# Assessment of Student Learning Needs Fulfillment and Autonomy in Teacher Teaching Practices

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## Abstrak

*Adaya otonomi peserta didik dalam belajar dan terpenuhinya kebutuhan belajar peserta didik merupakan ciri utama dan kunci terciptanya pembelajaran berpusat pada peserta didik. Distribusi otonomi belajar dan terpenuhinya kebutuhan belajar merupakan indikator utama pembelajaran berpusat pada peserta didik. Penelitian ini bertujuan untuk menganalisis persepsi peserta didik terhadap upaya guru dalam memenuhi otonomi belajar dan kebutuhan belajar mereka. Sebanyak 235 peserta didik (110 = laki-laki dan 125 = perempuan) yang berasal dari sekolah menengah pertama negeri yang mengimplementasikan Kurikulum Merdeka di Kota Bandung terlibat sebagai subyek penelitian. Data penelitian dihimpun dengan metode survey melalui kuesioner berskala Likert 1 hingga 4 yang berisi 25 butir deskripsi perilaku mengajar guru yang merepresentasikan upaya guru dalam memenuhi kebutuhan dan otonomi belajar peserta didik dan selanjutnya dianalisis menggunakan metode kuantitatif deskriptif. Hasil penelitian menunjukkan bahwa, secara keseluruhan peserta didik memandang keterampilan guru dalam memenuhi kebutuhan dan otonomi belajar peserta didik dikategorikan rendah. Baik peserta didik laki-laki dan perempuan tidak menunjukkan perpedaan persepsi yang signifikan.*

*Kata Kunci: Kebutuhan Belajar, Otonomi Belajar, Pembelajaran Berpusat pada Peserta Didik*

## Abstract

The existence of student autonomy in learning and the fulfillment of student learning needs is the main characteristic and key to creating student-centered learning. The distribution of learning independence and completing students' learning needs are two core indicators of student-centered learning. This study analyzes students' perceptions of how far teachers have fulfilled their learning needs and distributed autonomy in managing the learning process. 235 students (110= = male; 125 = female) from public secondary schools in Bandung, which implement Kurikulum Merdeka, were involved as the research subject. The data was gathered by survey method through a Likert-style questionnaire consisting of 25 behavioral descriptions that described teacher teaching behavior to facilitate students' learning needs and autonomy and were then analyzed by quantitative descriptive method. Study findings show that overall, students perceived teachers' capability to meet their learning needs and distribute freedom as low. Furthermore, there is no significant difference in perception between male and female students.

**Keywords:** Learning Needs, Learning Autonomy, Student-centered Learning

## 1. INTRODUCTION

The existence of student autonomy in learning and the fulfillment of student learning needs is the main characteristic and key to creating student-centered learning. Learning, composed of learning and teaching activities, is the core of educational activities and curriculum implementation (Rusman, 2019; Taylor et al., 2015). In this learning process, the effectiveness of the implemented curriculum in achieving educational goals is determined. Student-centered learning is an agenda for reforming the learning process in the Independent Curriculum, in which the teacher must be more constructive in guiding students to learn. Several indicators represent constructive teacher teaching behavior, namely teacher skills in distributing learning autonomy to students and teaching skills in meeting the learning needs of diverse students.

Student learning autonomy is closely related to the management of learning. In practice, some management responsibility is given to students because the responsibility for learning lies with the learner himself (Duchatelet & Donche, 2019; Thi Ngoc Nguyen & Nguyen, 2020). Learners take an active role in creating ideal conditions that can stimulate the learning process. Learning is closely related to the process of thinking. No one outside the students can force students to think. Students interpret all the information they receive from the environment in their cognitive structure (Alrawili et al., 2022; Suardana, 2012). The teacher's task is only to create an environment that can stimulate students to think so that the learning process occurs in students. Whether students learn or not, all returns to the students themselves. Based on this fact, the distribution of learning autonomy so that students participate in regulating their learning environment plays a significant role in the learning process. In addition, autonomy in learning is also closely related and impacts motivation, learning styles, personality, and students' attitudes toward learning (Boyadzhieva, 2016; Salonen et al., 2017). Therefore, in learning wherever possible, students have the autonomy to manage it.

Learning needs are seen as gaps between the learner's current level of knowledge and skills and the level of knowledge and skills required to perform a task or set of tasks, which gaps can be filled through the learning process. To fill this gap, teachers must pay attention to emotional, social, and psychological aspects when teaching students. Analysis of learning needs, including the emotional, social, and psychological learning needs of students, plays a vital role in developing students' knowledge and skills (Chien, 2019; Menggo et al., 2019). In teaching practice, the teacher can do this by examining prior knowledge and students' ways of thinking (cognitive), examining students' interests, attitudes, and feelings towards lessons (emotional & psychological), and presenting relevant phenomena, examples, and learning resources with students' lives (social) (Amelia & Rusman, 2022; Stevenson et al., 2020).

Previous research related to student autonomy in learning focused on the formulation of a definition of learning autonomy (Benson, 2006), as well as a study of methods for developing student autonomy in learning (Chen, 2022; Han, 2022; Shi & Han, 2019). Likewise, studies related to learning needs are dominated by the development of learning media (Setiawan et al., 2020) or the application of specific learning strategies (Aqsa & Khoiri, 2021) to meet learning needs, not yet at the level of assessing the extent to which learning needs and autonomy are met in order to evaluate teacher teaching practices. One of the agendas of the Independent Curriculum is to reform learning. One of the pressure points is to transform learning to be more student-centered. This is marked by student autonomy in learning and fulfilling student learning needs.

This study aims to analyze the extent to which students' learning autonomy and learning needs have been fulfilled. The results presented will provide a mini picture of the extent to which learning reform has been realized through the Independent Curriculum. Finally, the results of this study can also become additional literature to enrich discussions related to teacher teaching performance.

## 2. METHODS

This descriptive quantitative research uses a survey method to examine objective phenomena quantitatively. The survey method accommodates the need to study the facts and behavioral phenomena of research subjects in large numbers (Ali, 2018). The primary research data source is student responses to 25-item descriptions of teacher teaching behavior presented in a Likert scale 1 to 4 questionnaire. These twenty-five behavior descriptions are the elaboration of four indicators of fulfilling learning needs and two indicators of fulfilling student learning autonomy. The higher the student's response to each item of behavior

description, the higher their perception of the teacher's efforts to meet their learning needs and autonomy.

Two hundred thirty-five students (110 = boys and 125 = girls) from various public junior high schools implementing the Merdeka Curriculum in Bandung City were involved as research subjects. Research data were analyzed to determine students' perceptions of the teacher's teaching behavior in meeting their learning needs and autonomy. For this purpose, the average of all (235) research subjects' responses to the data collection questionnaire were calculated. Furthermore, to examine the significance of differences in perceptions based on the gender of students, an independent test was carried out on the average rating of each indicator from each group of respondents.

## 3. RESULTS AND DISCUSSION

### Result

### *Fulfillment of Learning Needs*

Table 1 presents data on students' perceptions of the teacher's teaching behavior in meeting learning needs.

**Table 1.** Student Perceptions of Teachers' Efforts to Meet Learning Needs

| Indicators of Fulfillment of Learning Needs | M | SD |
|---|---|---|
| Examining students' initial knowledge and ideas (MPIA) | 2.82 | 0.856 |
| Provide time and examine students' way of thinking (WMCB) | 2.79 | 0.875 |
| Examine students' interests, attitudes, and feelings toward lessons (MSPP) | 2.81 | 0.837 |
| Presenting phenomena, examples, and learning resources that are relevant to students' lives (FCSB) | 3.24 | 0.712 |
| **Average** | **2.92** | |

Based on the data presented in Table 1, overall, students perceive the teacher's efforts to meet the learning needs of students in the low category (M = 2.92). Table 2 presents data on students' perceptions based on the gender on the teacher's efforts to meet learning needs.

**Table 2.** Perceptions of Student Groups Regarding Fulfillment of Learning Needs

| Indicators of Fulfillment of Learning Needs | Female | | Male | | T-Test |
|---|---|---|---|---|---|
| | M | SD | M | SD | |
| Examining students' initial knowledge and ideas (MPIA) | 2.78 | 0.866 | 2.86 | 0.844 | 0.724 |
| Provide time and examine students' way of thinking (WMCB) | 2.73 | 0.886 | 2.85 | 0.861 | 0.662 |
| Examine students' interests, attitudes, and feelings toward lessons (MSPP) | 2.76 | 0.859 | 2.87 | 0.809 | 0.56 |
| Presenting phenomena, examples, and learning resources that are relevant to students' lives (FCSB) | 3.34 | 0.645 | 3.14 | 0.768 | 0.151 |
| **Average** | **2.90** | | **2.93** | | |

Furthermore, even though female and male students show different assessments on each indicator of the teacher's efforts to meet their learning needs, as presented in Table 2, through the independent t-test, the difference is not significant (T-test > 0.05 ).

The following diagram illustrates student assessments for each behavior description item (information on each behavior description can be seen in the attachment) which represents indicators of meeting learning needs. Student assessment for the behavioral description of MPIA indicators as show in Figure 1.
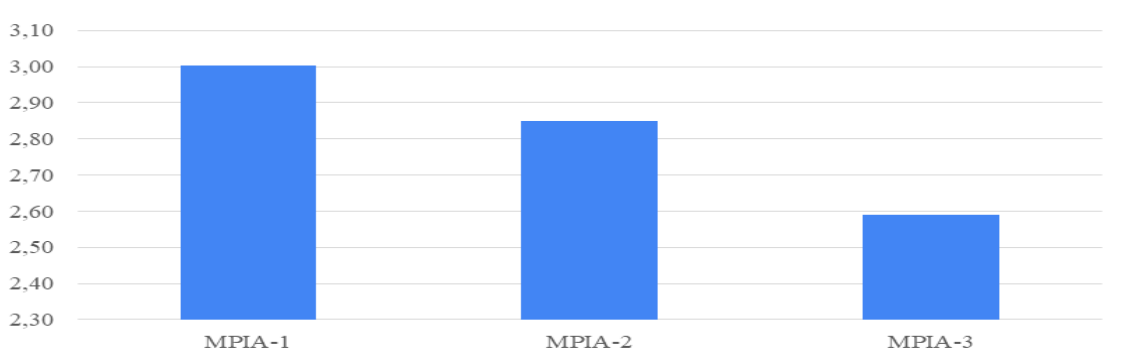


**Figure 1.** Student Assessment for the Behavioral Description of MPIA Indicators

Based on the distribution of behavior descriptions presented in Figure 1 it can be seen that it is still a challenge for teachers to ask students what they know about the material to be studied (MPIA-3). Student assessment for WMCB indicator behavior description is show in Figure 2.
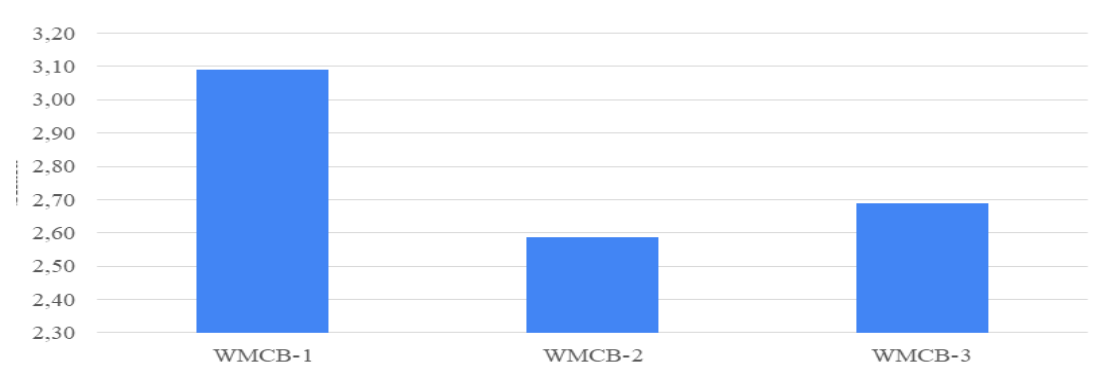


**Figure 2.** Student Assessment for WMCB Indicator Behavior Description

Based on the distribution of values for each behavior description presented in Figure 2, it is known that the teacher's efforts to give sufficient time for students to think about solutions to the problems presented in the lesson are excellent. Student assessment for MSPP indicator behavior description is show in Figure 3.
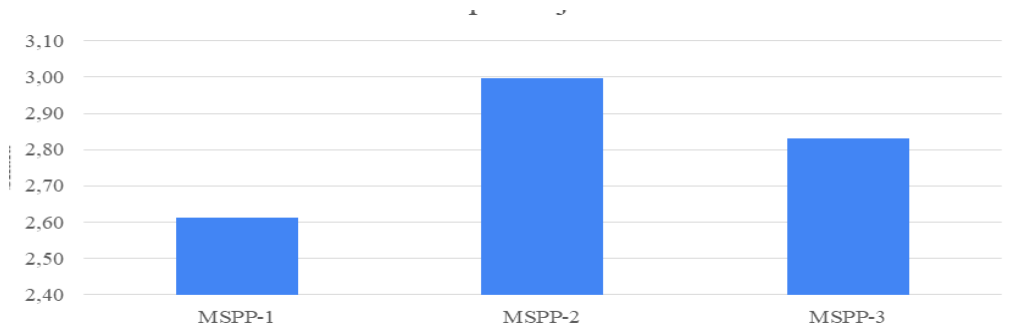


**Figure 3.** Student Assessment for MSPP Indicator Behavior Description

Based on the data presented in Figure 3, in ongoing learning, students' interests, attitudes, and feelings are rarely explored (MSPP-1 and MSPP-3). Student assessment for FCSB indicator behavior description is show in Figure 4.
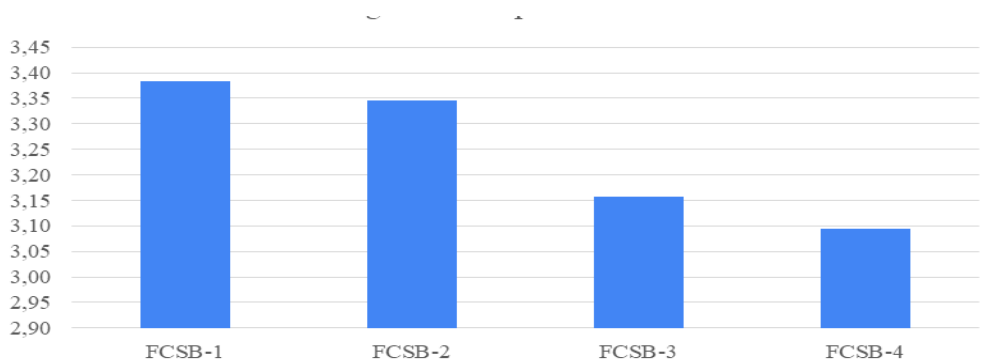


**Figure 4**. Student Assessment for FCSB Indicator Behavior Description

Base on Figure 4, illustrates that there have been significant efforts from teachers to present material that is within the knowledge horizon of students to help them understand the material being studied.

### Learning Autonomous Distribution

Data on students' perceptions of the teacher's efforts in distributing student learning autonomy is show in Table 3.

**Table 3.** Students' Perceptions of Teachers' Efforts to Distribute Learning Autonomy

| Indicator of Learning Autonomy Distribution | M | SD |
|---|---|---|
| Considering students' critical views in managing the learning environment (PKPD) | 2.72 | 0.886 |
| Involve students in managing the learning environment (MPLB) | 2.69 | 0.887 |
| **AVERAGE** | **2.70** | |

Than Table 4 presents data on students' perceptions based on the gender on the teacher's efforts to distribute learning autonomy to students.

**Table 4.** Perceptions of Student Groups Regarding the Distribution of Learning Autonomy

| Indicator of Learning Autonomy Distribution | Female | | Male | | T-Test |
|---|---|---|---|---|---|
| | M | SD | M | SD | |
| Considering students' critical views in managing the learning environment (PKPD) | 2.71 | 0.867 | 2.72 | 0.909 | 0.877 |
| Involve students in managing the learning environment (MPLB) | 2.71 | 0.885 | 2.67 | 0.890 | 0.768 |
| **AVERAGE** | **2.71** | | **2.70** | | |

The diagram illustrates student assessments for each behavior description item (information on each behavior description can be seen in the attachment) which represents indicators of fulfilling learning autonomy as show in Figure 5, and Figure 6.
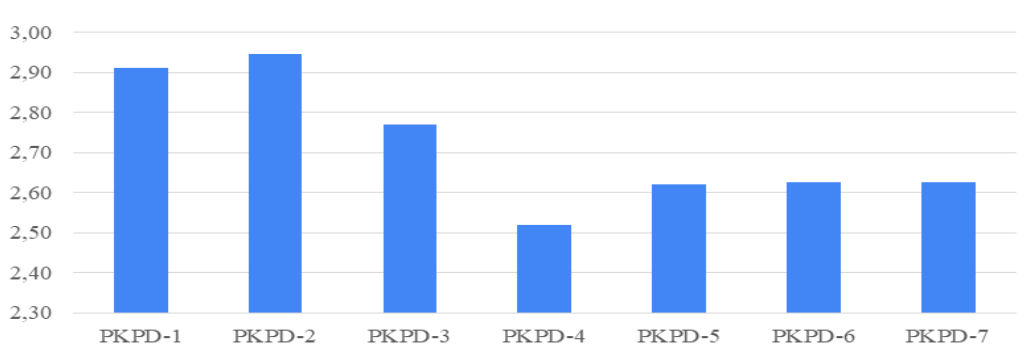
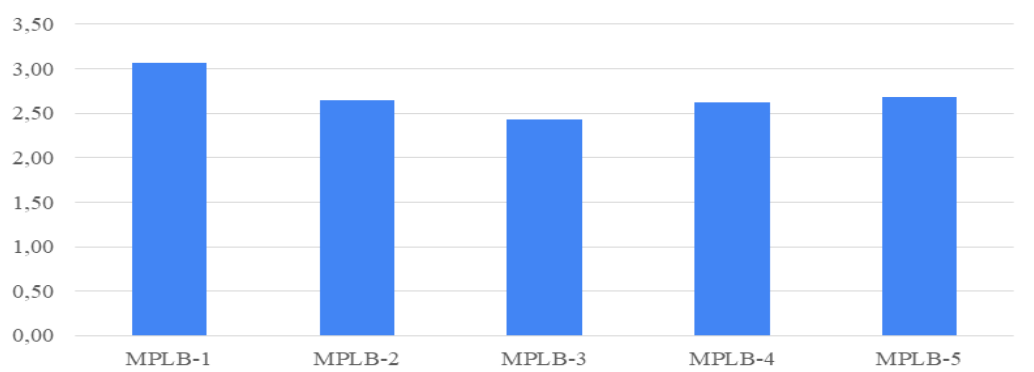**Figure 5**. Student Assessment for PKPD Indicator Behavior Description



**Figure 6.** Student Assessment for the Description of MPLB Indicator Behavior

## Discussion

In fulfillment of learning needs the lack of teacher effort in meeting students' learning needs was also reported in research (Chizhik & Chizhik, 2018; Fabriz et al., 2021). Of the four indicators that represent the teacher's efforts to meet the learning needs of students, only the indicators present phenomena, examples, and learning resources relevant to students' lives (FCSB), which show a high category rating. The following presents an elaboration of students' perceptions of each indicator that represents aspects of the teacher's efforts to meet students' learning needs:

### *Examining students' initial knowledge and ideas (MPIA)*

As an active constructor of knowledge, each learner has brought a specific meaning about the world in his cognitive structure. In fact, students who have just entered grade 1 elementary school have lived for many years and have found a method to deal with their environment so that they have brought their initial knowledge with them. Therefore, the teacher should look at each student as something other than an empty glass that only accommodates various information the environment provides. They have brought initial knowledge that will become the foundation for building further knowledge. Therefore, previous study recommend the teacher must understand students' knowledge regarding the material to be studied (Amelia & Rusman, 2022).

The initial knowledge of these students then becomes the basis for the teacher to carry out learning. The research findings are presented indicates that the teacher's efforts to examine students' ideas and initial knowledge are rarely made. Based on the distribution of behavior descriptions it can be seen that it is still a challenge for teachers to ask students what they know about the material to be studied (MPIA-3). Even though it is from this activity that students' initial knowledge will be explored, and if the teacher designs what will be presented and builds new knowledge of students based on the initial knowledge they have, it will

stimulate meaningful learning that can help students in constructing their new knowledge (Carlson, 1999; Hattan et al., 2015). The teacher is more dominant in the apperception of what they have learned in the previous meeting (MPIA-1 and MPIA-2) rather than measuring the level of students' initial knowledge of what they will learn. This will have implications for the teaching activities that the teacher will carry out, where the depth and breadth of the material to be taught are partially based on the student's level of knowledge.

### *Provide time and examine students' way of thinking (WMCB)*

One of the things that every teacher must pay attention to in facilitating student learning is not to assume that students think clearly and straightforwardly. Students think in complex and diverse ways about a phenomenon. Whatever the students say based on the results of their thinking in answering a question is a reasonable answer for them at that time. Therefore, teachers need to learn to understand how students think so that they can help them modify it with the proper method for each student.

However, based on the distribution of values for each behavior description presented it is known that the teacher's efforts to give sufficient time for students to think about solutions to the problems presented in the lesson are excellent. This will have implications for the delay in the process of restructuring the cognitive structure of students when facing conceptual changes, which these conceptual changes play an essential role in the construction of students' knowledge. (Clack & Dommett, 2021; Leilani et al., 2019). Teachers must be creative and innovative because teachers deal with individuals with diverse learning characteristics and needs. For this reason, teachers must make many innovations in teaching to facilitate students' learning.

### *Examine students' interests, attitudes, and feelings toward lessons (MSPP)*

Based on the data in ongoing learning, students' interests, attitudes, and feelings are rarely explored (MSPP-1 and MSPP-3). There are no specific parts of the learning that are organized that show significant efforts from the teacher to identify what students like or dislike about the lessons that take place, as well as efforts to explore the learning needs and feelings of students regarding learning activities and the material they are studying. This finding indicates that the learning that takes place entirely follows the scenario that the teacher has planned so that there is little room for modifying learning to respond to students' needs and interests (Alrawili et al., 2022; Kurniawan & Nawangsih, 2020; Tanti et al., 2020). The only thing the teacher does to review students' perspectives regarding learning is to ask which part of the lesson students find most interesting (MSPP-2). These findings also indicate that the reform of the learning process in the Independent Curriculum, which prioritizes learning based on student's interests, has yet to be realized optimally and has left much room for improvement and improvement.

### *Presenting phenomena, examples, and learning resources that are relevant to students' lives (FCSB)*

Related indicators presenting phenomena, examples, and learning resources relevant to students' lives are the only indicators with high ratings according to students' perceptions. This finding illustrates that there have been significant efforts from teachers to present material that is within the knowledge horizon of students to help them understand the material being studied. In addition, teachers have made significant efforts to use students' everyday experiences, especially those appropriate to learning situations, to make it easier for students to construct their knowledge. The relevance of the material taught in schools to students' daily lives plays a significant role in the learning process and students' conceptual changes. This personal relevance can also accelerate students' understanding of what is

learned and increase the retention of knowledge that students construct (Gill et al., 2022; Semmens et al., 2020). This is because the higher the relevance of the material taught in schools to everyday life, the easier it is for students to build and organize their cognitive structures about what they learn, which has implications for improving student learning outcomes (Imamah, 2012; Kapon et al., 2018). Thus, the knowledge that students construct must be connected to the world of students who are interpreting information and learning to understand.

### *Considering students' critical views in managing the learning environment (PKPD)*

The learning environment is not just the physical environment where the teaching and learning process occurs. However, more complex than that, this concerns students' psychosocial and emotional learning environment. Therefore, it is not surprising that the learning environment determines how a person learns and has become one aspect of reform in the Independent Curriculum (Senler, 2022; Tadesse et al., 2022). Because students are active subjects constructing their knowledge, students hold full responsibility for the learning process and learning outcomes. In students' learning process, the teacher acts more as a mediator and facilitator who participates with students to help make the learning process of students run well (Fraser, 2020; Tohir et al., 2021). To help the learning process run well, students' critical views regarding the teacher's efforts to manage the learning environment must be considered considering that the teaching activities that teachers carry out manage the learning environment so that they interact with students to achieve learning goals.

For this interaction process to run well, all input, criticism, and student complaints regarding matters that hinder learning must be considered by the teacher when managing the learning environment. Literature related to this issue suggests that it is better if the learning process provides opportunities for students to be more 'speaking' because this affects learning motivation and self-efficacy in learning, as well as opportunities for the formation of authentic and generative learning can be increased (In'am & Sutrisno, 2020; Mayes et al., 2021; Yang et al., 2018). As the transformation of the learning environment to be achieved in the Independent Curriculum, namely the creation of a safe, comfortable, and inclusive learning environment, to stimulate students to become critical learnersIn addition, there is no fear in students that they will be ridiculed, embarrassed, or considered to be less intelligent about the ideas they convey. Therefore, the learning process must view critical thinking as a regular thing; students must feel safe and comfortable expressing ideas and feeling valued during the process (Bashori, 2017; Rahayu et al., 2019).

### *Involve students in managing the learning environment (MPLB)*

Similar to the previous indicators, teachers' efforts to involve students in managing the learning environment are rarely practiced by teachers according to students' perceptions. There is very little room for students to be free to manage the learning environment. Learning like this shows that students do not have freedom in learning. In addition, the teacher's full authorization to manage the learning environment illustrates the teacher's need for more understanding of the learning process (Le et al., 2018; Mahan, 2022; Sadykhan et al., 2022). It can inhibit the formation of collaborative learning between both teachers and students and between students. Even though students have space to express opinions (MPLB-1), the opinions of these students are more about discussion and question-and-answer activities in the learning process.

Meanwhile, the teacher's efforts to involve students more in planning what will be learned, determine learning activities that suit the needs of students, and choose assessment methods during the learning process are rarely implemented. Furthermore, the findings of this study also indicate that students' learning autonomy still needs to be fulfilled. Learners have

not been fully encouraged to take responsibility for their learning. This is undoubtedly contrary to constructivism's viewpoint, which is the philosophical foundation of learning in the Independent Curriculum, which requires students to be responsible for their learning. Finally, these findings indicate that learning is not entirely personal, focused on students, and not based on students' needs and preferences.

## 4. CONCLUSION

Teacher skills in meeting the learning needs of students and distributing learning autonomy so that students are actively involved in managing the learning environment still need to be improved to support learning reform so that the learning transformation agenda promoted by the Independent Curriculum can be realized. Becoming a constructive teacher, as mandated by the national curriculum, is still challenging for teachers. However, blaming teachers entirely for the lack of transformation of their teaching behavior to make it more constructive is undoubtedly not a wise decision. This is necessary to make the teacher education curriculum more sensitive to primary and secondary education unit changes, where the output will work later.

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