Safrida S^{2*}, Susi Mulia Ulva³

¹ Teacher SMA Negeri 1 Krueng Barona Jaya, Master of Biology Education Department, Syiah Kuala University, Banda Aceh, Indonesia.

² Biology Education Department, Syiah Kuala University, Banda Aceh, Indonesia.

³ Master of Biology Education Department, Syiah Kuala University, Banda Aceh, Indonesia.

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Corresponding Author:

Safrida S

[safrida@usk.ac.id](mailto:sufrida@usk.ac.id)

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Abstract: This learning is designed to facilitate the individual learning needs of different learners by integrating social and emotional awareness. The purpose of this research to improving the motivation and learning outcomes. This research uses the development of the ADDIE model. The results show an increase in student learning outcomes and student learning motivation in class XI IA2 SMA Negeri 1 Krueng Barona Jaya. Student learning outcomes with paired sample T-test test obtained sig. (2-tailed) 0.00 < 0.05. Is a significant difference between biology learning outcomes in pre-test and post-test data. Students' responses through plasma membranes in class XI IA2 SMA Negeri 1 Krueng Barona Jaya is Very Good, with a percentage of 91.91%.

Keywords: Differentiated learning integrated; Digital learning; Emotional awareness; Motivation

Introduction

Education is one of the main benchmarks of a nation's progress, and curriculum changes in education are a necessity because they adjust to the needs of students and the times (Aleixo et al., 2018; Hart et al., 2020). The independent curriculum launched by the Minister of Education, Culture, Research and Technology of the Republic of Indonesia, Nadiem Makarim in February 2022 is an important learning transformation, not only in dealing with post-pandemic education but also to deal with the world situation that continues to change according to the times (Novia et al., 2023). The Merdeka Curriculum is designed to provide flexibility for education units to create a contextualized education unit operational curriculum, so that the learning applied at school is in accordance with the learning needs of students (Dewi et al., 2022). The fact

that our students have diverse characters, learning needs both in terms of interests, learning profiles, learning styles and learning readiness (Kukulka-Hulme, 2012; Schildkamp & Kuiper, 2010).

The independent curriculum with its main essence is independent learning, providing opportunities for teachers to design learning that allows students to explore their respective interests and talents (Irfan et al., 2023). This is in line with the basis of education according to Indonesian education figure Ki Hajar Dewantara that education guides all the forces of nature that exist in students so that they can achieve the highest safety and happiness as human beings and members of society, a concept that we later came to know as the among system (Hasibuan et al., 2023; Setiawan & Sudrajat, 2018).

Leading students to achieve safety and happiness certainly requires a balanced education between the

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development of academic competence and socio-emotional competence (Marzoan, 2023). Ki Hajar Dewantara also suggested character learning, which is the learning of the human soul (Purnama et al., 2022). One part of soul learning is social and emotional learning (Marlina et al., 2022). Social emotional learning in the midst of rapid technological development with increasingly individualistic patterns of human interaction is needed in preparing students to interact with others as part of their social life (Habibi, 2023).

In the implementation of learning that is in accordance with the individual learning needs of students and by considering social emotional aspects, the selection of learning media that is in accordance with the times and technological developments is very supportive (Daunic et al., 2021; Müller et al., 2020; Rimé et al., 2020; Griful-Freixenet et al., 2020). The values of novelty in learning applied by teachers in schools will be able to present learning that is in accordance with the era in which students are. Motivating learning, so that learning objectives will be easily realized (Brunec et al., 2020; Luo & Hancock, 2020).

So far, the learning that is often applied at school, especially at SMA Negeri 1 Krueng Barona Jaya is collaborative learning, but it has not been based on efforts to meet the individual learning needs of each student both related to interests, learning profiles, and student readiness. The media used by teachers is still conventional and tends to be uniform. Likewise, the process of learners' interaction with the subject matter, and how they show their understanding of what they have learned, is almost all determined by the teacher so it does not meet the individual learning needs of each learner. On the other hand, the integration of social-emotional awareness in learning as a basis for them to learn to manage emotions, interact with others and prepare themselves to be part of society, is still lacking.

Based on the description above, as a teacher, the author intends to design and implement differentiated learning integrated with socio-emotional awareness and digital learning media that can improve the motivation and learning outcomes of students at SMA Negeri 1 Krueng Barona Jaya. This learning is designed to facilitate the individual learning needs of different learners by integrating social and emotional awareness and using digital learning media in accordance with technological developments such as digital books, learning videos, interactive learning media, and other digital applications.

Method

This research uses the development of the ADDIE model. The author makes a non-cognitive diagnostic

assessment. The author develops lesson plans. Prepare digital learning media, tools, materials and learning resources. Next is learning stage and evaluation stage. Evaluation stage includes analyzing the students' response questionnaire and analyzing the strengths and weaknesses of the learning activities that have been carried out.

Result and Discussion

Before the implementation of learning, the teacher has distributed questions as a pre-test value and after the implementation of learning, students again answer questions to take the post-test value while reflecting on differentiated learning integrated with socio-emotional awareness and digital learning media on transport material through cell membranes. Learning with various kinds of differentiation both content, process and product differentiation that is felt to accommodate the needs of students on the material of transport through cell membranes makes learning activities take place interactively and filled with collaborative spirit from students. Learners look very motivated and active during learning activities. In addition, learners are also very enthusiastic in doing group work, they are fully present to carry out their roles and responsibilities as group members.

The results of pre-test and post-test of differentiated learning integrated with social emotional awareness and digital learning media are presented in the following Figure 1.

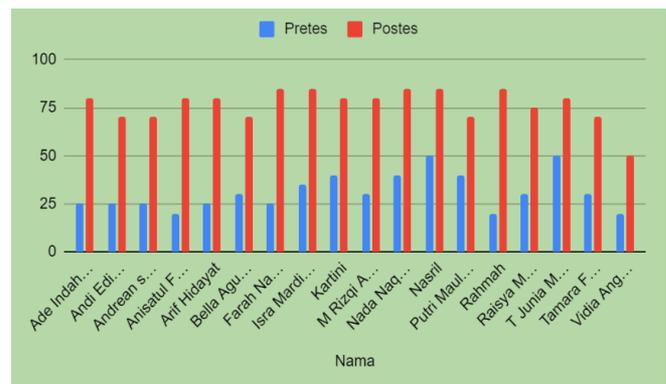


Figure 1. Student Learning Outcomes

Based on the results of Figure 1, it can be explained that the post-test value is higher than the pre-test value. Furthermore, the data were analyzed statistically with the paired sample T-test. normality test obtained the result that the data was normally distributed. The result of sig. (2-tailed) of 0.000 < 0.05, it can be concluded that there is a significant difference between biology learning outcomes in pre-test and post-test data, thus the application of differentiated learning integrated with

social emotional awareness and digital learning media can improve student learning outcomes.

From the results of the reflection of learning activities that have been carried out, the author analyzes the results of filling in the questionnaire of students' responses to the differentiated learning process integrated with socio-emotional awareness and digital

learning media implemented in learning biology transport material through cell membranes with 11 statements filled in by 18 students. The responses of students to differentiated learning integrated with socio-emotional awareness and digital learning media can be seen in Table 1.

Table 1. Analysis of Learners' Response

Statement	Assesment				
	1	2	3	4	5
Learning with many digital media (videos, digital books, interactive learning media) that can be accessed in this interesting learning of transport through cell membranes.	0	0	1	3	14
The digital learning media used in this course support you to master the learning material.	0	0	3	5	10
Self-awareness exercises help you to be more prepared to start learning.	0	0	0	8	10
Group activity self-reflection motivates you to play a more active role in the group.	0	0	1	2	15
Group activity self-reflection motivates you to be better at collaborating in groups	0	0	1	1	16
Differentiated learning integrated with KSE and digital learning media can motivate you to learn biology subject matter.	0	0	2	5	11
The material presented in the media provided is easy to understand	0	0	4	6	8
The variety of learning media that can be accessed is useful for you in understanding the material you are learning.	0	0	0	7	11
IT-integrated learning is what you expect to use in learning.	0	0	1	4	13
You feel that the diagnostic assessment given at the beginning of learning is highly correlated with the media that you can easily use to understand the subject matter better.	0	0	0	3	15
The variety of group members makes it easier for you to get to know your peers.	0	0	1	8	9
Number of Frequencies	0	0	14	52	132
Total Score	0	0	42	208	660
Total Number of Scores					910
Average					4.49
Percentage					91.91 %
Criteria					Very good

Table 1 showed that differentiated learning integrated with socio-emotional awareness and digital learning media in learning biology of transport material through cell membranes shows positive results, it can be seen that the most student responses are 91.91% with a very good category.

Importance and Novelty

Based on the results that have been achieved from learning activities using differentiated learning integrated with social emotional awareness and digital learning media, there are important values and novelties that we need to know, among others: Differentiated learning integrated with social emotional awareness and digital learning media is very appropriate to use in the learning process to increase students' interest and learning outcomes. This is in accordance with the study conducted by (Astiti et al., 2023; Astria & Kusuma, 2023) states that differentiated learning integrated with socio-

emotional awareness and digital learning media meets the individual learning needs of students and facilitates the emergence of social and emotional awareness of students. Motivation and learning outcomes increase because differentiated learning integrated with social-emotional awareness in its application utilizes digital learning media that meets the elements of novelty, and is in accordance with technological developments and the times.

Supporting and inhibiting factors

There are so many factors that can support differentiated learning integrated with social emotional awareness and digital learning media. The following are some of the supporting factors for differentiated learning integrated with emotional social awareness and digital learning media in learning, namely: Differentiated learning has advantages in facilitating the individual learning needs of students. This is in

accordance with the study from (Herawati & Wilujeng, 2023 ; Holisoh et al., 2023) so that students can develop the best potential they have. This is in accordance with the study conducted by (Agustina & Sukardi, 2023; Sutisnawati et al., 2022) states that igital learning media used in content differentiation is in accordance with the times and is perceived as a novelty value by learners, thus motivating them to learn. This is in accordance with the study conducted by Rahabav (2021) states that Social Emotional Awareness through self-awareness exercises and group work reflection activities can focus learners' attention and awareness of their roles and responsibilities so that they can attend class in a conscious and happy state.

In addition to the many supporting factors, the author also finds several obstacles that become obstacles in the implementation of learning. Based on the author's analysis, these obstacles, if not solved, will greatly affect the success of achieving learning objectives. This is in accordance with the study conducted by Mubarok (2023), Wantah & Fathimah (2020), states that for this reason, the author is looking for the best solution to overcome these problems. In the following, the author describes the obstacles and solutions to the implementation of differentiated learning integrated with social emotional awareness and digital learning media as follows: Students' indiscipline when accessing digital learning media.

When the learning process is underway, especially during activities to access digital learning media, it is found that students are still talking about things that are not related to learning with group mates. This greatly disrupts the process of collaborative learning activities, especially for other group members. The author anticipates these problems in the following ways: Making agreements related to each stage of learning activities and delivered at the beginning of learning activities. Giving appreciation for students who follow learning activities well and orderly.

Lack of confidence of learners in accessing digital learning media and in expressing opinions related to their understanding. In learning activities there are learners who lack confidence in accessing digital learning media and in conveying understanding related to learning materials. To overcome this, the author made the following solutions: Taking a direct approach to students who are considered not confident in accessing digital learning media and in expressing opinions to provide motivation and guidance. This is in accordance with the study conducted by (Danin & Kamaludin, 2023; Fransiskus De Gomes, 2019; Susanti et al., 2022) states that Both in class and outside the classroom and outside active learning hours. Encouraging through group and classmates to provide assistance related to learning

difficulties and to be more active in involving and giving them the opportunity to argue and ask questions.

Follow-up

It is hoped that there will be a follow-up to this Best Practice by motivating other teachers to implement learning that facilitates the diverse individual learning needs of students and utilizes technology and studies digital learning media that can be utilized in learning, so that learning can be felt interesting and in accordance with the development of technology and the times by students. And so that motivation and learning outcomes increase, the author will try in every lesson to start implementing learning that varies content, process and product (differentiated) by integrating socio-emotional awareness and utilization of digital media, not only on certain materials.

Conclusion

Based on the results show an increase in student learning outcomes and student learning motivation in class XI IA2 SMA Negeri 1 Krueng Barona Jaya. Student learning outcomes with paired sample T-test test obtained sig. (2-tailed) 0.000 <0.05. There is a significant difference between biology learning outcomes to differentiated learning integrated with social emotional awareness and digital learning media on transport material through plasma membranes is Very Good, with a percentage of 91.91%.

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Author Contributions

Conceptualization, S. A and S.; methodology, S. A.; software, S. M. U.; validation, S and S. A.; formal analysis, S. A.; investigation, S. A.; resources, S. M. U.; data curation, S. A.; writing—original draft preparation, S. A.; writing—review and editing, S.; visualization, S. M. U.; supervision, S. A.; project administration, S. A. funding acquisition, S. A.

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Conflicts of Interest

The authors declare no conflict of interest

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