Optimizing Implementation of the Independent Curriculum in Rural Schools

Mukodi Mukodi[1*], Chusna Apriyanti[2], Sugiyono Sugiyono[3], M. Fashihullisan[4], Ridha Kurniasih Astuti[5]

STKIP PGRI Pacitan, Indonesia

* mukodi@stkippacitan.ac.id

Abstract. This study aimed to know the teachers' understanding of an Independent Curriculum's concept, the implementation of an Independent Curriculum in the classroom, efforts to implement an Independent Curriculum, and the obstacles teachers face in implementing an Independent Curriculum. This study used a quantitative descriptive research design. Data was taken from November to December 2022. Respondents in this study were elementary school teachers in Pacitan Regency. Data was collected using the Google Form platform and distributed to 850 teachers in village schools through the Pacitan District. Data measurement was used in the form of an ordinal scale. The questionnaire contained 30 closed-ended questions. After data collection, the data were analyzed in stages: classifying and presenting data, making interpretations, and drawing conclusions. The study results showed that most teachers already understand the concept of an Independent Curriculum. The first, most teachers carried out the learning process following the characteristics of the Independent Curriculum, and the second in the planning process, core activities, and evaluation stage. Teachers have made various efforts to upgrade themselves to welcome the Independent Curriculum, such as school support and a solid teaching team. The obstacles faced by teachers during the implementation of the independent learning curriculum were confusion between Independent Curriculum implementation and 2013 year curriculum because both were still running. The research findings know that the administrative burden was still a lot, the lack of training on the Independent Curriculum. We recommend that the independence of students to learn has not been realized and is limited in learning resources.

Keywords: Independent Curriculum, Independent Curriculum's Obstacle, Independent Learning, Rural Schools

1   Introduction

In 2019-2022, the COVID-19 outbreak has changed the learning system worldwide, especially in Indonesia. The education system has changed to online learning. School closures are implemented worldwide due to stop the virus transmission. Knowledge is brought into the home, where parents are the key to online learning.

Undeniably, several problems were found. It deals with the student's mental health. Less interaction with friends and teachers, and completed self-quarantine supported the students in experiencing stress and depression. Students' negative thoughts and worries can predict mental health symptoms following stressful events [1]. Worries deal with many aspects, both the side of school terms and the worries for their health condition. School term worries deal with their inability to complete the tasks, failure to follow the online learning instructions, and limited learning materials. Besides, they also experience worries about their health condition. Alpha and Delta periods of COVID had harmful impacts on students feeling insecure and the possibility of getting the viruses.

Those insecurities and worries correlated with students' performance at school. Connectedness (loneliness and a sense of connection to university) mediated links between mental health (well-being and anxiety) and academic performance [2]. The students who experience worries, and anxiety will have fewer scores than those in stable condition. Research also declares that more depressive symptoms, academic stress, and loneliness were reported in 2021 [3]. The pandemic has affected college students' mental health and caused post-traumatic stress symptoms (PTSS) [4].

School workload also became a severe problem in online learning during the pandemic [5]–[7]. The workload or task load exists due to the 'practical' way of teachers in teaching. They just give a series of tasks every morning, and the students must submit them in the evening. This happens in Indonesia. Since not all places are covered with stable internet coverage and not all students have facilities to support online learning, like gadgets, PC or laptops, etc., the teachers just gave the tasks to students every day through parents' WhatsApp group. It was cheap and easy to gain because it just needs small bytes of internet bandwidth. Those workloads also put students bored. Online learning also limited the students' interaction with friends and teachers [8]–[10]. This Technology also became a problem in the online learning [11]–[14].

Online learning had no obstacles for the school with complete facilities and supported internet facilities. It seems online learning needed both of those things. Schools in the city could implement online learning well. But, the schools with limited facilities and internet coverage, as in rural areas, will have the disability to do online learning maximally. There were few WIFI routers in rural areas, where the parents needed to buy the internet bandwidth. And the price was also high. The mountainous area in rural places also limited internet coverage, where online learning was impossible.

Those problems lead to under-quality teaching and learning, such as learning loss. Several research journals show that students' motivation during online learning decreased drastically. Limited interaction with teachers to clarify understanding and network difficulties trigger learning loss as the impact of online learning was not optimal. Learning loss refers to a condition where a small part or most of knowledge and skills were lost in academic development, usually caused by the cessation or disruption of the learning process in education.

Notably, research on educational systems that faced events similar to the COVID-19 pandemic seldom referred to learning loss [15]. There seem to be clear indications that the first school closure due to COVID-19 resulted in substantial learning losses, especially for students from more disadvantaged homes, further exacerbating existing

achievement gaps, and thus increasing educational inequality [16]. Losses were up to 60% larger among students from less-educated homes, confirming worries about the uneven toll of the pandemic on children, and families [17]. Online home learning activities put most students in their comfort zone, and they tend to rely on Google search sites and cooperation in doing assignments and exams compared to studying on their own. As a result, when asked, "Are you ready to study at school normally?" most students answered that they were not ready or just wanted to go to school to meet friends.

Given the sizeable observed effect sizes, the effect of school closures appears to be a combination of lost learning progress and learning loss [18]. Children experienced significant learning losses during this period of school closures, as it was not possible for schools to provide the same level of education to students at home [19]. This prolonged period of home-schooling was unprecedented, and it is difficult to predict the learning loss that children will suffer [20]

Instead of learning loss, online also deal with the gap. The research findings reveal a cumulative disadvantage resulting from unequal opportunities in formal, informal, and non-formal education and underline the need to address school and family factors to mitigate the impact of the pandemic on learning opportunities. [21]. A few educators anticipate that learning gaps will be more prevalent for students who were in kindergarten during remote learning [22]. Some of the pre-existing disparities have been amplified by remote knowledge during the pandemic and potentially widened the existing learning gap [23]. Any impacts of inequalities in time spent learning between poorer and wealthier children were likely to be compounded by disparities not only in learning resources available at home but also in those provided by schools [24]

To minimize the learning loss and learning gaps, the Indonesian government implemented Independent Curriculum in 2020. The Independent Curriculum is meant to help all students recognize their unique potential. Independent Curriculum is freedom and has been designed to help students return to their roots. This means that the teaching-learning process does not depend merely on materials from books that the government decided, but the classes will be flexible based on the student's condition and school support.

Several learning theories that provide independent learning were experimental, contextual, and transformative learning [25]. Experimental learning was called focuses on experiential education, action learning, adventure learning, free choice learning, cooperative learning, service learning, and many others (Chen, 2009). This led to a new teaching and learning process design that gave children the freedom to put learning outside of the classroom. Experiential learning can be achieved through concrete experience, abstract conceptualization, reflective observation, and active experimentation. Knowledge is constructed by touching all of these bases, and learning is achieved [27].

Teaching will be admitted effective as if there was a connection between the classroom and beyond. Contextual learning might bring the students into actual practice education. Contextual learning greatly benefits students by placing their learning in relevant real-life situations, which is the way many of us learn the best [28]. Since the

world was constantly moving and changing, learning also changed. The development of learning material, as well as the method, is also developed. The teachers do not force the students to learn inside the classroom, but they must make a connection between the class and the actual situation. For example, rather than give the students a picture of the fibrous root and taproot of a plan. The teachers should ask the students to go into the field and make direct observations.

Transformative learning provided opportunities for students to develop critical self-reflection to gain confidence and learning experiences to find the basis of the views/thoughts of others [29]. The transformative learning theory explained this learning process of constructing and appropriating new and revised interpretations of the meaning of an experience in the world [30]. Transformative learning leads to Higher Order Thinking Skills. In transformative learning, individuals were transformed into learners who can direct themselves to achieve a change in understanding, awareness, and experience.

Regarding teaching types, the teacher's autonomy became the central issue in Independent Curriculum. There were three main perspectives on teacher autonomy: pedagogical freedom and absence of control, the will and capacity to justify practices, and a local responsibility [31]. Autonomy was maintained in teaching activities and provided possibilities for professional development [32]. Granting freedom in the world of education required a lot of creative teachers because of their free will in their work. That was the teacher will work autonomously in developing teaching materials and teaching methods. The teacher had the autonomy to design the classroom learning process, not just run the administration. He will teach well if he can apply all his ideas in class. The teacher should be someone who was specially trained so that he understood the need of his students and could act to meet those needs. Teacher autonomy deals with two dimensions: general autonomy concerning classroom standards of conduct and on-the-job discretion, and curriculum autonomy concerning selecting activities, and materials, instructional planning, and sequencing [33].

Offering teachers, the opportunity for broader didactic autonomy mean transforming the curriculum content into meaningful lessons by relying on their professionalism [34]. In fact, according to him, teachers are free to interpret the curriculum. Flexible teachers create, and contribute to the curriculum. The teacher is the co-creator of the curriculum. Educational trends develop from time to time. Education is dynamic, and teachers are in a critical position to reflect critically on their practical knowledge through research and evaluation. In addition, interactive teaching processes like Project Based Learning (PJBL) are needed. It is a medium to the significant positive effect on students' academic achievement compared to traditional education (Chen, 2018). It is characterized by students' autonomy, cooperation, communication, and reflection in real-life practices [36]. More specifically, it allows students to learn by searching for solutions, asking questions, debating ideas, designing plans, and communicating with others (Choi et al., 2019). Project-based learning promotes cooperation between students, and the teacher acts only as a guide during the project (Greenier, 2018). It also helps develop students' abilities, skills, attitudes, and values, enabling them to understand the global challenges in a changing global economy (Zatkova, 2015).

Turek (2008) stated that students will learn to work independently and creatively, plan and complete their work, take responsibility for their work and overcome obstacles, work with information, present their work, express themselves correctly and argue, cooperate, communicate, tolerate, accept other opinions, evaluate their work and the work of others (Maros et al., 2021). The project presents design features that combine the Framework's assets with PBL and then tests these features to derive design principles that serve as commitments for designing for teacher change and student learning (Miller et al., 2021). In PBL, pupils can engage in authentic, meaningful problems and act in projects similar to how scientists and engineers work on their projects (Lavonen et al., 2022).

However, this 'perfect' curriculum is still being debated among rural teachers. We must admit that the disparities between regions and the socio-economic conditions of society that have been going on for a very long time have had a far more devastating impact on increasing and equalizing the quality of education. So far, children in various regions and villages have not had adequate educational opportunities. At least the story above describes the reality of the condition of our society and education in the village area. Curriculum changes will be sterile if the teacher's mindset does not change. Teachers still teach in the old way, feeling they know more than their students. The lecture teaching method does not provide opportunities for students to exchange ideas. Mastery of information technology is very weak, so it is feeble to seek knowledge or new information. Among these problems, this study aimed to know the teachers' understanding of an Independent Curriculum's concept, the implementation of an Independent Curriculum in the classroom, efforts to implement an Independent Curriculum, and the obstacles teachers face in implementing an Independent Curriculum

2   Method

This study used a quantitative descriptive research design. Data was taken from November to December 2022. Respondents in this study were elementary school teachers in Pacitan Regency. Data was collected using the Google Form platform and distributed to 850 teachers in village schools through the Pacitan District education office. The researchers took the sample by using simple random sampling. The respondents' classification were displayed in this table:

Teachers' Classification	
Public school teachers	97%
Private school teachers	3%
Ages Range	
20-30 years old	12%
31-40 years old	45.6%
41-50 years old	22.6%
51-60 years old	19.8%

Data was taken in the form of an ordinal scale. The questionnaire contained 30 closed-ended questions. After data collection, the data was analyzed in stages: classifying data, presenting data, making interpretations, and drawing conclusions.

3   Results

3.1   The Teachers' Understanding related to Independent Curriculum
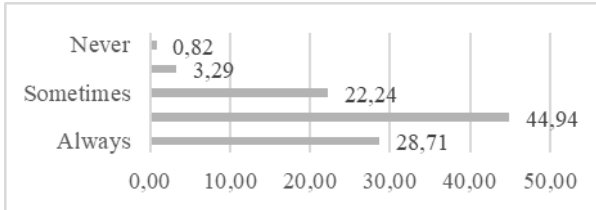
Fig. 1. Teachers' Understanding of Independent Curriculum Concepts

Figure 1 states that the teacher understood the Independent Curriculum well. This could be proven by most respondents answering 'often' understanding the Independent Curriculum, approximately 44.94%. In the second place, respondents answered 'always' about 28.7%. The remaining 22.24% of teachers answered 'sometimes,' 3.29% answered 'seldom,' and 0.82% answered 'never.' From the results of the questionnaire, the implementation of the Independent Curriculum received agreement from the teacher so that its performance at the class level would be more accessible.

Teachers admitted that the implementation of the Independent Curriculum was easier to understand than curriculum 13. The case study related to the implementation of the 2013 Curriculum in Garut Regency Elementary School has not been implemented optimally, as reflected in the condition of teachers who do not understand the process of preparing lesson plans, scientific learning, and learning evaluation. Teachers did not receive full assistance, coaching, or training [37]. This good perceptual attitude would facilitate implementation in the classroom. Respondents who answered 'sometimes' stated that they briefly knew about the Independent Curriculum but had not implemented it in class. This group of respondents admitted that studying the Independent Curriculum and its application took time because many things had changed, especially regarding the learning methods. Respondents who answered 'seldom' and 'never' stated they did not have adequate input regarding implementing the Independent Curriculum. Age and access to information technology were obstacles.

3.2   Independent Curriculum in Teaching and Learning Process

In its implementation, the teaching and learning process was divided into three parts: the preparation stage, the learning process/core learning stage, and the learning evaluation. The implementation of the Independent Curriculum was not only found in one of these parts but it was integrated into one inseparable unit. In the preparation stage, four aspects were assessed: the selection of teaching materials, preparation of authen-

tic learning in class, learning objectives and instructionals, and the design of learning concepts.
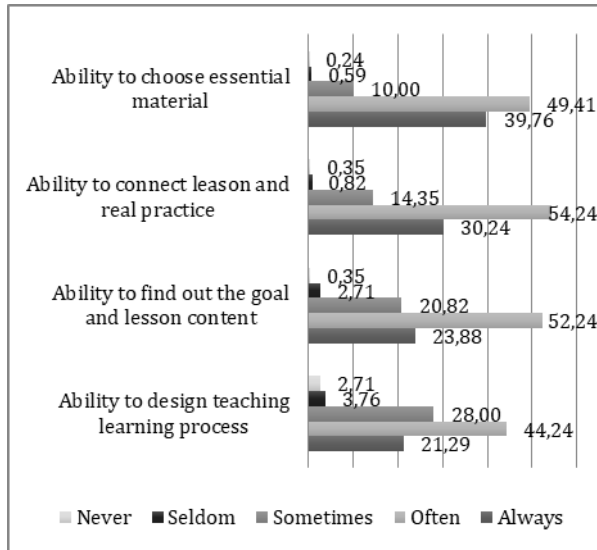
3.3   Independent Curriculum in Preparation Step

Fig. 2. Preparation Step in the Teaching and Learning Process

The teacher's ability to select critical material concepts for students was divided into five classifications: 'always,' 'often,' 'sometimes,' 'seldom,' and 'never.' Most respondents, approximately 49.9%, answered that they often choose material concepts important for children. The Independent Curriculum emphasized essential material that was suitable for students, so teachers should be able to know the needs of students and realize them in the teaching and learning process in class. Approximately 39.76% of respondents answered that they always prepare and choose essential concepts for children. The remaining 10% answered 'sometimes,' 0.59% answered 'seldom,' and 0.24% answered 'never.' Respondents who answered sometimes stated that they were often constrained by their ability to choose the appropriate material for children and had difficulty analyzing student needs. So, sometimes they still used monotonous material that had been done from year to year. Those who answered 'seldom' and 'never' stated that mapping suitable learning concepts for children was an obstacle. From the results of the questionnaire, it could be seen that the majority of teachers are ready and understand selecting the best concepts for students.

Regarding the teacher's ability to prepare for Independent Curriculum-based classroom learning, approximately 54.24% admitted that they often brought real things to class, with various activities such as role-playing and other methods. The result also found that about 30.24% of respondents brought real learning into the classroom by using media relevant to students' daily lives associated with learning materials. Bring-

ing actual experiences into the classroom is an approach that allows learners to engage in their organization's real-world situations [38]. The remaining 14.35% of respondents admitted that they 'sometimes' correlate learning and natural things in class. Approximately 0.82% of respondents 'seldom' connected the lesson with primary education, and 0.35% answered 'never.' The teaching-learning process would be effective when children bring various experiences to the classroom. The constructivist approach requires teachers to involve students in the learning experience and build on prior knowledge [39]

In designing learning instructional objectives and content, most respondents answered 'often,' approximately 52.24%, 23.88% of respondents answered 'always,' 20.82% answered 'sometimes,' 2.71% of respondents answered 'seldom' and 0.35% answered 'never.' Based on the in-depth evaluation and analysis of the respondents, those who answered 'sometimes' stated that they knew how to form instructional objectives and concepts but had limitations in putting them into the teaching and learning process. The reason for complexity of evaluation was also an obstacle in determining instructional purposes and content. For example, when learning led to project-based learning, the evaluation was not limited to students' cognitive and intellectual domains of students by basing the assessment on the tests given. However, other assessment rubrics, such as teamwork, critical thinking, communication skills, and report analysis, were also a reference. And this was not understood by all teachers.

In the preparation process, the teacher's ability to design learning in line with the characteristics and concepts of the Independent Curriculum was also an important note. The majority of respondents, 44.24% of teachers, answered that they 'often' design learning that aligns with the idea of an Independent Curriculum, such as implementing project-based learning, autonomous learning, HOTS activation, etc. Approximately 21.29% of teachers answered 'always,' 28% of respondents answered 'sometimes,' 3.26% said 'seldom,' and 2.71% said 'never.' Respondents who had not implemented learning in line with the concept of an Independent Curriculum admitted to having difficulties in designing learning activities that were in line with the values of an Independent Curriculum, such as a limited understanding of the Independent Curriculum, lack of knowledge of exciting learning methods and media, lack of supporting facilities, etc.

3.4   Independent Curriculum in Main Activities

In the main activities of the teaching and learning process, three aspects were assessed, including the teacher's ability to build a pleasant learning atmosphere, understand the material's content, and use appropriate methods in teaching.
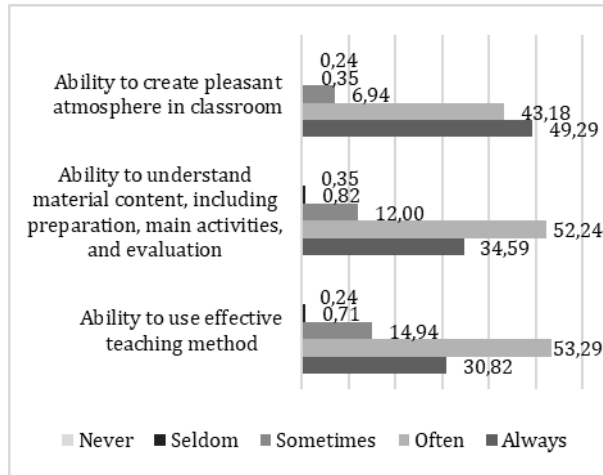
Fig. 3. Main Activities

Figure 3 showed that most teachers could 'always' build a pleasant learning atmosphere (49.29%). This group stated that the main stage in creating a fun classroom atmosphere was exciting ice-breaking to make concentration. The teacher must spend early learning activities with enjoyable activities. If the child was motivated to learn, the teacher would carry out varied learning according to the ongoing subject. Approximately 43.18% of respondents said they often did fun class activities. This group stated that occasionally they still used book/LKS-based learning. This group also admitted that they sorted out which teaching materials or materials could be made fun of. The remaining 6.94% admitted that they seldom made class fun, 0.35% said it seldom, and 0.24% answered never. It turned out that the teacher's effort to build a fun class was also related to the condition of the students. The teacher's efforts would be successful and maximal if students are well-motivated. Students perceive the classroom atmosphere a teacher creates as an essential factor influencing their emotions [40].

Figure 3 also stated that most teachers (52.24%) 'often' understood the content of the material to be taught. Approximately 34.59% said they 'always' understood the material's content to be prepared. This involved their efforts before going to class. The teacher would design material concepts before teaching time and design material using media in an exciting way that arouses student learning enthusiasm. Various digital platforms also assisted in preparing the material. Unfortunately, approximately 12% of teachers answered that they 'sometimes' understood the content of the material to be taught. They admitted that they have limitations in concocting various materials from various sources into comprehensive teaching materials for students. The remaining 0.82% of teachers answered 'seldom,' and 0.35% answered 'never.'

In using teaching methods, most teachers (53.29%) answered that teachers 'often' use appropriate strategies in teaching. However, it was undeniable that they also combined with conventional methods. This they did because of time constraints in designing an attractive approach. In addition, the administrative demands of teachers also

make up for their remaining time. They answered that they sometimes repeated many times the method of teaching. Approximately 14.94% responded that they sometimes use the proper way of teaching. The remaining 0.71% answered seldom, and 0.24% answered 'never.' The relationship between what teachers do in the classroom (process) and how well students learn in the school (product) is interconnected [41].

3.5   Independent Curriculum in Evaluation Process

Continuing at the evaluation stage, the researcher divided the research into five aspects, namely the creation of an assessment rubric, assessment feedback, assessment of the teaching and learning process, the use of various evaluation methods, and the design of a comprehensive and simultaneous evaluation.
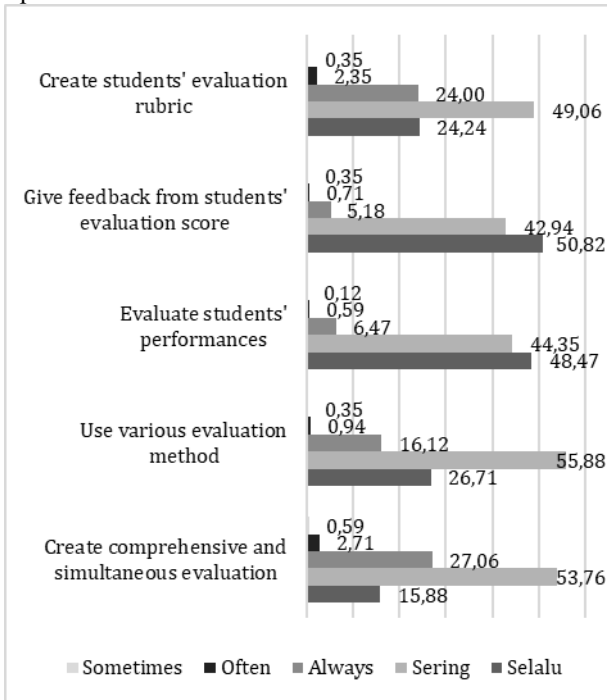

Fig. 4. Teaching Learning Evaluation

Figure 4 explained that most teachers (49.06%) often used the learning evaluation rubric. So far, assessments tend to be carried out only to measure student learning outcomes. Thus, the assessment was positioned as an activity separate from the learning process. Assessment should be carried out through three approaches, namely evaluation of learning, assessment for learning, and assessment as learning so that the teacher's ability to design assessments becomes part of the learning activities. Approximately 24.24% of teachers answered that they always make a different and comprehensive rubric to evaluate the teaching and learning process. The rest, about 24.00%, answered 'sometimes,' 2.35% of teachers answered 'seldom,' and 0.35%

answered 'never.' This was related to the limitations in designing the learning evaluation process. As a result, assessments were only based on learning outcomes. Typically children were tested on monthly tests and periodic exams, which were content-based. The scores on these tests and exams are critical in promoting the child to the next class [42].

Approximately 50.82% of teachers provided feedback from the evaluation results. This is very important because feedback can provide information about learning progress and students' level of understanding. This can be obtained from the effects of tests, assignments, and projects that students work on. Students will learn from mistakes in previous learning based on feedback from the teacher. Approximately 44.35% of teachers often provide feedback to students on tests and evaluations of learning that have been carried out. In this case, they only provided feedback on assessments in the test/cognitive domain by discussing test results with students. For other aspects of evaluation, they occasionally did not provide feedback. The remaining 5.18% admitted that they sometimes gave feedback. The remaining 0.71% answered 'seldom,' and 0.35% said they 'never' gave feedback. This was also related to the infrequency of teachers giving evaluations. The evaluation only followed the assessment of the books and worksheets used.

Figure 5 also showed that 48.47% of teachers did evaluations based on their learning outcomes, while 44.35% of respondents answered often. The remaining 16.15% of respondents answered sometimes, 0.59 answered seldom, and 0.12 responded that they never gave an evaluation related to their learning outcomes. The assessment referred to at this point was an evaluation made independently by the teacher, not an evaluation of the final test determined by the government/school.

Using various evaluation methods was also essential in seeing the success of the teaching and learning process as a whole and complete. Approximately 26.71% of respondents answered that they made various forms of evaluation of the learning process. In addition to the type of evaluation, the state also varied. Approximately 55.88% of respondents answered that they often use various evaluation methods. 16.12% of respondents answered that they seldom use different evaluation methods. This group said that not all parts of the learning process material must be evaluated. The remaining 0.94% answered seldom, and 0.35% answered never. This group stated that the assessment was carried out at the end of the semester.

Learning evaluation should also be carried out simultaneously. Approximately 15.88% of respondents answered that they always carry out simultaneous and comprehensive assessments. Concurrent means that the evaluation is well-planned and systemized. Assignments in the learning process are not done suddenly but are included in the planning. Comprehensive evaluation means that the evaluation stage covers various aspects that support the teaching and learning process. 53.76% of respondents answered that they often complete simultaneous and comprehensive assessments. Unfortunately, there are still teachers who have not carried out an integrated assessment. Approximately 27.06% of respondents said that sometimes, 2.71% answered seldom, and 0.59% said never. Once again, they emphasized that the evaluation was carried out at the end of the semester.

3.6   Implementing Creative Learning as the Characteristics of Independent Curriculum

In the learning process, one of the characteristics of the independent learning curriculum implementation was exciting activities and creative learning. Project-based learning was an option for realizing an Independent Curriculum in the classroom. In relation to engaging learning, researchers looked at four main aspects, namely the teacher's ability to integrate learning in the classroom and outside the classroom, giving freedom to students to learn independently, the teacher's ability to sort basic competence to be used as project-based learning, and the teacher's ability in integrating various learning activities in the classroom.
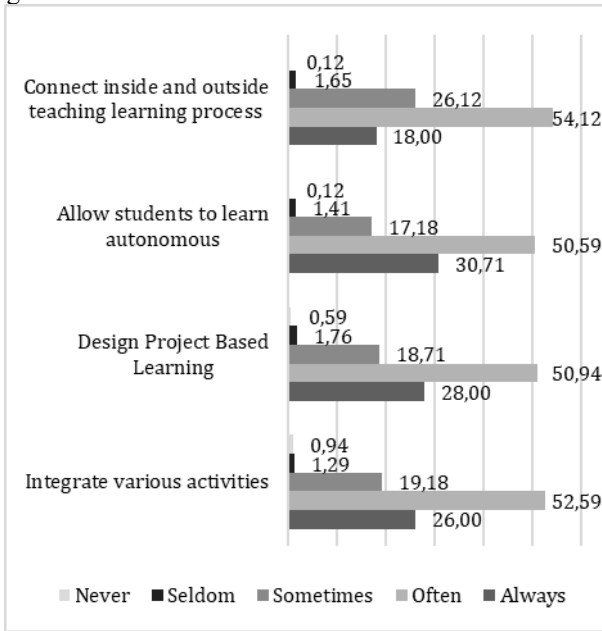

Fig. 5. Independent Curriculum Implementation in Classroom

Approximately 18.00% of respondents claimed that they could integrate learning in the classroom with learning outside the classroom. Now teachers were increasingly required to provide innovative and meaningful learning methods for students so that they did not experience boredom in learning. Learning outside the school was not always physically in the field but it was a learning method by connecting knowledge learned in class with knowledge/applications outside the classroom. Approximately 54.12% answered that they often do mix learning like this. The remaining 26.12% answered sometimes, 1.65% said seldom, and 0.12% answered never. The group that responded seldom and never emphasized that learning could still be carried out optimally in the classroom by fulfilling material from available sources.

In addition to these abilities, teachers were also required to encourage students to autonomous learning. Approximately 30.71% of respondents answered that they al-

ways support students studying independently. Of course, class level played a significant role in this. In addition, many other factors, such as student motivation, the availability of adequate learning resources, student backgrounds, and school conditions, are also greatly influenced. Approximately 50.59% of respondents often supported children learning independently. This group emphasized and sorted out which parts the child could learn independently and which ones could not. This group knew that children must be freed to ask questions, think, and find learning solutions. That way, critical thinking skills would also be trained. The remaining 17.18% of teachers answered sometimes, 1.41% answered seldom, and 0.12% answered never.

In its implementation, not all learning materials were used for project-based learning. Teachers had been able to sort out which basic competence would lead to project-based learning and which would not. Approximately 28.00% of teachers could always sort out basic competence for project-based learning. The majority of teachers (50.94%) answered often. The remaining 18.71% answered sometimes, 1.29% said seldom, and 0.59% said never.

The teacher must also be able to integrate various learning activities in the classroom. This was important to prevent student boredom in learning. Approximately 26.00% answered that they always combined various activities in class. Approximately 52.59% of respondents often incorporated multiple activities in class. For example, they implemented ice-breaking with an exciting method, learned to use the pair discussion model, and continued with portfolio assessment. The remaining 19.18% of respondents sometimes answered, 1.29% of respondents said seldom, and 0.94% of respondents said never.

3.7   Developing Students' Critical Thinking

One of the characteristics of the independent learning curriculum implementation was the development of critical thinking for students. In this case, the researcher focused on the teacher's ability to encourage students to solve problems and the teacher's ability to stimulate students to ask questions.
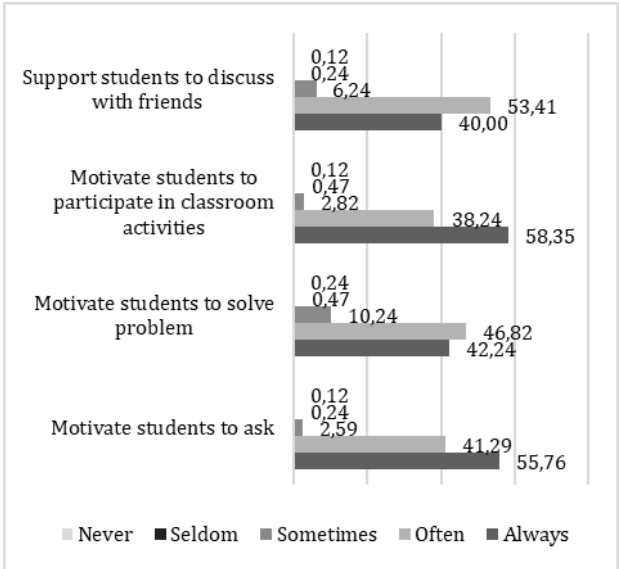
Fig. 6. Teachers' Effort in Building Students' Critical Thinking

Figure 6 showed that approximately 40% of respondents always encourage students to discuss with friends. Discussion activities with friends would familiarize students with mutual respect and appreciation. In addition, discussions could also develop thinking power, knowledge, and experience and train critical thinking. The discussion also developed communication and speaking skills. Approximately 53.41% of teachers often encouraged children to discuss. This group divided the class into several small groups. Unfortunately, about 6.24% of respondents answered 'sometimes,' 0.24% answered 'seldom,' and 0.12% answered 'never.'

Teachers should encourage students to be able to be actively involved in the learning process. Approximately 58.35% of respondents encouraged students, and 38.24% answered often. Students were allowed to ask questions and be active in the learning process, such as answering quizzes, leading discussions, expressing opinions, etc. Unfortunately, approximately 2.82% of teachers responded sometimes, the remaining 0.47% answered seldom, and 0.12% answered never.

Approximately 42.24% of teachers always encouraged students to solve problems independently. At the same time, the majority of respondents (46.82%) answered often. This group emphasized that students might be independent in solving problems, both problems related to the learning and teaching process in the classroom and issues in schooling. To develop this ability, teachers often instructed students to solve problems. The remaining 10.24% of teachers answered sometimes, 0.47% said seldom, and 0.24% answered never.

The teacher could also be able to stimulate students to ask questions. Approximately 55.76% answered that it constantly enabled students to ask questions. 41.29% of respondents answered often. This group believed that encouraging students to ask questions will form students' curiosity in learning. It also built students' confidence

and communication skills. The remaining 2.59% of respondents answered sometimes, 0.24% said seldom, and 0.12% said never.

3.8   Efforts to Maximize Independent Curriculum Implementation

Teachers had to be able to collaborate with various parties in implementing the independent learning curriculum. In this case, researchers saw four essential points: school support, a positive attitude to work with teachers, actively participating in activities about an Independent Curriculum, and a solid team implementing the curriculum.
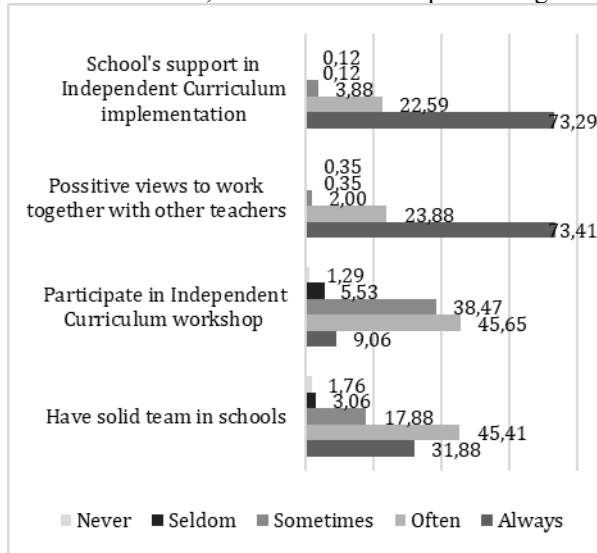

Fig. 7. Teacher's Collaboration

Figure 7 showed that the majority of respondents (73.29%) answered that the school where they teach supported the implementation of the independent learning curriculum. This commitment to improving the quality of learning supported to increasing student quality. The remaining 22.59% schools 'often' supported the implementation of the Independent Curriculum. Unfortunately, approximately 3.88% of schools 'sometimes' supported the implementation of an Independent Curriculum. This was because there was still confusion with the K13 curriculum. In addition, the Independent Curriculum had not been implemented at all grade levels. Approximately 0.12% of schools 'seldom' implemented it, and 0.12% had never implemented it.

Collaboration was also a necessity in the implementation of the Independent Curriculum. One teacher must be able to work with other teachers to form good learning. Approximately 73.41% of teachers worked together with other teachers. This group answered that the form of cooperation revolved around classroom learning and project-based learning. One project could include various integrated competencies. Approximately 23.88% of teachers answered 'often'. The remaining 3.88% of respondents responded sometimes, 0.12% said seldom, and 0.12% said never.

Teacher awareness in self-upgrading in increasing knowledge about the Independent Curriculum was also essential. The curriculum changed, and so did the policies and content. Therefore, teachers must be adaptive to change and able to develop themselves. Teachers must be up to date on the dynamics of education. Approximately 9.06% of respondents stated that they always participate in self-development efforts, such as workshops, training, seminars, etc., regarding the Independent Curriculum. Approximately 45.65% of respondents answered often. 38.47% of respondents answered sometimes. This was based on several factors, such as lack of information about the activity in question, internet signal network (if the action was carried out online), and limited time. Unfortunately, approximately 5.53% of respondents answered seldom, and 1.29% answered never. Of course, if the teacher was not active in self-development, the implementation of the Independent Curriculum would be constrained.

A solid team was also essential in implementing the Independent Curriculum. Approximately 31.88% of respondents had a solid team as team teaching and partners in discussing the Independent Curriculum. Approximately 45.41% of respondents answered that they often have a team. The team in question could be from the same school or different schools with the same knowledge group. The remaining 17.88% of respondents answered sometimes, 3.06% of respondents said seldom, and 1.76% of respondents said never.

3.9   Facilities

The provision of facilities was also an important thing to be fulfilled by schools. In addition, ease of access to obtaining teaching materials was also essential. Figure 8 stated that 25.41% of respondents 'always' found teaching materials easy. Most of these were obtained through the internet. Approximately 50.94% answered 'often'. The remaining 20.71% of respondents answered 'sometimes,' 2.00% of respondents said 'seldom', and 0.94% responded that it was difficult to get teaching materials even though the era was very abundant for surfing in cyberspace.

In addition to the adequacy of teaching materials/materials, approximately 26.35% of respondents always had access to good technology. The pandemic had made many homes connected to WIFI. This allowed teachers to work and learn from anywhere. Approximately 44.35% answered that they often got good technology. In contrast to those who responded always, this group stressed that constraints such as power outages and weather greatly affected the implementation of the Independent Curriculum. Unfortunately, there were still many teachers who still have problems in the field of technology.
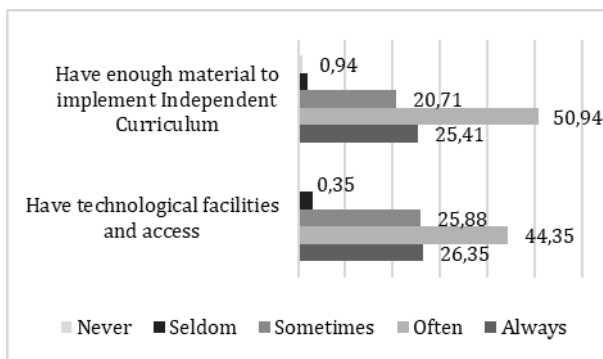
Fig. 8. Classroom Facilities

Before designing the implementation of the Independent Curriculum in the classroom and determining what methods and media to use, the teacher must know the characteristics of the students. It was essential to map out the learning styles and resources children need. In this case, the researcher divided it into two significant aspects: the teacher's ability to understand student character and see student difficulties.
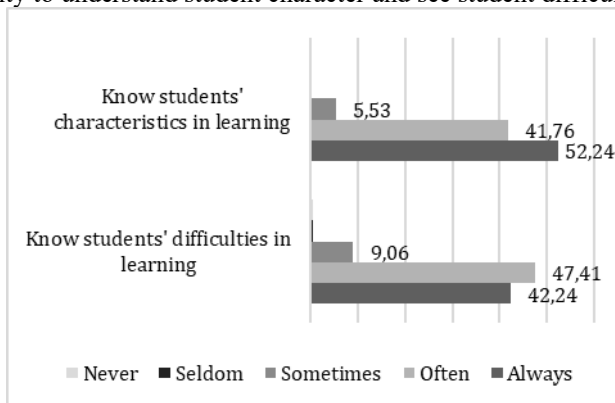

Fig. 9. Teachers' Way to Motivate Learners

Figure 9 showed that 52.24% always understood student characters, and 41.76% often answer. This was done by observing students in class activities. In addition, the method used could be a discussion with students in the class. Unfortunately, approximately 5.53% of respondents sometimes understood the character of students. This learning model referred to teacher-centered, where everything was centered on the teacher. About 5.53% of respondents admitted that they sometimes explored an understanding of student character. The remaining 0.71% of respondents answered seldom, and 0.12% answered never.

Teachers were also expected to be able to map the difficulties experienced by students. Approximately 42.24% of teachers answered that they always see and solve students' difficulties. Approximately 47.41% of respondents answered often. In see-

ing students' problems, the teacher made observations and direct interviews with students. The remaining 0.71% answered seldom, and 0.56% answered never.

3.10   Obstacles to Implementing Independent Curriculum

There were six obstacles found in implementing Independent Curriculum, they are: 1) There was confusion between Independent Curriculum Implementation and K13 since some schools still used the K13 curriculum; 2) The curriculum changed too often, and too much administration, such as unclear concrete actions, e-reports, and many more, made the teacher less optimal in teaching and learning classroom activities; 3) There has not yet been a conducive climate for the implementation of an Independent Curriculum Implementation because there were still two curricula being implemented, namely K13 and the Independent Curriculum; 4) The need for activeness to find out more about the Independent Curriculum, one of which is with workshops and seminars; 5) Students were not yet fully independent in learning because they still need guidance and teacher assistance to be more optimal; 6) Teachers had limited sources.

4   Discussion

The discussion of this research findings revolves around several key aspects of implementing the Independent Curriculum.

Firstly, the study highlights the importance of teachers' ability to understand the content of the material to be taught and their proficiency in using effective teaching methods. While most teachers demonstrated a good understanding of the material content and used appropriate teaching strategies, there were still some limitations and challenges. Some teachers faced difficulties in designing comprehensive teaching materials, which affected their ability to provide engaging and diverse learning experiences for students. Time constraints and administrative demands were also identified as factors that hindered teachers from fully utilizing innovative teaching methods.

Another important aspect discussed in the research is the evaluation process. The study emphasizes the need for teachers to create assessment rubrics, provide feedback, and evaluate the teaching and learning process comprehensively. However, it was found that there were limitations in implementing these evaluation practices. Some teachers struggled with determining instructional goals and content due to the complexity of evaluation, especially when implementing project-based learning. Additionally, not all teachers fully understood the various assessment rubrics beyond cognitive domains, such as teamwork, critical thinking, and communication skills.

The research also highlights the significance of having a solid team in schools, participating in workshops, and receiving support from the school in successfully implementing the Independent Curriculum. Collaboration among teachers from the same or different schools with the same knowledge group was found to be beneficial. Furthermore, the provision of facilities and access to teaching materials and technology were identified as crucial factors for effective implementation. While some teachers

reported easy access to teaching materials and good technology, there were still challenges faced by a significant number of teachers in these areas.

Overall, the discussion of the research findings emphasizes the need for continuous professional development, support from the school, and adequate resources to overcome the limitations and challenges in implementing the Independent Curriculum. It also highlights the importance of designing comprehensive teaching materials, utilizing effective teaching methods, and implementing a robust evaluation process to enhance student learning outcomes.

5   Conclusion

The conclusion of this paper is that while most teachers demonstrate a good understanding of the material content and use effective teaching methods, there are still some limitations and challenges in implementing the Independent Curriculum. These limitations include difficulties in designing comprehensive teaching materials, time constraints, and the infrequency of providing feedback and evaluations. Additionally, the study highlights the importance of having a solid team in schools, participating in workshops, and receiving support from the school in order to successfully implement the Independent Curriculum. Furthermore, the provision of facilities and access to teaching materials and technology are crucial factors for effective implementation.

6   Authors' Contributions

Mukodi Mukodi: Analysis of research data
Chusna Apriyanti: Analysis of research data
Sugiyono Sugiyono: Data collection
M. Fashihullisan: Data collection
Ridha Kurniasih Astuti: data collection

References

1. M. Vasileva, E. Alisic, A. De Young, M. Vasileva, and E. Alisic, "COVID-19 unmasked : preschool children ' s negative thoughts and worries during the COVID-19 pandemic in Australia COVID-19 unmasked : preschool children ' s negative thoughts and worries during the COVID-19 pandemic in Australia," *Eur. J. Psychotraumatol.*, vol. 12, no. 1, 2021, doi: 10.1080/20008198.2021.1924442.
2. J. Bond *et al.*, "Distance education students ' mental health , connectedness and academic performance during COVID-19 : A mixed-methods study," *Distance Educ.*, vol. 43, no. 1, pp. 97–118, 2022, doi: 10.1080/01587919.2022.2029352.
3. L. Kivelä, J. Mouthaan, W. Van Der Does, and N. Antypa, "Student mental health during the COVID-19 pandemic : Are international students more affected ?," *J. Am. Coll. Heal.*, vol. 0, no. 0, pp. 1–9, 2022, doi: 10.1080/07448481.2022.2037616.
4. X. Yang, Y. Xu, R. Tan, and X. Zhou, "Event centrality and post-traumatic stress symptoms among college students during the COVID-19 pandemic : the roles of attention

to negative information , catastrophizing , and rumination," *Eur. J. Psychotraumatol.*, 2022, doi: 10.1080/20008198.2022.2078563.

5. M. Aristeidou, S. Cross, and S. Cross, "Disrupted distance learning : the impact of Covid-19 on study habits of distance learning university students Disrupted distance learning : the impact of Covid-19 on study habits of distance learning university students," *Open Learn. J. Open, Distance e-Learning*, vol. 36, no. 3, pp. 263–282, 2021, doi: 10.1080/02680513.2021.1973400.

6. L. Hui and J. Donkers, "Why students do (or do not) choose retrieval practice : Their perceptions of mental effort during task performance matter," *Wiley*, no. January, pp. 433–444, 2022, doi: 10.1002/acp.3933.

7. K. Kochu, T. Beena, and M. Sony, "Student workload assessment for online learning : An empirical analysis during Covid-19 Student workload assessment for online learning : An empirical analysis during Covid-19," *Cogent Eng.*, 2022, doi: 10.1080/23311916.2021.2010509.

8. F. Sohil and M. U. Sohail, "Measuring the impact of COVID-19 on distance learning for educational sustainability Measuring the impact of COVID-19 on distance learning for educational sustainability," *Cogent Educ.*, vol. 9, no. 1, 2022, doi: 10.1080/2331186X.2022.2034248.

9. L. Li, "Students ' Isolation Challenges in Blended EFL Learning During COVID-19 : How Can Social Presence and Interaction Help Develop Sense of Students ' Isolation Challenges in Blended EFL Learning During COVID-19 : How Can Social Presence and Interaction Help," 2022, doi: 10.2147/PRBM.S388317.

10. R. Raaper, C. Brown, A. Llewellyn, C. Brown, and A. Llewellyn, "Student support as social network : exploring non- traditional student experiences of academic and wellbeing support during the Covid-19 pandemic," 2022, doi: 10.1080/00131911.2021.1965960.

11. A. Innab and N. Alqahtani, "The mediating role of E- learning motivation on the relationship between technology access and satisfaction with E- learning," no. February, pp. 1–8, 2022, doi: 10.1002/nop2.1513.

12. J. Howcroft and K. Mercer, "' What if my Wi-Fi crashes during an exam ?' First- year engineering student perceptions of online learning during the COVID-19 pandemic pandemic," 2022, doi: 10.1080/03043797.2022.2031115.

13. P. Bajaj, A. Khan, M. I. Tabash, and S. Anagreh, "Teachers ' intention to continue the use of online teaching tools post Covid-19 Teachers ' intention to continue the use of online teaching tools post Covid-19," *Cogent Educ.*, vol. 8, no. 1, 2021, doi: 10.1080/2331186X.2021.2002130.

14. N. Ndzinisa and R. Dlamini, "Responsiveness vs . accessibility : pandemic-driven shift to remote teaching and online learning," *High. Educ. Res. Dev.*, vol. 0, no. 0, pp. 1–16, 2022, doi: 10.1080/07294360.2021.2019199.

15. S. Harmey and G. Moss, "Learning disruption or learning loss : using evidence from unplanned closures to inform returning to school after COVID-19," *Educ. Rev.*, vol. 00, no. 00, pp. 1–20, 2021, doi: 10.1080/00131911.2021.1966389.

16. T. M. Schuurman *et al.*, "Learning Loss in Vulnerable Student Populations After the First Covid-19 School Closure in the Netherlands Learning Loss in Vulnerable Student Populations After the First," *Scand. J. Educ. Res.*, vol. 0, no. 0, pp. 1–18, 2021, doi: 10.1080/00313831.2021.2006307.

17. P. Engzell, A. Frey, and M. D. Verhagen, "Learning loss due to school closures during the COVID-19 pandemic," 2021, doi: 10.1073/pnas.2022376118/-/DCSupplemental.y.

18. J. E. Maldonado and K. De Witte, "The effect of school closures on standardised student test outcomes," *Br Educ Res J, 48 49-94*, 2022, doi: https://doi.org/10.1002/berj.3754.

19. C. Booth, A. Villadsen, A. Goodman, and E. Fitzsimons, "PARENTAL PERCEPTIONS OF LEARNING LOSS DURING COVID-19 SCHOOL CLOSURES IN 2020," *Br. J. Educ. Stud.*, vol. 69, no. 6, pp. 657–674, 2021, doi: 10.1080/00071005.2021.1984390.

20. N. Pensiero, T. Kelly, and C. Bokhove, "Learning inequalities during the Covid-19 pandemic: how families cope with home-schooling," 2020.

21. S. González and X. Bonal, "19 school closures and cumulative disadvantage : Assessing the learning gap in formal , informal and non- formal education," *Wiley*, no. July, pp. 607–622, 2021, doi: 10.1111/ejed.12476.

22. J. V. Klosky, Julie A. Gazmararian, O. Casimir, and S. C. Blake, "Effects of Remote Education During the COVID-19 Pandemic on Young Children ' s Learning and Academic Behavior in Georgia :," *J Sch. Heal. 92 656-664*, vol. 92, no. 7, 2022, doi: 10.1111/josh.13185.

23. S. Chaabane, S. Doraiswamy, and K. Chaabna, "The Impact of COVID-19 School Closure on Child and Adolescent Health : A Rapid Systematic Review," 2021.

24. A. Andrew *et al.*, "Inequalities in Children ' s Experiences of Home Learning during the COVID-19 Lockdown in England *," *Fisc. Stud.*, vol. 41, no. 3, pp. 653–683, 2020, doi: 10.1111/1475-5890.12240.

25. M. Sa, I. Nurhayati, E. Endri, D. Supriadi, and Y. Afrianto, "The Implementation of Independent Learning Independent Campus : The New Paradigm of Education in Indonesia," no. February, 2022, doi: 10.20944/preprints202202.0302.v1.

26. K. C. Chen, "Building An Experiential Learning Model For A Project Management Course," vol. 2, no. 4, pp. 87–92, 2009.

27. A. Y. Kolb and D. A. Kolb, "Learning Styles and Learning Spaces : Enhancing Experiential Learning in Higher Education," vol. 4, no. 2, pp. 193–212, 2015.

28. J. Bransford, "How People Learn: Brain, Mind, Experience, and School: Expanded Edition (2000)," Jan. 2000.

29. R. Percy, "The contribution of transformative learning theory to the practice of participatory research and extension: Theoretical reflections," *Agric. Human Values*, vol. 22, no. 2, pp. 127–136, 2005, doi: 10.1007/s10460-004-8273-1.

30. E. W. Taylor, "Transformative Learning Theory," no. 119, pp. 5–15, 2008, doi: 10.1002/ace.

31. S. Mausethagen and C. E. Mølstad, "Shifts in curriculum control: contesting ideas of teacher autonomy," *Nord. J. Stud. Educ. Policy*, vol. 2015, no. 2, p. 28520, Jan. 2015, doi: 10.3402/nstep.v1.28520.

32. J. Haapaniemi, S. Venäläinen, A. Malin, P. Palojoki, and A. Malin, "Teacher autonomy and collaboration as part of integrative teaching – Reflections on the curriculum approach in Finland," *J. Curric. Stud.*, vol. 53, no. 4, pp. 546–562, 2021, doi: 10.1080/00220272.2020.1759145.

33. L. C. Pearson, B. W. Hall, L. C. Pearson, and B. W. Hall, "Initial Construct Validation of the Teaching Autonomy Scale," no. March 2015, pp. 37–41, 2010, doi: 10.1080/00220671.1993.9941155.

34. M. Erss, V. Kalmus, and T. H. Autio, "' Walking a fine line ': teachers ' perception of curricular autonomy in Estonia , Finland and Germany," vol. 0272, no. June, 2016, doi: 10.1080/00220272.2016.1167960.

35. C. Chen, "Revisiting the effects of project-based learning on students' academic achievement: A meta-analysis investigating moderators," *Educ. Res. Rev.*, 2018, doi: 10.1016/j.edurev.2018.11.001.

36. D. Kokotsaki, V. Menzies, and A. Wiggins, "Improving Schools Project-based learning : A review of the literature," pp. 1–11, 2016, doi: 10.1177/1365480216659733.

37. C. Suryana, I. Nurwahidah, and A. H. Hernawan, "Komparasi Implementasi Kurikulum 2013 dan Kurikulum Merdeka di Sekolah Dasar," *J. Basicedu*, vol. 6, no. 4, pp. 5877–5889, 2022.
38. E. Biech, "Bringing the Real World into the Classroom," *Wiley*, pp. 375–380, 2013, doi: https://doi.org/10.1002/9781118918838.ch58.
39. S. J. Farenga and B. A. Joyce, "What Children Bring to the Classroom : Learning Science From Experience," *Sch. Sci. Math.*, vol. 95, no. 5, 2010, doi: https://doi.org/10.1111/j.1949-8594.1997.tb17270.x.
40. S. Hartikainen, L. Pylväs, P. Nokelainen, S. Hartikainen, and L. Pylväs, "Engineering students ' perceptions of teaching : teacher-created atmosphere and teaching procedures as triggers of student emotions emotions," 2022, doi: 10.1080/03043797.2022.2034750.
41. P. Hlebowitsh, "When best practices aren ' t : A Schwabian perspective on teaching When best practices aren ' t : A Schwabian perspective on teaching," no. October 2014, pp. 37–41, 2012, doi: 10.1080/00220272.2011.637184.
42. S. Jambunathan, "Journal of Early Childhood Teacher Beliefs about the Importance of Use of Developmentally Appropriate Practices Among Early Childhood Teachers in India," *J. Early Child. Educ.*, no. December 2014, pp. 37–41, 2007, doi: 10.1080/10901020500369878.