

# Biology Teacher Emotional Intelligence Analysis towards Class X IPA Students in State High School in the District of Pangkatan

# Ayu Sari Purba<sup>1\*</sup>, Hasmi Syahputra Harahap<sup>2</sup>

<sup>1,2</sup>Faculty of Teacher Training and Education, Universitas Labuhanbatu, Indonesia hasmi.putraharahap@gmail.com

#### **Abstract**

Emotional intelligence is the ability of a person to know one's feelings for oneself or others, and encourage oneself to be able to control one's emotions well and behave in a scientific manner that is able to accept the opinions of others. X IPA at state high schools in all sub-districts. This type of research uses qualitative with the method used is descriptive. The population used was 6 public high school teachers in Pangakatan District, while the total sampling sample consisted of 6 State Senior High School teachers in Pangkatan District, Data collection techniques were carried out by giving direct interviews and questionnaire responses to teachers regarding the emotional intelligence of biology teachers to students by direct distribution instruments in the form of questionnaires and questionnaires The data analysis technique uses descriptive analysis before carrying out descriptive analysis. The results of the study are that teachers who recognize selfemotions get a score of 65.92% then teachers who can manage their own emotions get 56.85% results, then teachers who can motivate themselves themselves get 62.42% results, and teachers who can recognize other people's emotions get 44.68% results and teachers who can build relationships with other people get 57.81% results. There are still teachers who have not been able to control the emotional intelligence of Class X IPA students at State Senior High Schools throughout the Pangkatan District.

Keywords emotional intelligence; teachers; scientific attitudes; students



## I. Introduction

Education is a plan that can be carried out consciously in the community to be able to achieve a process in the implementation of effective learning, and better with the aim of educating students to be able to develop their potential. (Dwi Lathif, 2013). Education is one of the efforts to be able to foster a development in the potential possessed by humans by encouraging and providing learning and teaching activities in order to achieve progress in humans who are good, intelligent and qualified and have good potential and School for students is an institution in education that can change and shape a character and behavior in students for the better (Syafrimen, 2004).

In essence, demanding knowledge in lessons is something that can be carried out by a teacher and student in adding a science to the process of getting modification of human actions and insight understanding, seek knowledge that makes a learning method. In the way of learning that has ties and parts, namely: teacher students who have a goal even in the method, and evaluation, as well as media, as well as a lesson material will also not be able to be implemented properly and an interaction occurs in a lesson, so that in this case there is a kind of part in the learning so that they can relate to each other and can create and

Budapest International Research and Critics Institute-Journal (BIRCI-Journal)

Volume 5, No 3, August 2022, Page: 22576-22584

e-ISSN: 2615-3076 (Online), p-ISSN: 2615-1715 (Print)

www.bircu-journal.com/index.php/birci email: birci.journal@gmail.com

develop a learning process that is good, effective and efficient as well as intelligent (Pane and Darwis Dasopang, 2017).

A teacher must have emotional intelligence because emotional intelligence is a skill to be able to monitor and control a feeling that is in oneself and others, then the following feelings can be done to unite thoughts with actions(Susanto And Sofyani, 2019). Emotional intelligence is a person's ability to know the feelings of oneself or others, encourage oneself or be able to control emotions well in social relations (Tiovani and Suryawati, 2021). Emotional intelligence has a positive and significant influence on students' learning motivation (Sofyani, nd). Motivation comes from the Latin word movere which means drive or driving force (Purba and Sudibjo, 2020).

Emotional intelligence is the skill to be able to explore our own feelings and feelings for others, self-motivation skills and skills in controlling emotions well in a relationship for others. Keeping in mind that emotional intelligence is so important during the process of implementing lessons in improving an achievement in learning, in this case the teacher or from parties related to an education need to pay attention to emotional intelligence in students (Winarni, 2014).

Teachers who do not have a good social emotional for students resulting in a relationship between teachers and students only limited to teachers and students. In this case as a teacher so that he can be a parent as well as a friend to students. That way it will create a better relationship with students, teachers will also be more respected and students will also be better and more comfortable and open to teachers. In that case, a good relationship will also be created by the nature of the teacher who is enthusiastic, friendly and can also motivate students to be able to do learning. This is also related to an emotional teacher in good teaching. There are still some teachers who sometimes are also unable to control their emotions, (Widya, 2017).

In the implementation in the process of a lesson, that is one of the relationships between a teacher and students in the scope of the lesson. The teacher is one of the guidelines in a way in the implementation of learning as well as someone who plays an important role in the world of education. A teacher should be more active and innovative and creative in creating and growing a scope for good and interesting and active learning, so that students can easily understand a lesson that can be conveyed by a teacher.(Kurniati et al., 2021).

Success in the implementation of a process in learning, can also be caused by several factors, such as in a teaching method, as well as in instructional media and strategies in learning, to teaching materials used in carrying out lessons as well as explanations in lessons. Teaching materials that have been prepared and assembled have a principle of relevance, and good consistency in order to have a space for students to develop their knowledge.(Purnomo et al., nd).

On June 25, 2022, the reviewer carried out an observation visit to SMAN 1 schools throughout Pangkatan Sub-district and conducted a few short interviews with Biology teachers and students of X Science. The research also obtained information about students and teachers that many students lack interest in learning and the intelligence of a teacher who is lacking in addressing student attitudes and behavior. (Hariyatmi, 2016). Stating the ability of teachers can be seen when learning takes place, such as mastery of the material, class mastery, and the use of learning strategies, Based on the results of interviews and observations at schools as well as to teachers and students in SMA Negeri Se-District Ranks, That Related to the management of emotional intelligence that is in a teacher who is owned by students, the emotional management of teachers is sometimes less stable and there are some students who lack a scientific attitude towards students, especially when the

value of biological results is instantaneous. which can be less and what is satisfactory, students feel disappointed and sometimes a sense of anger arises in the students themselves. Then also see that there is an influence of the point of view that exists on students on an emotional intelligence that exists in a biology teacher.

In this case, this research is still related to the existence of an emotional intelligence, Deangan mentions that there is a good and positive relationship between emotional intelligence and a teacher's performance in creating scientific attitudes in students, in which an emotional intelligence of the teacher becomes a factor that can affect a motivation in learning in students against students of Class X Science in SMA Negeri Se-District Pangkatan, So, based on this description, the reviewer is interested in conducting and carrying out research on Analysis of the Biology Teacher's Emotional Intelligence on the Learning Outcomes of Class X Science Students in State Senior High Schools in All Sub-Districts. And in this study the aim is to be able to determine the emotional intelligence of biology teachers on the learning outcomes of class X science students in public high schools throughout the sub-district.

## II. Research Method

This research was conducted in May at a public high school in Pangakatan subdistrict. The type of this study used qualitative with the method used was descriptive. The population used is 6 public high school teachers in Pangakatan District, while the total sampling sample is 6 State Senior High School teachers in Pangkatan District. In taking samples using total sampling is sampling where the number of samples is the same as the population, due to taking total sampling because the population is less than 100. (Sugiono 2014).

Data collection techniques were carried out by giving direct interviews and questionnaire responses to teachers regarding the emotional intelligence of biology teachers using a statement questionnaire that was given directly to the teacher. The technique of distributing questionnaires is done by distributing questionnaire statements directly to the teacher using 4 choices. The indicators in this study are (1) Recognizing your own emotions, (2) Managing your own emotions, (3) Motivating yourself, (4) Recognizing other people's emotions, (5) Fostering relationships with others, and this research is also supported by the results of interviews with information that has the capacity according to research needs.

The initial preparation stage was carried out by observing and conducting observations and interviews with biology teachers at State Senior High Schools in the Rank District at the research location at State Senior High Schools in the Rank District, the next stage was to make interview statement guidelines, as well as a grid on the emotional intelligence of biology teachers, followed by making a question and continued with instrument validation to expert validators, the data collection instrument used was a questionnaire interview which was distributed directly while the biological teacher's emotional intelligence instrument was a modification of (Muhammad, 2021), (Aisyah et al., 2018), (Sartika, 2020), for the instrument of emotional intelligence of biology teachers and students' scientific attitudes can be seen in table 1.

Table. 1. Biology Teacher Emotional Intelligence Questionnaire Grid

| No     | Indicator                          | No Question          | Number of Statement Items |
|--------|------------------------------------|----------------------|---------------------------|
| 1      | Recognizing your own               | 1,2,3,4,5,6,7        | 7                         |
|        | emotions                           |                      |                           |
| 2      | Managing emotions in               | 8,9,10,11,12,13      | 6                         |
|        | yourself                           |                      |                           |
| 3      | Motivate Yourself                  | 12,15,16,17,18,19    | 6                         |
| 4      | Recognizing Emotions               | 20,21,22,23          | 4                         |
|        | towards Others                     |                      |                           |
| 5      | <b>Building Relationships With</b> | 24,25,26,27,28,29,30 | 7                         |
|        | Others                             |                      |                           |
| Amount |                                    |                      | 30                        |

This study uses instruments in the form of questionnaires and questionnaires to obtain questionnaire data. In this study, the data obtained from the documentation is the teacher's emotional intelligence data on the XII IPA class students at SMA Negeri Se-District Pangkatan in the form of the teacher's emotional intelligence value to students, then the data analysis technique uses descriptive analysis.

#### III. Results and Discussion

Based on the results that have been carried out by the reviewer regarding emotional intelligence on biology teachers to Class XI IPA students in public high schools throughout the Pangkatan District, that the steps in analyzing data are to calculate the scores that have been obtained in the form of percentage results that have been obtained from research results, after that it is then carried out by analyzing research data by using percentage analysis. Then the results of the calculations in the form of percentages are entered into the table criteria to determine emotional intelligence in biology teachers at public high schools throughout the sub-district.

The indicators in emotional intelligence research on biology teachers at State Senior High Schools in the Pangkatan sub-district are teachers must be able to recognize their own emotions, and teachers can manage their own emotions, motivate themselves, and recognize other people's emotions, then build relationships with others as a result of the presentation. on these indicators can be seen in the diagram, as for the value of the acquisition of the percentage as below.:

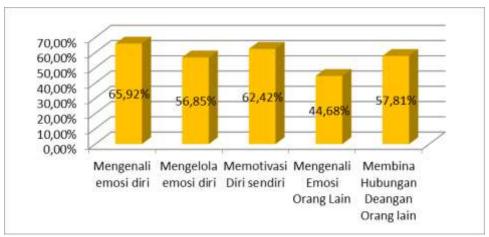


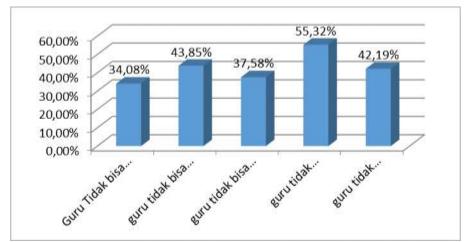
Figure 1. Diagram of Emotional Intelligence for Biology Teachers for Class X Science Students at State Senior High Schools in all Sub-Districts

In this case, it is stated that the emotional intelligence of the biology teacher towards Class X Science students at state high schools throughout the Rank District. That a teacher who canrecognizing self-emotions gets a score of 65.92% then teachers who can manage their emotions get 56.85% results, then teachers who can motivate themselves get 62.42% results, recognize other people's emotions at 44.68 %, then build relationships with other people by 57.81%, In this case that the teacher in SMA Negeri Se-Kecamatan Rank also have shortcomings in controlling emotions and do not understand the character of students in carrying out learning in this case that the biology teacher in SMA Negeri Se-District Ranks, Very important role in high school teachers and of course being able to master the learning material in low motivation teachers can cause a low success in teaching will also be able to get low learning motivation, emotional intelligence is very important in a education and teaching. Therefore, teachers need to master all the material and be skilled, creative, and innovative in presenting lessons (Mariamah, et al 2019).

The emotional intelligence of biology teachers towards Class X IPA students at State Senior High Schools in the Ranking District still has a lack of motivation and interest in learning, and mastering the atmosphere of the student learning environment is one of the barriers to student learning, some students believe that they are less motivated in the learning environment and less interested in learning(Pratiwi & Harahap, 2022). As we know that high school teachers are high school teachers and of course they can master the learning material in teaching Low motivation can cause a low level of success in teaching and then also get low learning motivation as well.(Tiovani & Suryawati, 2021). Efforts to improve a quality in continuous education are also carried out, including the quality of graduates, as well as the quality of teachers, the quality of school principals, as well as school management, infrastructure and teaching and learning processes and so on have not shown significant improvement. (Prabu & Puspitasari, 2015).

In the implementation of lessons, in essence, which means that they can grow and develop an activity and creativity in the teacher by means of various interactions and an experience in teaching. However, in implementing it, we often do not realize that there are still many activities in the implementation of a learning process that can be carried out, which actually hampers an activity and teacher creativity in recognizing emission from the teacher. biology as a study that has an abstract and complex nature, so it requires a good attitude and emotional.(Nurhafidhah, 2018).

That it is true that a performance is a result of sincere work, and thorough work, smart work, hard work, and competence are a requirement and The teaching profession is one of the jobs that can demand a complexity of expertise, both physically, mentally and materially. And actually a performance on a teacher is an intellectual life in the nation. Through a strengthening and expertise that is expected to be able to organize a quality education (performance), and with it can create a generation that is independent, characterized and competitive, religious, and intelligent (Sopandi, 2019).



**Figure 2.** Diagram of Teachers Who Can't Control Emotional Intelligence in Biology Teachers Against Class X Science Students in State Senior High Schools in All Districts

In this case, it is stated that those who cannot control emotional intelligence in biology teachers are students of class X science in public high schools in all sub-districts. That teacher who can't Recognizing self-emotions got a score of 34.08% then teachers who could not manage their own emotions got 43.85% results, then teachers who could not motivate themselves got 37.58% results, and teachers who could not recognize Other people's emotions get results of 55.32% and teachers who can't build relationships with other people get 42.19% results.

Intelligence is a skill and ability in counting, writing and reading which becomes a focus in a formal education or school, where intelligence also encourages a person's success, especially in an academic field. In intelligence or intelligence is a skill and ability to be able to master a certain strength, or expertise and ability to be able to do something Intelligence is a cognitive aspect of an individual that can be formed from a lesson or an experience(Sholiha, 2017). The teacher is a profession that carries out an essential task as a teacher who carries out the duties to teach a student and is responsible for educating.(Ibrahim, 2018).

A teacher also views that an emotional intelligence is also very important in an education. However, the results showed that an EQ profile of a teacher studied was only high in the domain of spirituality and maturity, but still low in five other domains which should also be important for the teacher. The implications of the results of this study are also discussed based on a theory and the results in previous studies(Syafrimen, M. Ed, 2004).

This study also shows that there is a significant positive influence on the teacher's attention, as well as learning motivation and an emotional intelligence together on a biology learning achievement if a teacher's attention, a learning motivation and an emotional intelligence are high, an achievement in learning biology tends to be high, the

amount of an effective contribution is 59.483%, and there is a significant positive influence on the attention of the teacher with the achievement of learning biology if the attention of the teacher is high then an achievement in learning biology tends to be high, with a value of 60.690% and an effective contribution of 36,100% then has a significant positive effect of motivation in learning on a biology learning achievement. If a learning motivation is high, then biology learning achievement tends to be relatively high at 21.565% and effective at 12.827%.

Then it can be seen that there is a significant positive influence on an emotional intelligence on a biology learning achievement. (Winarni, 2014).

The teacher is conveying a material in the lesson to students who interact and communicate in the way of implementing learning and teaching that has been done to be able to produce success for the teacher in conveying, it also depends on the competence he has from starting to interact and communicate between teachers and students. Teachers also have a very important role in the way of education, therefore teachers must have professional qualifications in order to be able to develop their professional qualifications and be able to carry out their duties and roles. Teachers are cognitive agents, teachers are moral and political agents, teachers are innovators, teachers play a cooperative role, and teachers are agents of social equality and education. (Sopandi, 2019).

# **IV.** Conclusion

Based on the results of the explanation above regardingemotional intelligence on biology teachers to students of Class X IPA at SMA Negeri Se-Kecamatan Pangkatan. It can be concluded on the indicator that teachers recognize self-emotions get a score of 65.92% then teachers who can manage their emotions get results of 56.85%, then teachers who can motivate themselves get 62.42% results, and teachers who can recognize other people's emotions get 44.68% results and teachers who can build relationships with other people get 57.81% results. There are still teachers who have not been able to control the emotional intelligence of Class X IPA students at State Senior High Schools throughout the Pangkatan District.Get presentation resultsThat teachers who cannot recognize their own emotions get a score of 34.08% then teachers who cannot manage their emotions get 43.85% results, then teachers who cannot motivate themselves get 37.58% results, and teachers who can't Recognize Other People's Emotions get 55.32% results and teachers who can't Build Relationships with Other People get 42.19% results.

#### References

- Aisyah, N., Rambe, P., Hasanah, U., & Chairunnisa, N. (2018). Hubungan kecerdasan emosional dengan hasil belajar biologi siswa kelas X MIA MAN 3 Medan T.P. 2017/2018. *Jurnal Pelita Pendidikan VOL.*, 6(2), 90–94.
- Dwi Lathif Kurniawan, D. S. (2013). Pengaruh lingkungan belajra minat belajar dan motivasi belajar terhadp prestasi belajar siswa pada mata pelajaran Tik kelas X SMA 1 kota mungkid, magelang. 1–4.
- Hariyatmi, A. S. (2016). Kemampuan Guru Biologi dalam Penerapan Kurikulum 2013 di SMA Negeri Se-Kabupaten Pekalongan Biology Teacher Ability in the Implementation of Curriculum in Senior High School 2013 District State Pekalongan 2013 Semester Genap Tahun Ajaran. *Proceeding Biology Education Conference*, 13(14), 225–231.

- Ibrahim, B. H. F. H. I. A. H. A. M. S. H. M. (2018). Tahap Grit dalam Kalangan Guru di Negeri Johor. *Politeknik & Kolej Komuniti Journal of Social Sciences and Humanities*, Vol., 3, 51–63.
- Kurniati, T., Yusup, I. R., Hermawati, A. S., & Kusumahwardani, D. (2021). Respon Guru Terhadap Kendala Proses Pembelajaran Biologi di Masa. *Jurnal Educatio FKIP UNMA*, 7(1), 40–46. https://doi.org/10.3 1949/educatio.v7i1.765.
- Mariamah, Ruwaidah, Rosdiana, Syahbuddin, M. (2019). Analisis Kesulitan Guru Sekolah Dasar Dalam Menerapkan. *Prosiding Seminar Nasional Pendidikan FKIP*, 2(1).
- Muhammad Nasrul Mustain, Bonita Hirza, R. A. S. (2021). Analisis Korelasi Sikap Ilmiah dan Hasil Belajar Biologi. *BIODIK: Jurnal Ilmiah Pendidikan Biologi*, *07*(04), 115–126. https://online-journal.unja.ac.id/biodik.
- Nurhafidhah, M. dan. (2018). Kesiapan dan pemanfaatan laboratorium kimia pada pelaksanaan pratikum di SMA N 1 Langsa. *Proceeding Seminar Nasional Politeknik Negeri Lhokseumawe*, 2(1), 36–41.
- Pane, A., & Darwis Dasopang, M. (2017). Belajar Dan Pembelajaran. *FITRAH:Jurnal Kajian Ilmu-Ilmu Keislaman*, 3(2), 333. https://doi.org/10.24952/fitrah.v3i2.945.
- Prabu, A. A. A., & Puspitasari, M. (2015). kecerdasan emosi guru dan stres kerja dan kinerja guru SMA. *Jurnal Kependidikan Penelitian Inovasi Pembelajaran*, 45(2), 142–155. https://doi.org/https://doi.org/10.21831/jk.v45i2.7491
- Pratiwi, A. T., & Harahap, R. D. (2022). Obstacles for biology education students in the process of implementing online learning at Labuhanbatu University during the covid-19 pandemic. *Bioinoved Jurnal Biologi-Inovasi Pendidikan*, *4*(1), 10–16. https://doi.org/10.20527/bino.v4i1.12067.
- Purba, K., Sudibjo, K. (2020). The Effects Analysis of Transformational Leadership, Work Motivation and Compensation on Employee Performance in PT. Sago Nauli. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 3, Page: 1606-1617
- Purnomo, D., Pendahuluan, A., & Ajar, M. B. (n.d.). *Pengembangan Bahan Ajar Matimatika sebagai sarana pengembangan kreativitas berfikit.* 024, 1–8.
- Rahmawati, A. N. (2018). Identifikasi Masalah yang Dihadapi Guru dalam Penerapan Kurikulum 2013 Revisi di SD Aisyah. *Indonesian Journal of Primary Education*, 2(1), 114–123.
- Sartika Ayu Utami , Wahyuni Ismail, E. D. (2020). Pengaruh kecerdasan emosional terhadap hasil belajar biologi peserta didik. *Psikoislamedia Jurnal Psikologi*, 05(01), 1–13.
- Sholiha, M. (2017). Pengaruh Kecerdasan Emosional dan Kecerdasan Spiritual terhadap Kinerja Guru SMP An-Nur Bululawang Malang. *Warta Ekonomi*, 07(17), 78–92.
- Simamora, R., (2005), Hubungan Persepsi Siswa Tentang Emosional Guru Kimia Terhadap Prestasi Belajar Kelas X Semester 2 SMAN 5 Medan T.A 2004- 2005, Skripsi, FMIPA Unimed, Medan.
- Sofyani, N. (n.d.). Analisis keterkaitan kecerdasan emosional (Emotional Quotient) Dan Ketahanan Malangan (Adversity Quotient) Dalam pembentukan motivasi belajar siswa kelas VA Di Sekolah dasar negeri Jelamber Baru 01. *Dinamika Sekolah Dasar*, 1–13. https://doi.org/doi.org/10.21009/DSD.XXX.
- Sopandi, A. (2019). Pengaruh Kompetensi Profesional Dan Kompetensi Kepribadian Terhadap Kinerja Guru. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, 2(2), 121–130. https://doi.org/10.5281/zenodo.2628070

- Susanto, R., & Sofyani, N. (2019). Analisis Keterkaitan Kecerdasan Emosional (Emotional Quotient) Dan Ketahanmalangan (Adversity Quotient) Dalam Pembentukan Motivasi Belajar Siswa Kelas VA Di Sekolah Dasar Negeri Jelambar Baru 01. *Jurnal Dinamika Sekolah Dasar*, *1*(1), 1–13. https://journal.pgsdfipunj.com/index.php/dinamika/article/view/96.
- Sugiyono.(2014).MetodePenelitianPendidikan Pendekatan Kuantitatif,Kualitatif dan R&D. Bandung: Alfabeta
- Syafrimen, M. (2004). Pentingnya Kecerdasan Emosional Di Kalangan Pendidik. *Jurnal Kopertis*, 1–14.
- Tiovani, D., & Suryawati, E. (2021). *Emotional Intelligence Profile Of Biology Student In SMA Negeri 2 Tambang*. 8(1), 1–10.
- Widya Afriani Wiliskar, U. H. (2017). Analisis Kecerdasan Emosional Guru IPA-Biologi SMP Negeri Di Kota Binjai Tahun Pembelajaran 2010/2011. *Prosiding Seminar Nasional III Biologi Dan Pembelajarannya*, 8 September, 879–886.
- Winarni, S. (2014). Pengaruh Perhatian Guru, Motivasi Belajar, dan Kecerdasan Emosional terhadap Prestasi Belajar Biologi Siswa SMA Negeri 2 Bantul. *Jurnal Bioedukatika*, 2(1), 42. https://doi.org/10.26555/bioedukatika.v2i1.4111.