



**Management of Learning System to Improve the Quality of Student Learning in chemistry subjects in Senior High School: Case Study SMA Negeri 8 and SMA Taman Siswa, Bekasi City**

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**Abstract**

The background of this research is: the low availability of physical facilities, the low quality of teachers, low student achievement, and a decrease in the number of students entering state universities. This study aims to describe and analyze the learning system management to improve the quality of student learning in Chemistry lessons at SMA Negeri 8 and SMA Taman Siswa in Bekasi City. The two high schools, consisting of SMA Negeri 8 and SMA Taman Siswa in Bekasi City, both accredited A, were the subjects of this study, which used the multiple case study method. The Yin case study model was used as the conceptual framework to formulate problems and analyze findings. Data collection was conducted through in-depth interviews, observation, and document studies. The collected data were analyzed individually and across cases to see similarities and differences. The results of the study show that 1) the learning planning process is relatively good, but some teachers still need guidance in making lesson plans (RPP); 2) the implementation of learning is relatively good, teachers carry out learning activities including introduction, core, and closing activities; 3) learning control is relatively good. Supervision in SMA Negeri 8 Bekasi City is carried out by educational supervisors from the education agency, and managerially, it is carried out by the school principal assisted by the curriculum vice principal. Meanwhile,

in SMA Taman Siswa Bekasi City, supervision is also carried out by the foundation; 4) learning evaluation is relatively good. The school principal provides guidance, assistance, supervision, and assessment on technical issues related to the implementation and development of teaching and education programs to create a conducive learning environment; and 5) the impact of implementing learning management on students and schools are: a) final school exam results, b) accreditation scores, c) community trust, and d) academic and non-academic achievements of SMA Negeri 8 Bekasi City students, e) students who enter state universities.

**Keywords**

Management, Learning System, Learning System Management, Learning Quality

**I. Introduction**

The reality shows that the quality of Indonesia's human resources is relatively far behind Malaysia, the Philippines, Thailand, and Singapore. Looking at the UNDP version of the HDI or the Human Development Index, Indonesia ranks 6th in ASEAN and 111th in the world out of 189 countries. Both in ASEAN and the world, Indonesia is in the middle ranks. In Southeast Asia, in terms of HDI, Indonesia is still lagging behind Singapore, Brunei Darussalam, Malaysia, Thailand, and the Philippines.

Human Development Rank of Indonesia Compared to ASEAN Countries 2019.

<b>Negara</b>	<b>Rangking ASEAN</b>	<b>Rangking Global</b>	<b>HDI</b>	<b>UHH</b>	<b>HLS</b>	<b>RLS</b>	<b>PPP</b>
<b>Brunei Darussalam</b>	2	43	0.845	75.7	14.4	9.1	79.389
<b>Filipina</b>	5	106	0.712	71.1	12.7	9.4	9.540
<b>Indonesia</b>	6	111	0.707	71.5	12.9	8.0	11.256
<b>Kamboja</b>	10	146	0.581	69.6	11.3	4.8	3.597
<b>Laos</b>	8	140	0.604	67.6	11.1	5.2	6.317
<b>Malaysia</b>	3	61	0.804	76.0	13.5	10.2	27.227
<b>Myanmar</b>	9	145	0.584	66.9	10.3	11.5	83.793
<b>Thailand</b>	4	77	0.765	76.9	14.7	7.7	16.129
<b>Vietnam</b>	7	118	0.693	75.3	12.7	8.2	6.220

Source: (Citradi, 2020)

Not much different from the human development index score, Indonesia's PISA results in 2018 decreased compared to 2015. In the categories of reading, science, and mathematics, Indonesia's score is classified as low because it is ranked 74th out of 79 countries. For reading ability, Indonesia is ranked 6th from the bottom or 74th. Indonesia's average score is 371, below Panama which has an

average score of 377. Meanwhile, China ranks first with an average score of 555. The second position is occupied by Singapore with an average score of 549, and Macau, China, ranks third with an average score of 525. Finland, which is often cited as an example of an education system, ranks 7th with an average score of 520. As for the mathematics category, Indonesia ranks 7th from the bottom (73) with an average score of 379. Indonesia is above Saudi Arabia which has an average score of 373. China still ranks first with an average score of 591. For the science performance category, Indonesia is ranked 9th from the bottom (71), with an average score of 396, above Saudi Arabia which has an average score of 386. China ranks first with an average score of 590 (Tohir, 2020).

The causes of the low quality of education in Indonesia include problems with the effectiveness, efficiency, and standardization of teaching. This still remains a problem in Indonesian education in general. Specific problems faced in the world of education are the low availability of physical facilities, the low quality of teachers, the low welfare of teachers, the low achievement of students, the low opportunity for equal education, the low relevance of education to needs, and the high cost of education (Abadi, 2019).

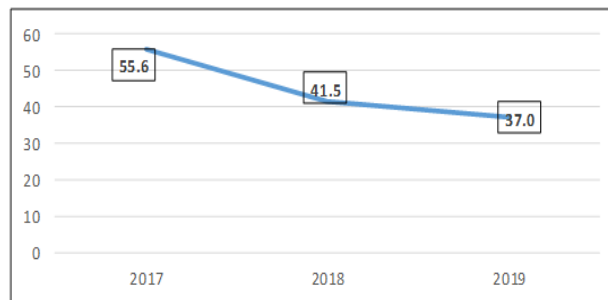
In line with this statement, Komnas HAM also notes the emergency conditions of education in Indonesia. According to Komnas HAM, there are four emergency conditions of education in Indonesia, namely: 1) an emergency due to many human rights violations. Komnas HAM data shows that cases of alleged human rights violations related to education tend to increase. In 2017, there were 19 cases, while in 2018 until April 2018, there were already 11 cases; 2) an emergency due to Indonesia's poor education ranking; 3) an emergency condition due to corruption related to education budget; and 4) a poorly running education system (Nadlir, 2018). These emergency conditions will certainly have an impact on the quality of education produced.

The quality of education is reflected in the competency of graduates, which is influenced by the quality of the education process and content. The achievement of graduate competencies that meet standards must be supported by education content and processes that also meet standards. The realization of a quality education process is influenced by the performance of educators and education personnel, the quality and quantity of facilities and infrastructure, the quality of management, the availability of funding, and a valid, objective, and firm assessment system. Therefore, the realization of a quality national education must be supported by education content and processes that meet standards, educators and education personnel who meet academic qualifications and competencies to perform optimally, as well as facilities and infrastructure, management, and funding that meet standards (Rosdiana & Soedarmo, 2019).

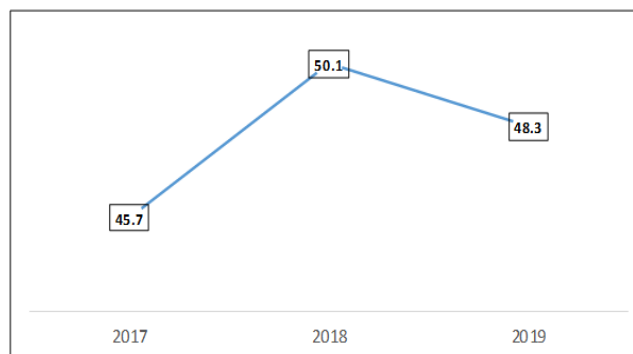
Education quality is closely related to the quality of learning, which includes planning, implementation, and student learning outcomes. The quality of learning is greatly influenced by the role and competence of teachers as educators. In relation to the issue of Chemistry learning quality, data from the national exam in

2019 placed Chemistry as the lowest score compared to other subjects. However, the national exam scores in 2019 increased compared to the previous year, according to data from the Ministry of Education and Culture (Kemendikbud). The average national exam score for high school students also increased, including for the Science major. The average score for the Indonesian language subject was 69.55, an increase of 1.58 points from the previous year, while the average score for English was 53.49, an increase of 0.06 points, for Mathematics it was 39.29, an increase of 2.04 points, for Physics it was 46.42, an increase of 2.20 points, and for Biology it was 50.50, an increase of 1.83 points. Meanwhile, the Chemistry subject score decreased by 0.22 points, to 50.91 (Meilanova, 2019).

There are many factors that have contributed to the decrease in the score of the Chemistry subject. Chotimah & Bernard (Chotimah, Ramdhani, Bernard, & Akbar, 2019) noted that Chemistry is closely related to real-life, and many things or problems around us require knowledge of Chemistry. However, because Chemistry uses many formulas, it seems that Chemistry is one of the subjects that is feared and considered difficult to understand by some students. This is in line with the research conducted by Amallia & Unaenah (Fauzy & Nurfauziah, 2021), which found that many students still consider Chemistry as a difficult subject, causing them to give up easily before studying it. This can be seen from the national exam results obtained by the students of Taman Siswa High School Bekasi City from 2017-2019.



Based on the data, there was an average score decrease from 2017 to 2019 of 18.6 points. Meanwhile, there was a decrease of 4.5 points from 2019, which is still below the average score in 2019. As for the UN scores of students from State High School 8 during the 2017-2019 period, they are as follows:



National exam Scores Data of Students in SMAN 8 Bekasi City in 2017-2019

Based on the data, it can be seen that there was an increase in the average score from 2017 to 2018 by 4.4 points. However, from 2019, there was a decrease by 1.8 points. This decrease is still below the average score in 2019. The impact of the learning process is that students tend to solve a problem by imitating the problem-solving demonstrated by the teacher when discussing the questions. Furthermore, students will have difficulty applying concepts to solve non-routine problems or real problems related to the learned concepts. This is what causes the low ability of students in solving problems.

Meanwhile, from the previous research conducted by Dami (2020), it is known that online learning management can include planning, movement, organization, and supervision. In addition, the implementation of online learning can include several aspects, namely learning design, learning activities, learning strategies, learning media and technology, and learning support services. These results are in line with the research conducted by Efendy (2018), whose research concluded that (1) planning for learning is done through teamwork, performance meetings, and prioritizing programs, (2) organizing learning in education quality assurance is done through teachers who are similar in one subject, material, selecting content, arranging the order of content, integrating academic quality to achieve achievements in international science olympiads without leaving student character values and quality outputs, (3) implementing learning involves the mental and physical processes of students, (4) monitoring learning is done by comparing previous monitoring results with government regulations, (5) learning evaluation involves all elements with rewards and punishments, (6) educational quality produces students with academic and non-academic achievements, gaining high trust from society, and graduates are accepted in favorite state universities, (7) the obstacles are curriculum policies that often change, ideal student books are still limited, new assessment systems and different interpretations by each teacher, limited research culture. Based on these two studies, it appears that learning management is very important to improve student learning quality.

Different research results were found by Gultom et al. (2022), who concluded in their research that the implementation of quality management at SMTK Pelita Nauli Sibolga is still not optimal. The fulfillment of each educational standard instrument is still far from the requirements. The improvement of school quality is an important concern that must be carried out sustainably and involve the cooperation of all components in the school.

Research before discussing management in the functions of (1) planning, (2) organizing, (3) implementation, (4) monitoring learning, and (5) evaluation. In the research that the researcher will conduct, learning management in the form of (1) planning, (2) organizing, (3) implementation, and (4) control will be the focus.

Based on the phenomenon gap, research gap, and theory gap above, the author is encouraged to conduct a study by raising the problem of "Learning System Management to Improve Student Learning Quality in Chemistry Subjects in High Schools (SMAN 8 and SMA Taman Siswa Bekasi City)" with the focus of the research

being "Management of high school learning systems which include planning, implementation, control, and supervision of learning," with the root problem as follows: the low application of learning system management in improving the quality of student learning in chemistry that impacts the decrease in the results of high school chemistry exams in Indonesia on a national scale.

## **II. Research Methodology**

The method used in this research is exploratory descriptive method with a qualitative approach using a case study type. This research focuses intensively on a specific object as a case. Case study is "a more appropriate strategy for research whose main research questions are related to how or why" (Yin, 2018:1). In this research, the researcher seeks to understand and examine the Management of Learning Systems to Improve the Quality of Learning in Chemistry Subjects in SMA Bekasi (Negeri 8 Bekasi and SMA Taman Siswa Bekasi City) using the input, process, and output system approach, and its cycle repeats endlessly, not as the final product/service. The most relevant approach to explore this matter is considered to be a qualitative approach. In order to make the analysis of the research findings more meaningful, this research uses theological, philosophical, theoretical foundations: Management Theory, Learning Systems, and Learning Quality, and the foundation of six value systems.

## **III. Results and Discussion**

1. Learning system management to improve the quality of learning outcomes in chemistry subjects for graduating students

Management is very important for every individual or group activity in an organization to achieve desired goals. Management is process-oriented, which means that management requires human resources, knowledge, and skills to make activities more effective or to produce actions in achieving success. Therefore, no organization will succeed if it does not use good management (Torang, 2013:165). Based on the definition above, the author believes that what is meant by Management is the science of arranging processes to achieve predetermined goals in order to achieve the desired results and evaluate learning activities by including various factors in it to achieve goals (Sagala, 2017). George R. Terry in his book Principles of Management (Sukarna, 2011:3), also stated that management is the accomplishing of predetermined objectives through the efforts of other people, or management is the achievement of predetermined goals through or together with the efforts of others. Terry then divides the four basic functions of management into Planning, Organizing, Actuating, and Controlling.

### **a. Lesson Planning**

Lesson planning in this research starts from the planning carried out by the Principal. The Principal as a leader gives directions to the teachers to: (1) prepare

learning tools, (2) prepare various media, facilities, and infrastructure as needed, which can support learning in school, such as textbook packages, (3) allocate sufficient teaching hours for subject teachers, (4) teachers teach according to their field of study. The results of this research are in line with some of the tasks of the Principal, including arranging teaching assignments, preparing class schedules, and dividing classes (Depdikbud, 1998:60).

- 1) The distribution of teaching and other tasks should be done evenly according to the expertise and interests of the teachers. Each teacher should be allocated the minimum workload. The equal distribution of workload will foster a sense of togetherness, assigning tasks according to expertise and interest will increase teacher motivation, and receiving the minimum workload will make teachers feel secure and able to be promoted on time
- 2) The scheduling of lessons should be arranged so that teachers teach a maximum of 5 days per week, leaving 1 day for KKG meetings. Each day, teachers should not teach more than 6 hours of lessons, allowing for rest time.
- 3) Class allocation is also important in the learning process because the ability to absorb and interest in the material presented by teachers varies among students.

According to Majid (2008), lesson planning is the process of arranging lesson material, using media, approaches and methods, and assessment within a certain allocated time frame to achieve predetermined goals. This research aligns with Nashihah's (2020) research, which concluded that to increase students' interest in learning, teachers should optimize the components in their lesson plans, such as learning objectives, lesson material, teaching methods, teaching media, learning sources, and assessment. Therefore, planning can be one way to increase students' interest in learning chemistry. Meanwhile, the researcher's study focuses on lesson planning to improve the quality of chemistry learning in high school students.

The success of education in schools is largely determined by the success of the school's leaders in managing available resources. The strategic role of leadership in education is to empower teachers and give them broad authority to improve learning. Educational institution leaders should guide and assist others in developing similar characteristics.

As Syafaruddin (2011) explained, human resources are one of the important elements that can move other elements, such as materials, capital, machinery, technology, and systems in an organization, through the process of planning, organizing, implementing, and monitoring to produce outputs in the form of goods and services in an effort to achieve organizational goals.

Based on research, it is known that in developing lesson implementation plans (RPP), several steps should be taken, such as (1) determining the allocated time, (2) setting learning objectives and identifying lesson material for students; (3) developing learning activities; (5) describing the types of assessments that will

be used; and (7) determining learning sources for students. As stated by Rusman, the lesson implementation plan is developed from the syllabus to direct student learning activities in achieving basic competencies. Each teacher in educational institutions is obligated to develop a comprehensive and systematic Lesson Implementation Plan so that learning takes place interactively, inspiringly, enjoyable, challenging, motivating students to participate actively, and providing sufficient space for initiatives, creativity, and independence according to students' talents, interests, and physical and psychological development. (Rusman, 2012: 5). It turns out that the Lesson Planning in SMAN 8 and SMA Taman students is in accordance with the six systems of values (Sanusi, 2017), namely the teleological value, where lesson planning that is realized is in line with its function so that students can learn effectively and quickly, and the material taught is in accordance with the plan.

### **b. Organizing Learning**

Organizing learning is the overall process of grouping educators, students, learning materials, and learning resources and media so that a learning process can be created to achieve the predetermined objectives. In this organizing process, the lesson materials, who will teach them, for whom the materials will be given, how the lesson will be delivered, and when the lesson will be given are determined.

The organizing process is carried out by doing several things, including being responsible for the education activities, school administration, supervision of other educational personnel, and utilization and maintenance of facilities and infrastructure. At least, the role of the School Principal in organizing learning includes: (1) Mastering the outline of the teaching program for each subject and each class, (2) Preparing the school program for one year, (3) Preparing the class schedule, Coordinating the activities of developing the unitary teaching model, (4) Arranging assessment activities, (5) Implementing the class promotion standards, (6) Coordinating school counseling activities, (7) Coordinating non-curricular programs, (8) Maintaining and developing the school library books and teaching aids.

This research is in line with the opinion expressed by Mulyasa (2011) that to become a successful school principal, one must have 10 keys to success in leadership, namely: (1) a clear vision, (2) responsibility, (3) role modeling, (4) empowering staff, (5) listening to others, (6) providing excellent service, (7) developing the abilities of educators and staff, (8) maintaining trust, (9) focusing on students, and (10) being innovative.

In relation to organizing learning, the school principal must be able to develop the abilities of educators to manage classrooms well so that educators can focus on students to achieve good learning outcomes.

Furthermore, according to Maimun and Fitri (2010), determining learning materials means conducting learning material management activities. This must take into account the principles of children's diversity, moral objectives (cognitive,



emotional, and kinetic), and other psychological aspects. Therefore, the learning materials that will be taught can be added according to the needs of the school to support the achievement of the school's program targets that are being developed.

In addition to materials, learners/students also need to be well-organized or managed so that the planned learning program targets can be achieved, as students are the most important and determining components or elements in the learning process. Therefore, to be successful in the learning process, efforts must be made to manage students, which begins with strict student selection, followed by grouping students based on intelligence levels or other aspects (Maimun and Fitri, 2010).

this organization of learning provides a clear direction and responsibility for teaching and learning activities. This means that, looking at the components related to learning in educational institutions, it gives a clear picture of the role of the school principal in providing facilities and learning equipment, the role of teachers in determining and designing learning, organizing time allocation, curriculum design, media and learning equipment, and other things related to the success of learning activities. It is also clear that students have a role in participating in learning activities both in the classroom and at home, under the coordination of teachers and parents related to learning. (Syaiful Sagala, 2009)

Nashihah (2020) concluded in her research that the organization conducted to support mathematics learning activities includes curriculum organization, facilities and infrastructure, teachers, and student organization. The organization is carried out to stimulate interest in learning mathematics. The organization carried out by the researcher is responsible for managing educational activities, school administration, fostering other educational personnel, and utilizing and maintaining facilities and infrastructure.

The process of organizing to improve the quality of education in the research site can be realized if those assigned have the skills and expertise in their field, as well as high cooperation skills within the organization. In the research conducted at SMAN 8 and SMA Tamansiswa, the organization is in accordance with the 6 Value systems (Sanusi, 2017), namely the Physiological Value, which has clear elements and functions, namely the distribution of tasks and responsibilities for each part.

### **c. Implementation of Learning**

The process of implementing learning, in relation to improving the quality of graduates in the research site, includes preliminary activities, core activities, and closing activities. The core activity is the learning process to achieve the objectives, which is done interactively, inspiringly, enjoyable, challenging, motivating students to actively seek information, and providing sufficient space for creativity, individuality, talents, interests, physical and psychological development of students.

The results of this study are in line with the opinion put forward by Rusman (2012) that the core activity uses methods adapted to the characteristics of students and subjects, which include the process of observation, questioning,

gathering information, association, and communication. For learning related to procedural KDs, the teacher facilitates so that students can observe modeling/demonstration by the teacher, students imitate, then the teacher checks and gives feedback, and provides further exercises to students. As stated by Rusman, the core activity at least pays attention to:

- 1) Preparing students psychologically and physically to participate in the learning process.
- 2) Asking questions that relate previous knowledge to the material to be learned.
- 3) Explaining the learning objectives or basic competencies to be achieved.
- 4) Delivering the scope of the material and explanation of the activity description in accordance with the syllabus.

The implementation in this study is in line with the implementation carried out by Nashihah (2020), who in her research conducted mathematics learning in three activities, namely preliminary, core, and closing activities, while still maintaining student attention to focus on learning. So, the implementation in learning is entirely the same, namely opening, core, and closing.

Guiding and warning factors are important for the success of a plan because if they are ignored, they will have a negative impact on the continuity of an organizational wheel and others. The actuating process is to provide orders, instructions, guidelines, advice, and communication skills. Actuating is the core of management that drives to achieve good results by applying effective and efficient principles. From the results of the research, the actuating management function (implementation) at SMAN 8 and SMA Tamansiswa is also in line with the six value systems (Sanusi, 2017), namely the aesthetic system that is realized, beautiful, lovely, and full of love. Likewise, the implementation of learning at SMAN 8 and SMA Tamansiswa is very humanistic in providing material, where teachers are enthusiastic and humanistic so that students can learn well and effectively.

#### **d. Learning Control/Supervision**

Based on the research results, it is known that teachers assess knowledge competencies through written tests, oral tests, practical work, and assignments. Teachers assess skill competencies through performance assessments, which require students to demonstrate a certain competency using practical tests, projects, and portfolio assessments. The instruments used are in the form of checklists or rating scales equipped with rubrics. Indeed, to carry out a learning evaluation program, evaluation instruments are needed, which can be in the form of tests or non-tests.

These research results are in line with the opinion expressed by Arifin (2011) that test evaluation instruments are of several types, namely:

- 1) Based on knowledge and skill aspects, there are power tests and speed tests.
- 2) Based on the form of student answers, there are written tests (essay and objective), oral tests, and practical tests.

Techniques and instruments used for assessing attitude, knowledge, and skills competencies. Educators assess attitude competencies through observation, self-assessment by students, and journaling. The instruments used for observation and self-assessment are checklists or rating scales accompanied by rubrics, while for journaling, they are educator notes. It turns out that in the research conducted at SMAN 8 and SMA Taman Siswa, learning evaluation is in accordance with the Six Value Systems (Sanusi, 2017), namely the Logical-rational Value, which is manifested, among others, in logic, accuracy, suitability, clear processes, and conclusions where learning evaluation is very important for teachers to see whether their students can understand the material presented by the teacher or not, which can be seen from the results of their written, practical, and oral exams.

## **2. Impact of Learning Management**

In every education quality improvement management, there will always be an impact which is the improvement of the quality or value of education. An organization that wants to succeed must have a competitive advantage. To achieve this advantage, every organization must be ready to change. And to go through this change, every organization must have change agents. The process of learning management has a positive impact on improving the quality of student learning. The impact of improving the quality of learning in the research site is that the community's trust in the school is getting better, as evidenced by the increasing number of students applying to study at the school every year, academic and non-academic quality through the school's achievements.

The impact of the above-mentioned quality improvement management can be realized when all school components and stakeholders collaborate and participate with a participatory and humanistic approach. Participatory and humanistic approaches have positive impacts, such as the relationship between the school principal and all school components and stakeholders is not a bureaucratic relationship but more of a partnership relationship in achieving shared success by prioritizing aspects of values, such as feeling valued, feeling mutual respect, feeling satisfied and proud to work, feeling responsible for realizing Pancasila values for the future generations. The impact of School-Based Learning Quality Improvement Management is that the school education becomes of high quality and can be achieved by involving all school components and stakeholders with a participatory and humanistic approach:

First, the impact of learning management on improving the quality of learning is reflected in the quality of graduates who achieve a 100% pass rate in the national exam with an average score of 80.00, and many of them continue their education at state universities.

Secondly, in terms of institutional development, the school receives an A (very good) rating from the National Accreditation Agency for Schools, indicating that the school has achieved the government's target of meeting 8 National Education Standards.

Thirdly, the community's trust in the school is increasing, as evidenced by a significant increase in the number of new student enrolments from year to year. However, this situation is different from that experienced by SMA Taman Siswa, where the number of students is decreasing. This is partly due to the COVID-19 pandemic. The pandemic has made it difficult for many parents to pay the school fees imposed by the school on the students' parents, "Many private school teachers are starting to have difficulty receiving salaries, and even some private schools are threatened with closure due to a lack of students," said member of the DPR RI Commission X, Ledia Hanifa Amaliah. Ledia explained that most private schools have been struggling to meet their operational needs through self-support by relying on revenue from school fees. On the other hand, many parents of students are currently unable to pay school fees due to the impact of the pandemic. (<https://www.kompasiana.com/yudiyuda8644/641fc94cd3aa0f113954e1a2/menyoal-tutupnya-sekolah-swasta>)

To address this issue, the Ministry of Education provides assistance to private schools through the BOS Affirmation program. This year, for the first time, the most needy private schools will receive assistance through the Affirmation and Performance-Based BOS programs. The Affirmation and Performance-Based BOS programs are focused on schools that are most in need and have been affected by the COVID-19 pandemic. The provisions are as follows: for public and private schools (elementary, junior high, high school, vocational schools, and special needs schools) that are most in need, the grant amount is Rp. 60 million per school per year, and the funds are disbursed directly from the Ministry of Finance to the school's account (<https://pk.kemdikbud.go.id/read-news/kemendikbud-membantu-sekolah-swasta-terdampak-covid19-dengan-bos-afirmasi-dan-kinerja>).

The fourth point is about improving the competency of educators and education. The competence of teachers must be improved, including their ability to deliver learning to students, which can ultimately improve student learning achievements. Which states that educators or teachers are an important component in the implementation of education. It is the responsibility of teachers to educate and teach, so the improvement of education quality should be supported first by improving the potential of the teachers. The fifth point is about the participation of stakeholders in education quality improvement programs, with a humanistic and participatory approach from the school principal to all school components. This is in accordance with Sarah White's theory, which states that stakeholders feel it is important to participate and take responsibility in education quality improvement programs because of their role in the program.

Efforts to improve the quality of chemistry learning cannot be separated from the values system that we uphold, which is to continue to produce the best in the midst of increasingly complex life competition. Life that is becoming more complex, where there are changes, competition, and rapid exchange of values, cannot be stopped by the progress of philosophy, science, and technology today. This has resulted in a culture that is becoming more advanced, called cultural

globalization. However, the increasingly advanced global culture has a significant impact on moral aspects (Tafsir, 2012). Therefore, from now on, we must return to the values of our identity as humans who believe in God. Human beings live not only to devote themselves to their God, Allah SWT, in the form of direct and indirect worship or through good deeds towards fellow human beings or the environment.

The six values systems (Sanusi, 2017) are: 1) theological values (faith and belief values), 2) physiological values (physical values), 3) ethical values (respect, trustworthiness, justice, all related to morals). 4) teleological values (realized and useful, related to benefits, effectiveness, efficiency, productivity, innovation, and accountability in every aspect of life), 5) Logical values (values of thinking, understanding, and remembering as the work of the mind, understanding, comprehension, and alertness as the fruits), and 6) Aesthetic values (values of beauty, harmony, attractiveness, sweetness, love, charm, and so on) should be the basis for humans in thinking and acting while adhering firmly to teleological values (faith) because this can prevent humans from selfish, hedonistic, envious, jealous, forgetful, and other negative traits. Educational institutions, in which there are people who have obligations to their duties and responsibilities, should provide services to students by trying their best and seriously because this is the trust given by parents to schools and essentially the trust given by Allah SWT. The trust of parents is inseparable from the expectation that their sons and daughters will acquire knowledge, skills, and morals from learning to live a good life in society. It is a certainty that if a teacher is only oriented towards fulfilling their duties in carrying out their professional tasks, and as broad as the knowledge they possess, it will not have any value if it does not benefit themselves and their environment, especially in terms of sincerity because it is solely for worship. Teleological values must be the basis for a person's actions because they will influence other values, carrying out tasks like a teacher, if starting from the value of faith, of course, they will carry out their duties and responsibilities entrusted by Allah SWT sincerely, improving and developing their abilities because it is an obligation to seek knowledge as a creature, utilizing what is inside according to their abilities because it is worship, nurturing and providing good services to students with patience because it is worship, and so on.

Therefore, interpreting the six value systems based on the findings of this research, the author's view is that, due to the strategic role of teachers in learning activities and the image of teachers still being attached to the term "respected and emulated" in society, the intrinsic elements of a teacher, namely sincerity for worship, providing benefits to oneself and the environment, increasing knowledge through seeking knowledge, will become the foundation for carrying out their duties and responsibilities as professional educators in the world of education and provide hope for achieving future school quality.

### **III. Conclusion**

Based on the analysis of the data that has been presented above, it can be

concluded as follows:

1. The planning of the learning system to improve the quality of learning in chemistry subjects in high schools, including the syllabus and lesson plans, is not yet optimal as some teachers still need guidance in making lesson plans.
2. The organization of the learning system to improve student learning quality in the subject of chemistry at SMA is carried out by education supervisors from the education department, and is managed by the principal with the assistance of the vice principal for the curriculum. Meanwhile, in private high schools, supervision is also carried out by the Foundation and the Foundation will receive reports from supervisors on their supervision to the principal and teachers.
3. The implementation of the learning system to improve the quality of learning in chemistry for high school students is carried out by teachers who aim to enhance spiritual and social attitudes, knowledge, and skills competencies. The teaching materials are implemented according to the RPP (Lesson Plan) that is prepared at the beginning of each semester. In determining the teaching method, both high schools use the Scientific Approach model based on Project-Based Learning.
4. The supervision of the learning system, which aims to improve the quality of learning in chemistry for high school students, is carried out by the school principal who provides guidance, assistance, supervision, and assessment on technical issues related to the implementation and development of education and teaching. Result assessment is conducted in the middle and at the end of the semester, and the impact of implementing learning management on students and schools.

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