JPI, Vol. 6 No. 2, Oktober 2017
ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

Students' Satisfaction with Chemistry Learning Process at SMA Laboratorium Undiksha

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Abstract

This research was aimed to describe and explain the students' satisfaction with chemistry learning process and the factors that influence it at SMA Laboratorium Undiksha Singaraja in academic year 2016/2017. This research was a quantitative descriptive research. The students of classes X, XI IPA and XII IPA at SMA Laboratorium Undiksha Singaraja were used as the population of this research. The sample size was determined by Slovin formula with sampling error of 5%. This research used multistage random sampling. The students interviewed were those who had low and high percentage in satisfaction. The data were analyzed through the descriptive statistical method. The results showed that the students' satisfaction level was in the high category. The highest students' satisfaction was in the tangible dimension and the lowest was in empathy dimension. The satisfier factors toward chemistry learning are learning process, learning result, learning progress, teacher appreciation, and gift of the task. The dissatisfier factors with chemistry learning are the learning atmosphere, the interaction of teacher with students, the interaction between students, and the return of task. Therefore, the teacher are suggested to increase the sense of empathy and satisfier condition of the students. Furthermore, the headmaster should make a policy to overcome students' satisfaction'problems by paying attention to the sense of teachers' empathy to students and the dissatisfier factors.

Keywords: *students satisfaction, chemistry learning*

1. Introduction

Teacher has very important roles in an educational system, especially in the implementation of learning in schools. The roles of the teacher which are stated in Depdiknas, 2008a are teacher not only as a teacher but also as a class leader, a counselor, a learning environment controller, a supervisor, a motivator, and an evaluator. If the learning process is not good, then the other components in education such as curriculum, infrastructure, cost, etc, cannot influence the education quality.

The learning quality has a strong relation with the students' satisfaction. If the learning quality is higher, so the students' satisfaction will be higher. When the service in the learning process received is appropriate to the students' expectation, they will be satisfied. However, if the service received is not appropriate, they will be dissatisfied (Sopiatin, 2010).

The paradigm of education quality of student oriented is the measurement to determine how far the program and graduate students complete graduate competence standard are. The students will satisfied if the teaching learning process received by the students is appropriate with their expectation. In contrast, if the service is not appropriate to their expectation the students will not be satisfied. There are three points that should be understood by the school, namely (1) what the students need is; (2) how to know the students need; and (3) what makes the student satisfied. Therefore, an education department or school must identify students' need and expectation (Sukamto in Margono, 2005).

The students' perception toward the satisfaction concept cannot be generalized, but the school can use quality service dimensions for identifying the students' satisfaction. The most popular service quality model in management research and service marketing is the SERQUAL (service quality) model developed by Parasuraman, Zeithaml, and Berry

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

consisting of five basic dimensions, that are tangibility, reliability, responsiveness, assurance, and empathy (Tjiptono & Chandra, 2011).

The student' satisfaction level toward learning is determined by the factors that influence students' satisfaction. Herzberg's theory of motivational-hygiene explains that there are two factors that affect one's job satisfaction, namely motivation and hygiene factors (Robbin & Judge, 2008). Motivation factor or satisfier gives learning motivation to create students' satisfaction in learning a subject and in giving an optimum outcome. The dissatisfier factor gives negative motivation to create students' dissatisfaction in learning a subject and produce minimum outcome (Dirmansyah, 2005). Satisfier factors in chemistry learning are learning process, learning outcomes, learning progress, appreciation from teacher, and the assignment of of tasks. Dissatisfier factors in chemistry learning are learning atmosphere, the interaction between students, the interaction between student and teacher, and return of the task (Adapted from Robbin & Judge, 2008).

The teaching and learning process is a system in which the teaching and learning process is influenced by raw input (students), instrumental input (curriculum, teacher, and school facilities), and environmental input (Suastra, 2009). The teaching and learning process conducted in schools should be guided by the applicable curriculum. In addition to teachers and students, the implementation of the curriculum in the learning process is influenced by learning support facilities and learning environment. School facilities and infrastructure affect the success of the teaching and learning process, because it affects the variety of teaching methods that teachers can apply to produce effective learning. Student learning environment also influences the teaching and learning process because the environment gives influence to students' learning readiness and teacher's teaching strategies.

SMA Laboratorium Undiksha Singaraja is an A accredited private school in Singaraja city. School accreditation describes the feasibility of schools or programs implemented based on the National Standards of Education and quality assurance of education of education programs and units. Accreditation A indicates that the education services provided by the school already meet the eight service standards of educational institutions, namely content, graduate competency, teacher and education staff, management, assessment, infrastructure, process and cost standard (Depdiknas, 2008a).

The field study in SMA Laboratorium Undiksha Singaraja only observed the facilities and learning process standards, because these standards can be maximized to improve the quality of school services. The observation of school facilities and infrastructure found that facilities and infrastructure supporting the chemistry learning are very adequate. The facilities and infrastructure, such as LCD, projector and Chemical Laboratory, have been used to support the chemistry learning so as to implement chemistry learning as a product and process. The observation of chemistry learning found that teachers of class X and XI IPA can make conducive learning atmosphere. The teachers of class XII IPA can make a relaxed but less conducive learning. The interview found the discrepancy between chemistry learning and students' expectation. The students of classes X and XI IPA expect learning that is fun and not surprising so as to facilitate students in interacting with teachers. The students of class XII IPA expect a conducive learning environment, in which teachers must take firm action against students carrying out activities outside the learning activities.

Students' satisfaction with chemistry learning was greatly affected by students' motivation and participation in the learning activity. The motivation and participation of the students in following teaching learning process affect students' achievement. Dissatisfied student will not participate in learning activities so that students achieve low learning

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

achievement. But satisfied students will participate actively in learning process therefore they receive high learning achievement. In addition, research on the student satisfaction level in learning is important to implement the Decision of the Minister of Administrative Reform (Men.PAN) Number 63/KEP/Men.PAN /7 2004 that each service provider should survey received satisfaction index service periodically. The results of the students' satisfaction level can provide several benefits for teachers and students, that are (1) measurement causes teachers to have a sense of success and achievement, which is then translated into excellent service for students; (2) the measurement provides feedback to the teacher regarding the lesson learned; (3) the measurement provides information to improve students' quality and satisfaction; And (4) this measurement motivates teachers to perform and achieve optimal levels of productivity (Gerson, 2004). Therefore, it is important to dig information about the students' satisfaction level toward chemistry learning process at SMA Laboratorium Undiksha Singaraja which focuses on two problems that are students' satisfaction level to chemistry learning process and factors influencing students' satisfaction toward chemistry learning process. This study aims to describe and explain the level of students' satisfaction and the factors that affect students' satisfaction with the chemistry learning process at SMA Laboratorium Undiksha Singaraja.

2. Method

The data collection techniques employed in this study were questionnaires and interviews. Instruments used in this research were questionnaires and interview guidelines. The students' satisfaction was measured by using a questionnaire based on the SERQUAL (service quality) method consisting of five main dimensions, namely tangible, reliability, responsiveness, assurance and empathy. The questionnaire in this study was tested for its validity and reliability in SMA N 1 Sukasada. The result of validity test of 60 statements showed that 47 statements have the validity of greater than 0.344, 23 have the validity smaller than 0.344, and the reliability was 0.946. The data analysis techniques used were quantitative and qualitative descriptive statistics. Quantitative descriptive statistics was used to describe and explain the level of students' satisfaction with the chemistry learning process conducted by teachers obtained through the questionnaire. Qualitative descriptive statistics was used to explain and describe the factors that affect the students' satisfaction with the learning process obtained from direct interviews.

3. Results and Discussion

The level of student' satisfaction was divided into five categories, namely very high, high, medium, low and very low. The summary of the analysis of the five aspects of students' satisfaction with chemistry learning are shown in Table 1.

Table 1. The Level of Students' Satisfaction toward Service Quality Dimension Chemistry Learning Process

No.	Dimension	Very Low		Low		Medium		High		Very High	
		n	%	n	%	N	%	n	%	n	%
1.	*Tangibility*	0	0.0	0	0.0	26	13.0	88	44.0	86	43.0
2.	*Reliability*	0	0.0	5	2.5	36	18.0	98	49.0	61	30.5
3.	*Responsivenes*	0	0.0	2	1.0	28	14.0	104	52.0	66	33.0
4.	*Assurance*	0	0.0	4	2.0	28	14.0	120	60.0	48	24.0
5.	*Empathy*	0	0.0	5	2.5	38	19.0	76	38.0	81	40.5

Note: n = sample

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The level of students' satisfaction with the chemistry learning process in terms of the five dimensions of chemistry learning service can be described as follows.

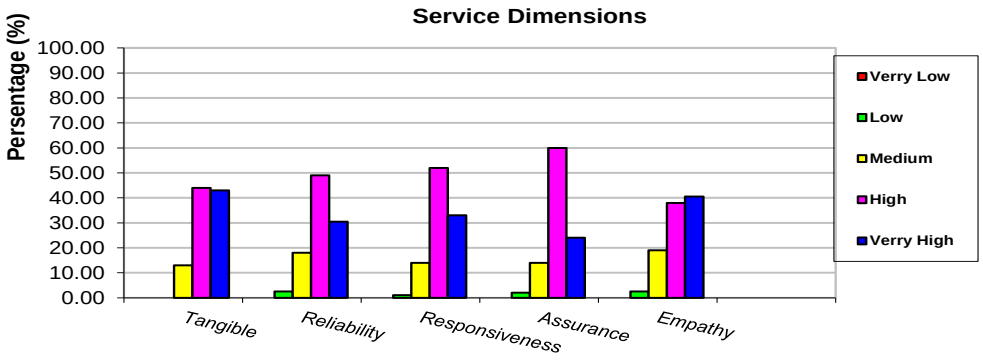

Figure 1. Graph of Students' Satisfaction Level with Chemistry Learning Service Dimension

The results of data analysis presented in Table 1 and Figure 1 show that in general, the level of students' satisfaction with the chemistry learning process was high. It shows that the learning done by the teacher has not given the maximum satisfaction for the students, so the teacher needs to improve the learning quality. These results agreed with the finding of Sobari (2014), the schools with a accreditation level should render a very high level of satisfaction to the students. If it does not reach a very high category, it means that the school has not been maximizing its effort yet in providing learning process to the students. This happens because the teacher does not pay attention to the students' need and expectation in learning process.

Figure 1. shows the sequence of students' satisfaction in five service dimensions viewed from the sample in the high and very high category from the lowest to the highest, i.e., empathy, reliability, assurance, responsiveness and tangibility. Students' satisfaction with the highest learning service of chemistry lies in the tangible dimension. This indicates that the teacher has utilized facilities in the classroom, Chemistry Laboratory, students' learning resources, and attention to the cleanliness of the classroom in the implementation of learning. This result was consistent with the finding of Purwandani, Sutarsih, & Sururi (2016) who found that the use of facilities and infrastructure in learning can increase student satisfaction. This is in consistent with the Depdiknas (2008b), which requires teachers' creativity in utilizing school facilities and infrastructure to support the learning process. Because the facilities and infrastructure available in schools affect the variation of teaching methods that can be applied by teachers to create effective learning so as to increase student satisfaction.

The dimension of students' satisfaction in the lowest level of learning service was in the empathy dimension. Therefore, the teacher should enhance empathy further towards the learning process of the students. The teacher's empathy with the students is shown in the teacher's enthusiasm in teaching, caring about the students' learning difficulties, understanding the students' needs and expectations, learning motivation, providing time lags for answering questions, and providing feedback and reinforcement. This result was supported by Depdiknas (2008a) that a teacher should have the skills to ask questions and provide reinforcement to increase students' attention to learn, increase students' motivation

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

and learning activities. This result was supported by the finding of Panjaitan (2013) which states that a teacher should be friendly in teaching, pay attention to modesty, care about students' learning difficulties and able to increase students' learning motivation in order to increase their satisfaction with the learning process.

The results of students interviews in classes X and XI IPA showed that the factors that caused the students' satisfactory feeling with the teaching and learning process conducted by chemistry teacher A were learning process, learning outcomes, learning progress, appreciation from the teacher, and tasks given by the teacher, while the results of students interview of class XII IPA showed the factors which made the students satisfied with chemistry teaching done by teacher B were learning process, learning progress and the tasks given.

The students of classes X and XI IPA were satisfied with the teaching and learning process of teacher A because the information delivered was related to the learning, detailed and systematic, therefore it made it easier for the students to study the subject. In addition, the students felt satisfied because the teacher gave them pre-test and post-test in each learning activity, so it increased the students' motivation to review the material that has been discussed outside the lesson. The students of class XII IPA were satisfied with the teaching and learning process done by teacher B because the teacher conveyed information related to the material in detail according to the learning resources, so it could help the students understand the information in the learning sources. This effort is related to professional competence possessed by teachers in delivering learning material to make learning process more effective. This result was supported by the finding of Sudiro (2015) study which showed a positive and significant relationship between learning process and students' satisfaction, where students are satisfied with the learning process because the teacher has an ability to teach the subject and to evaluate it well.

The students of classes X and XI IPA were satisfied that the subject delivered by teacher A was detailed and systematic which improved the students' understanding of the subject. The students of class XII IPA often had difficulties in understanding materials from the learning resources, but teacher B was able to help the students in understanding the subject by guidance and explanation. This effort made by the teacher is related to professional competence possessed by the teacher in delivering learning materials by directing and assisting the students in in understanding them. This is in line with the opinions of Basrowi & Siskandar (2012) that students make a good progress in learning because they feel more satisfied with the learning process.

The teacher's appreciation in accordance with its function is very dependent on his or her pedagogic competence in optimizing the potential of learners to actualize their ability in the classroom (Depdiknas, 2008a). The students of class X and XI IPA were satisfied with teacher A's way of teaching because the teacher gave an additional score to students who answered questions. In addition, teacher A sometimes also gave an appreciation in verbal form by saying "'Yes it is the thinking I want, it makes me easy to give scores." so that the students were motivated to learn the material and did the tasks given by the teacher. This result was consistent with the finding of (Natalina, Salim & Rasyid (2014) which showed the influence of giving awards or appreciation to students on students' learning motivation so that students participate actively in learning activities.

The ability to provide appropriate tasks is related to the professional competence possessed by teachers in directing student learning activities to achieve learning objectives. The students of classes X and XI IPA were satisfied with the teaching of teacher A because the teacher gave tasks related to the materials clearly and systematically which could be

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

done by the students by the students to arouse the students' interest to learn. In addition, the tasks given by teacher A were collected by the teacher on time and in accordance with the provisions so that it indirectly fostered the attitude of discipline and students' sense of responsibility. The students of class XII IPA were satisfied because teacher B gave the tasks from the learning resources and discussed them at the next meeting so that students knew their mistakes or the correctness in doing the tasks that have done and were motivated to study outside the lesson. This result was consistent with the finding of Sabriani (2012) research result that the assignment given to students accompanied by feedbacks and the presenting of the results of the assessment in front of the class, and return of the works as soon as possible to the students can improve the students' motivation and learning outcomes.

The students of classes X and XI IPA were satisfied with the learning because the learning result obtained from the evaluation process conducted by teacher A was in accordance with their ability. An evaluation process that can provide learning outcomes in accordance with the ability of students is a pedagogic competence that is very important to be possessed by teachers in conducting assessment of learning activities (Depdiknas, 2008a). The results of this study indicate that the satisfaction with learning outcomes is not solely because of the high learning achievement, but because of the accuracy of the evaluation process conducted by the teacher so as not to harm the students. This results were consistent with the finding of Pan (2014) study which shows that learning outcomes are ones of the keys to students' learning satisfaction. If students succeed in learning activities they feel more satisfied with the learning process.

The results of interviews with class X and XI IPA revealed the factors that caused the students to feel dissatisfied with the learning of teacher A. These factors were the learning atmosphere, students' interaction with each others and the return of tasks while the results of interviews with class XII IPA revealed the factor that caused the students to feel dissatisfied with the learning of teacher B, i.e., the learning atmosphere and students' interaction with each others.

Conducive learning atmosphere is a comfortable and pleasant atmosphere. A comfortable learning environment allows students to focus their mind and attention on the material being studied. Conversely, the uncomfortable and boring learning atmosphere makes the students' learning concentration disturbed. The creation of a conducive learning environment is very demanding pedagogic and professional competence of teachers in managing the class.

The students of classes X and XI IPA were not satisfied with the learning atmosphere created by teacher A because they felt uncomfortable and pleasant. According to the students, the lessons taught by the teacher were too tense which made the students feel afraid to follow the learning process. IPA class XII students were not satisfied with the learning atmosphere created by teacher B because the teacher was not able to create a conducive classroom atmosphere. The learning atmosphere disrupted the concentration of the students to learn. The learning atmosphere was less conducive because the teacher did not stop the students from performing activities outside the learning process.

This result was consistent with the finding of Wu, et al. (2014) which shows a relationship between the classroom atmosphere and the satisfaction of high school students. This result was also consistent with the finding of Pan (2014) research that the learning atmosphere controlled by the teacher can increase the students 'seriousness in learning and the learning atmosphere which is in accordance with the needs of students can improve students' comfort in learning. If the teacher successfully conditions students' comfort in

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

following the learning activities, then the students will feel more satisfied with the learning process.

Learning requires an interaction between teacher and learners who are strongly supported by the social competence of the teacher. Teachers who do not interact with students can cause the learning process to run less smoothly. The students of classes X and XI IPA felt dissatisfied with the chemistry lesson because they found it difficult to interact with the teacher. The difficulty experienced by students regarding how to communicate the understanding of a material is related to the use of the standard language systematically and in accordance with the teacher's wish. It is also caused by the authority and assertiveness held by the teacher which sometimes makes students feel afraid to interact with the teacher so that they dare not participate in answering questions asked by the teacher.

This result was consistent with the opinion of Slameto (2003) that the lack of interaction between students and teachers causes students to feel far away from teachers, so they are not motivated to participate actively and feel less satisfied with the learning process. This results was also consistent with the finding of Febriyanti (2014) that the interaction of students and teachers have a direct relation with students' interest in learning. The better the interaction of students with teachers, the more the students' interest in learning so that students easily understand the learning materials that have been given by the teacher.

In addition to the interaction between students and teachers, in the learning process is also involved the interaction of students with students. Students' interaction with each others should be well nourished by the teacher so that the learning process can be effective (Slameto, 2003). The students of class XII IPA felt dissatisfied with learning because the teacher did not stop the interactions between the students and the students that were not related to the learning activities, thus causing less conducive learning atmosphere. The creation of a less conducive learning environment caused the concentration of other students to be disrupted and the learning process became ineffective.

This is related to the personal competence that teachers must possess in developing discipline, learning how to learn and learning how to act within the students during the learning process so that the classroom atmosphere is conducive and effective (Depdiknas, 2008a). This result was consistent with the finding of Udiutomo (2011) that teachers play an important role as a figure who can manipulate the classroom environment to form a classroom environment that can improve students' attitudes toward learning objects. A teacher can shape the environment and design learning activities that can improve students' cohesiveness, cooperation, and students' involvement.

The return of the students' tasks is related to the pedagogic competence of teachers in conducting an assessment of the learning activities that the students have done objectively (Depdiknas, 2008a). The return of student tasks is one part of the evaluation of the learning process. The tasks assigned should be reported or restored thoroughly to provide information to students regarding the progress of their learning process in school so that students can follow up to achieve better learning outcomes (Aries, 2011).

The students of classes X and XI IPA felt dissatisfied with learning because teachers rarely returned the tasks that have been collected so that students did not know the truth or mistakes in completing tasks. The students could not correct their mistakes because they did not know which parts were wrong. This result was consistent with the finding of Sabriani (2012), the teachers can improve motivation and students' learning outcomes by assigning tasks to students accompanied by feedbacks and delivering assessment results in front of the class, and returning them as soon as possible to students. Therefore, teachers should

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

return the tasks collected by students to improve students' motivation and learning outcomes so that students feel more satisfied with learning.

4. Conclusions

Based on the results obtained and the discussion presented above it can be concluded that generally the level of the students' satisfaction with chemistry learning process at SMA Laboratorium Undiksha Singaraja in academic year 2016/2017 was high. The highest level of students' satisfaction was in tangible dimension and the lowest in empathy dimension. The factors influencing students' satisfaction with chemistry learning consisted of two factors, i.e., satisfaction and dissatisfaction factors. The satisfaction factors in chemistry learning were learning process, learning outcomes, learning progress, appreciation from teacher, and task given. Dissatisfier factors in chemistry learning were the atmosphere of learning, interaction between student and teacher, interaction between students and the return of tasks.

Therefore, from the results and discussion above the following suggestions can be made: (1) the chemistry teacher should in carrying out the learning activities improve empathy and satisfiers conditions like, learning process, learning outcomes, learning progress, teacher appreciation and task. In addition, the teacher should reduce or limit the condition of dissatisfiers, namely learning atmosphere, student interaction with teachers, students' interaction with students and the return of tasks in order to increase students' satisfaction; (2) the school should make policy in overcoming problems of dissatisfaction of students by considering dissatisfiers factors, i.e., learning atmosphere, students' interaction with teacher, student interaction with student and return of tasks; (3) the government should make policies related to the development of education management in Indonesia that is oriented towards students and ends up in the satisfaction of students, parents and society; and (4) for other researchers interested in reviewing this research, it is better to test the questionnaire used in this study because there are two invalid statements. In addition, other researchers should also examine the magnitude of the influence of each factor satisfiers and dissatisfiers on students' satisfaction.

References

Aries, E. F. (2011). *Assesemen dan Evaluasi*. Malang: Aditya Media Publishing.

Basrowi & Siskandar. (2012). *Evaluasi Belajar Berbasis Kinerja*. Bandung: Karya Putra Darwati.

Depdiknas. (2008a). *Penilaian kinerja guru*. Jakarta: Balai Pustaka.

Depdiknas. (2008b). *Peraturan Menteri Pendidikan Nasional No.16 tahun 2007 Tentang Standar Kualifikasi Akademik dan Kompetensi Guru*. Jakarta: Depdiknas.

Dirmansyah, Y. (2005). *Analisa Tingkat Kepuasan Siswa Terhadap Layanan Program Smart Ekselensia Indonesia Tahun 2011*. Semarang: UNS.

Febriyanti, C. (2014). Peran Minat Dan Interaksi Siswa Dengan Guru Dalam Meningkatkan Hasil Belajar Matematika. *Jurnal Formatif*, *4*(3), 245–254.

Gerson, R. F. (2004). *Mengukur Kepuasan Pelanggan*. *PPM dan Bisnis 2030*. Jakarta: PPM.

Margono, G. (2005). Validitas Konstruk Instrumen Pengukur Tingkat Kepuasan Siswa sebagai Pelanggan Internal. *Jurnal PTM*, *5*(1), 9–18.

Natalina, Salim, I. & Rasyid, R. (2014). *Pengaruh pemberian penghargaan oleh guru ekonomi terhadap motivasi belajar siswa*. Pontianak: Universitas Tanjungpura.

Pan, Y. (2014). Relationships Among Teacher'Self-Efficacy in Physical Education. *Journal of Teaching in Physical Education*, *33*, 68–92.

Panjaitan, P. (2013). Pengaruh Kompetensi Guru terhadap Kepuasan Siswa (Studi Kasus pada SMA Negeri 2 Tebing Tinggi). *Jurnal Ilmiah Business Progress*, *1*(1), 43–49.

ISSN: 2541-7207 DOI: 10.23887/jpi-undiksha.v6i2.11880

Purwandani, D., Sutarsih, C., & Sururi. (2016). Pengaruh Mutu Layanan Sarana dan Prasarana Terhadap Kepuasan Mahasiswa di Fakultas Pendidikan Teknologi dan Kejuruan Universitas Pendidikan Indonesia. *Jurnal ADPEND*, *1*(1), 80–90.

Robbin, S. P., & Judge, T. A. (2008). *Perilaku Organisasi*. Jakarta: Salemba Empat.

Sabriani, S. (2012). Penerapan Pemberian Tugas Terstruktur disertai Umpan Balik pada Pembelajaran Langsung untuk Meningkatkan Motivasi dan Hasil Belajar Siswa (Studi Pada Materi Pokok Struktur Atom Kelas X6 SMA Negeri Watampone). *Jurnal Chemica*, *13*, 39–46.

Slameto. (2003). *Belajar dan faktor-faktor yang mempengaruhi*. Jakarta: Rineka Pustaka.

Sobari, R. N. (2014). *Tingkat Kepuasan Peserta Didik terhadap Pelayanan Proses Pembelajaran di SMK Averus*. Jakarta: Universitas Islam Negeri Syarif Hidayatullah.

Sopiatin. (2010). *Manajemen Belajar Berbasis Kepuasan Siswa*. Bogor: Ghalia Indonesia.

Suastra, I. W. (2009). *Pembelajaran Sains Terkini Mendekatkan Siswa dengan Lingkungan Alamiah dan Sosial Budaya*. Singaraja: Undiksha.

Sudiro. (2015). Pengaruh Sarana Proses Pembelajaran dan Persepsi Kinerja Dosen terhadap Kepuasan Mahasiswa pada Politeknik Indonusa Surakarta. *Jurnal Saintech Politeknik Indonusa Surakarta*, *1*(4), 1–16.

Tjiptono, F., & Chandra, G. (2011). *Service, Quality & Satisfaction*. Yogyakarta: ANDI.

Udiutomo, P. (2011). Analisis Tingkat Kepuasan Siswa dalam Mempelajari Akutansi. *Jurnal Pendidikan Dompet Dhuafa*, *1*, 1–19.