

A Study on the School Culture and Teaching Methods that Elementary School Teachers Consider Important

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Abstract

There are many predictions of how education will change in the future. In particular, the impact of technological and social change will make schools look different than they are today. Schools are expected to perform various functions in the future, and their forms and functions will differ from those of today. This study is mainly composed of two research contents. The first is about the school culture that teachers consider important in the future school, and the second is about the teaching-learning method suitable for the future. In this study, a survey was conducted on 81 elementary school teachers from February to April 2022. Data collection was conducted online. A total of 73 data were analyzed, excluding data judged to be insincere among respondents. The results are as follow. First, the most important thing for teachers to recognize is to operate a competency-oriented curriculum and set educational goals suitable for the future society. In addition, the most important teaching and learning methods of future schools recognized by teachers were student-student interaction, discussion-centered classes, and student-centered classes. Meanwhile, according to teachers, education using smart devices showed relatively low importance compared to other questions. Since this result is limited to elementary school students, it is necessary to interpret it carefully.

Keywords: future schools, school culture, teaching and learning methods, core competencies, student interactions

1. Introduction

In the future, it is predicted that schools will disappear or change in existence as the use of artificial intelligence tutors becomes full-fledged, and standardized tests will be abolished (Williamson & Eynon, 2020). There is also the prospect of a day when the entire content of the curriculum can be uploaded to the human brain. Predictions about the future are often wrong, but there is no doubt that schools will change. In addition, changes in technology and society will change the knowledge needed by humans, affecting the content and methods of school education (Kim, 2021). Many studies have been published on the direction of education to respond to these social changes (Goyal, 2012). Among them, there are many studies on core competencies that will replace the role of classical knowledge in future school education and improvement of teaching and learning methods.

Competence is the ability to successfully solve complex needs in a given situation by using or mobilizing psychosocial resources that transcend knowledge or skills. In the context of vocational and school education, competency is a concept understood and manifested through performance as the ability to apply knowledge rather than simply understanding it. A competency-based approach emphasizes outcomes that enable students to cope and cope with a variety of situations. What a student can do is more important than what a student knows. The ability to use that knowledge in context is more important than simply knowing it. Success in a role means coping with the ever-changing social environment. Competent people can respond flexibly to changing circumstances and needs. Successful role performance requires not only the acquisition of knowledge and skills, but also positive aspects such as attitudes, values and emotions. Competence, therefore, refers to an individual's ability to select, control, and integrate knowledge, skills and attitudes.

It is important to present the curriculum in a context that reflects the real world to improve student achievement. Schooling provides a context of performance that reflects the real world. The purpose of this study is to investigate the school culture and teaching-learning methods that elementary school teachers consider important in the future

society.

2. Theoretical Background

The DeSeCo project is significant in that it sparked a debate about what knowledge is in education (Rychen & Salgenik, 2000). At the same time, however, it has created confusion and misunderstandings about how to design and operate a competency-based curriculum. More than a decade after many interpretations of the relationship between knowledge and competence, the OECD has republished the OECD 2030 Education Project (OECD, 2018). It proposes education that enables students to recognize and solve problems on their own. If the DeSeCo project focused on deriving core competencies for the future society, Education 2030 aims to go one step further and derive a curriculum, teaching/learning method, and evaluation system for developing core competencies (Park, 2019). In particular, it emphasizes that learning activities should focus on knowledge, ability, and personality. First, strategies for integrated subjects beyond individual subjects must also be passed on. Next, skills correspond to cognitive and metacognitive, social/emotional and physical activity. Finally, attitudes and values correspond to the personality of individuals, local, social and global citizens.

Also, the school culture of the future will be very different from today. Accordingly, a number of studies are predicting the future through scenarios, one of which is an extreme prediction that schools will disappear in the future. In many cases, however, schools are expected to perform many different functions in the future, and it is evident that their appearance and functions will differ from those of today. What is important to develop the overall culture of the school and the abilities of its students? This study tried to find the answer through the perception of teachers.

3. Methodology

3.1 Study Subject

In this study, a survey was conducted on 81 elementary school teachers from February to April 2022. Data collection was conducted online. A total of 73 data were analyzed, excluding data judged to be insincere among respondents. There were 57 female respondents and 16 male respondents. The grades were relatively evenly distributed.

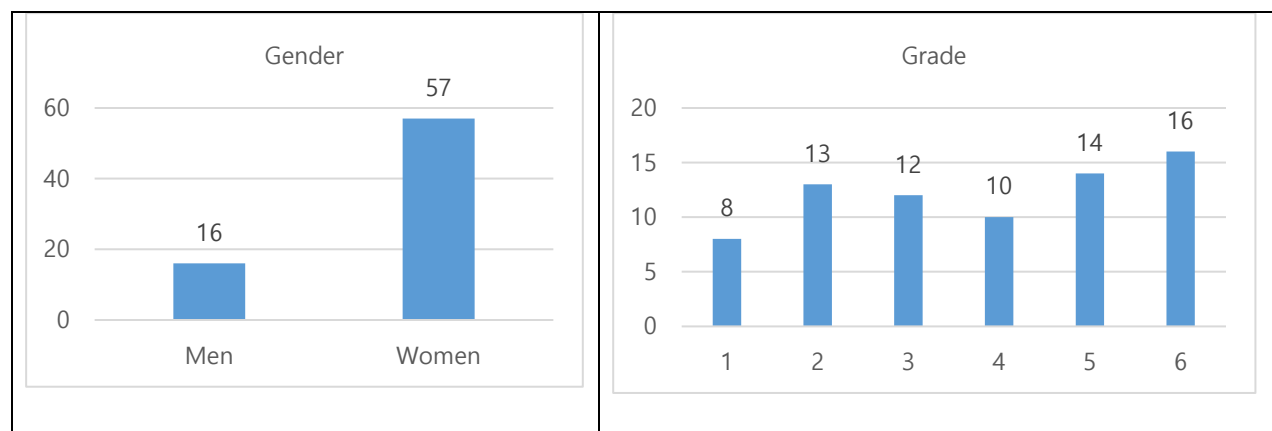


Figure 1. Gender and Grade of Study Subjects

3.2 Questionnaire Content

The research question consists of two main parts. The first is about the overall culture and educational vision of the school as perceived by teachers, and the second is about the teaching-learning method that teachers consider important. All questions were constructed on a 5-point Likert scale.

First, the questions about the overall culture of the school that teachers consider important are as follows.

1. It is necessary to present the vision and goals of a school suitable for the future society.
- 2 Teachers need to restructure the curriculum as needed.
- 3 It is necessary to organize and operate a competency-oriented curriculum.
4. Teachers need to participate voluntarily in the professional learning community.

5. Teachers need to frequently discuss teaching methods and exchange feedback.
6. Active participation of parents is required in school operation.
7. Schools need to work with the community.

Questions about teaching-learning methods that teachers value most include:

1. It is necessary to devote a lot of time to student-centered classes in class.
2. It is necessary to give opportunities to have many discussions with classmates.
3. Students need to search for materials in class using smart devices.
4. Students should be given the opportunity to solve problems on their own.
5. It is necessary to use various evaluation methods (reports, experiments, discussions, essays, etc.).
6. It is necessary to provide many opportunities for self-evaluation of students' learning performance.
7. Students need to actively interact with each other.
8. Students need to utilize the various spaces of the classroom.

4. Results

The result consists of two main parts. The first is about the overall culture and educational vision of the school as perceived by teachers, and the second is about the teaching-learning method that teachers consider important.

4.1 Teacher Awareness of the School's Culture

The overall school culture and educational vision perceived by teachers is the result of answers to seven questions. These are about first, setting educational goals suitable for the future society, second, reforming teachers' curriculum, third, organizing and operating competency-oriented curriculum, fourth, teacher learning community, fifth, teacher exchange, sixth, parental participation, and lastly, local cooperation.

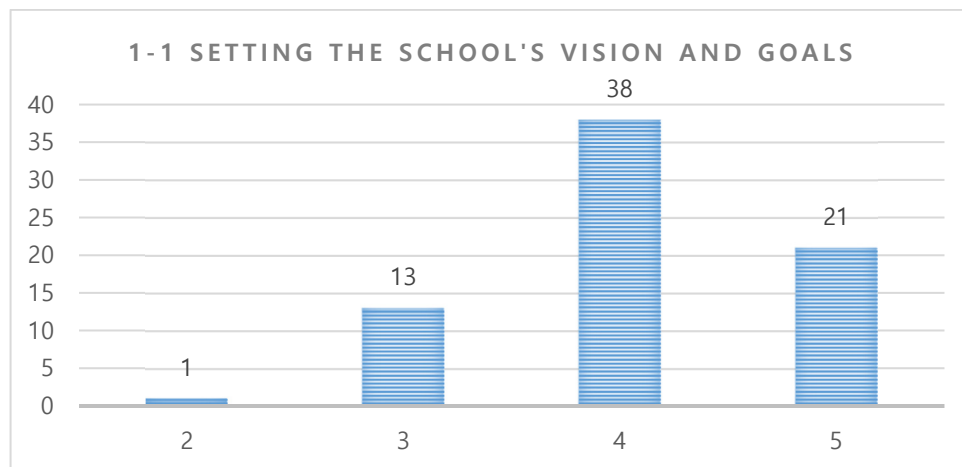


Figure 2. Setting the School's Vision and Goals

First, the answer to the importance of setting educational goals for schools suitable for the future society is as follows. Among the respondents, 38 people answered that it is important to set educational goals suitable for the future school, and 21 people answered that it is very important.

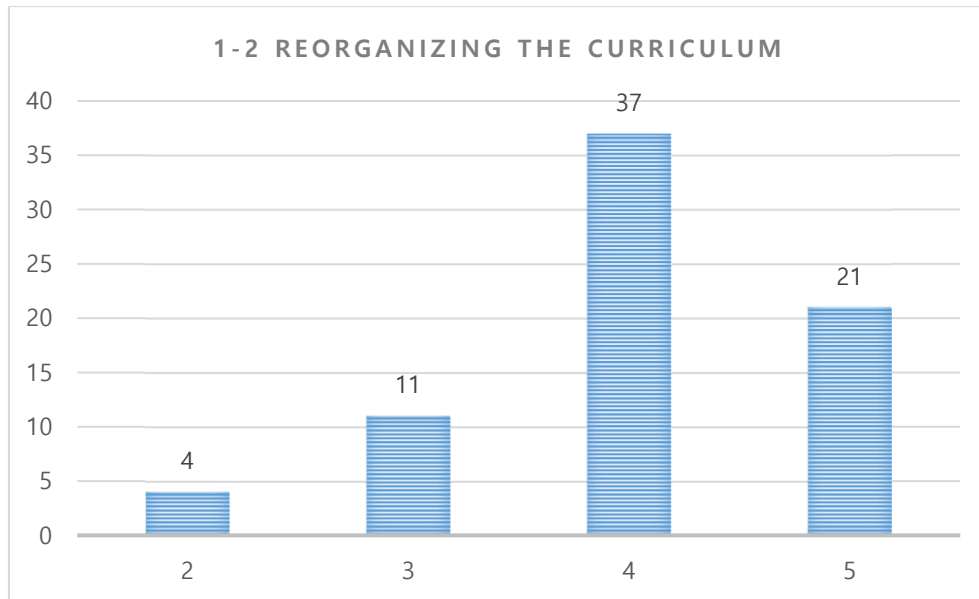


Figure 3. Reorganizing the Curriculum

Second, the importance of reforming the curriculum for teachers is as follows. Of the respondents, 37 said it was important to reorganize the teacher's curriculum suitable for the future school, and 21 said it was very important.

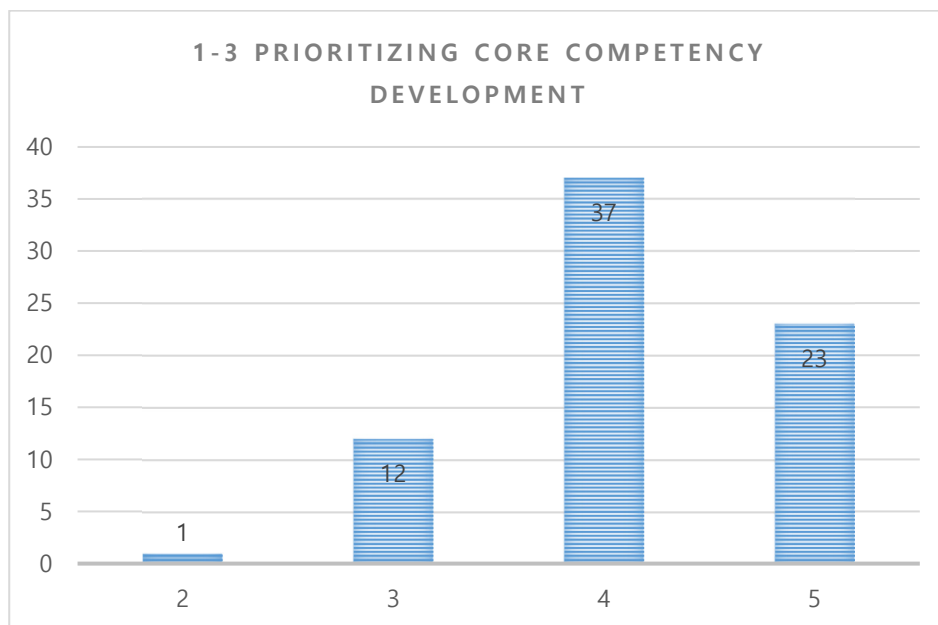


Figure 4. Prioritizing Core Competency Development

Third, the importance of composing and operating a competency-oriented curriculum is as follows. Among the respondents, 37 said that it was important to establish and educate the competencies suitable for the future school, and 23 said that it is very important.

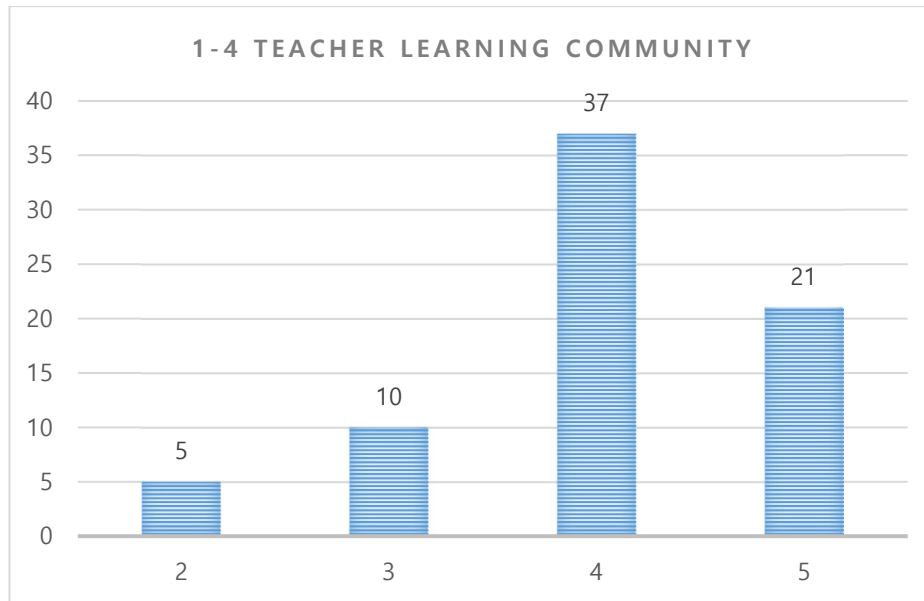


Figure 5. Teacher Learning Community

Fourth, the importance of the teacher in the learning community was as follows. Of the respondents, 37 said it was important to reorganize the teacher's curriculum suitable for the future school, and 21 said it was very important. On the other hand, about the teacher-learning community, there were not only positive responses, with five respondents saying that it was not important.

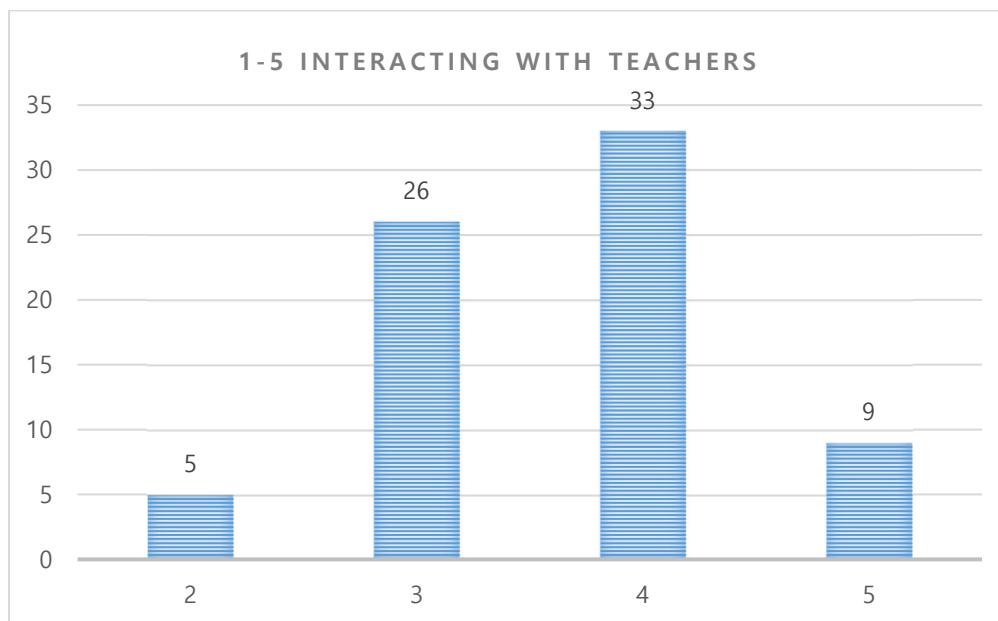


Figure 6. Interacting with Teachers

Fifth, the importance of interaction between teachers was as follows. Among the respondents, 33 said that the interaction between teachers was important, and 9 said that it was very important. On the other hand, there were 5 teachers who thought differently.

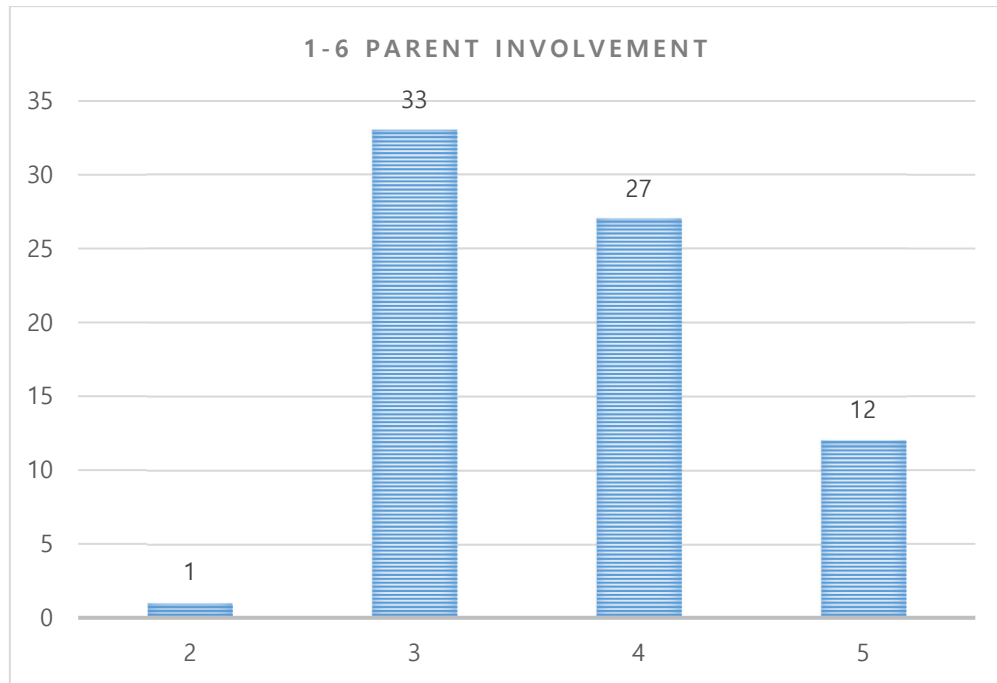


Figure 7. Parent Involvement

Sixth, the importance of parental participation was as follows. Among the respondents, 27 said that parental participation was important for the future school, and 12 said that it was very important. On the other hand, the most common response was neutral, and 33 teachers answered that parental intervention was not essential.

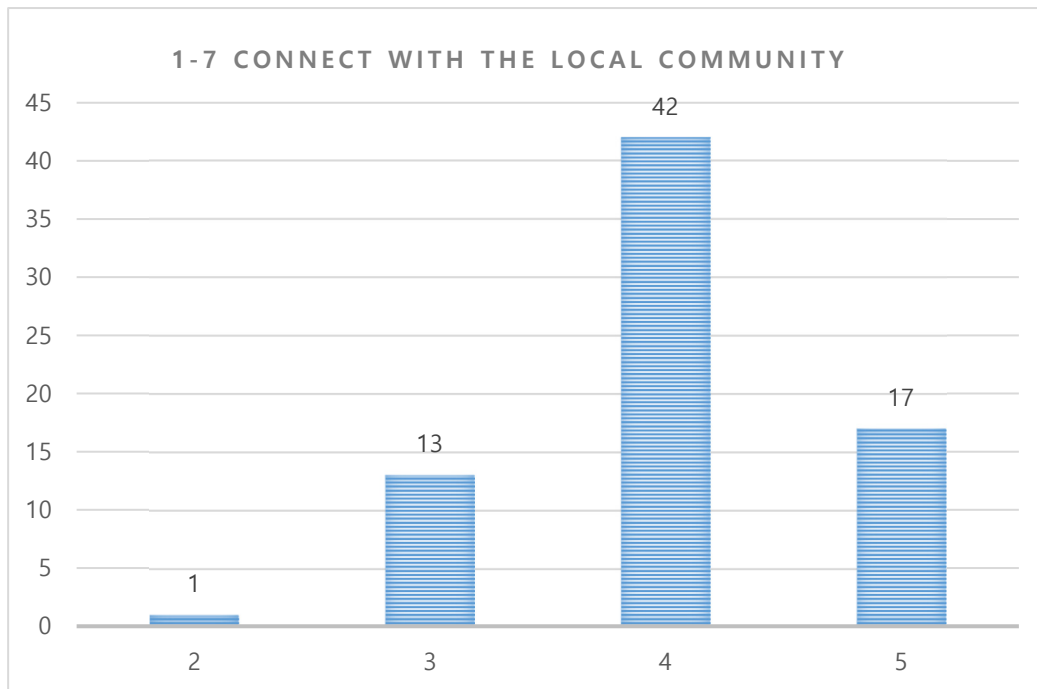


Figure 8. Connect with the Local Community

Lastly, regarding the importance of connection and cooperation with the local community, 42 of the respondents answered that it is important for Future Schools to cooperate with the local community, and 17 said that it is very

important.

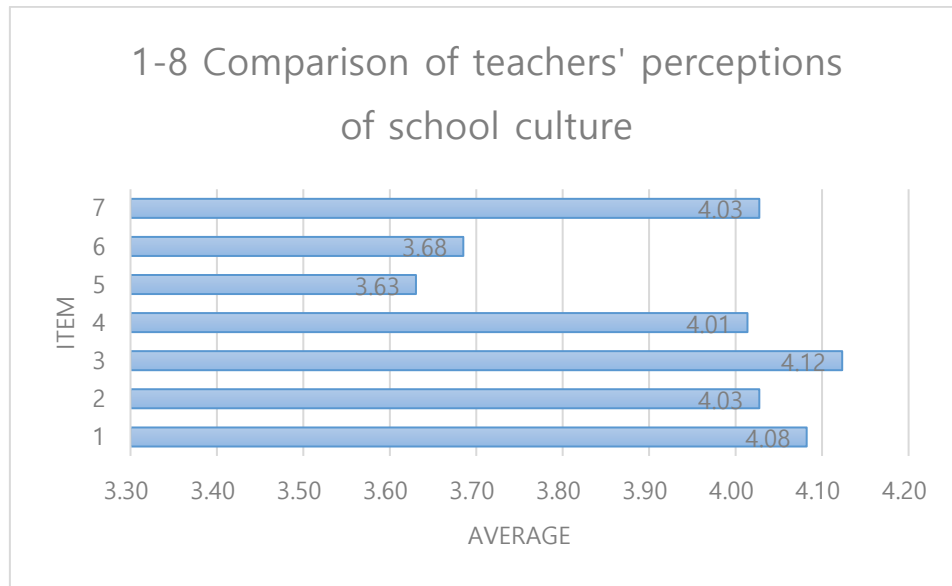


Figure 9. Comparison of Teachers' Perceptions of School Culture

The result of combining the above 7 items is as follows. First, among the overall school culture and educational vision perceived by teachers, the most important thing for teachers is to operate a competency-based curriculum suitable for the future society and set educational goals suitable for the future society. On the other hand, teachers considered both the teacher-learning community and the interaction between teachers to be important. Nevertheless, its importance was relatively low compared to other items.

4.2 Teacher Awareness of the School's Culture

The following are the results of answers to the importance of eight questions related to teaching-learning in future schools perceived by teachers. These are, first, student-led classes, second, discussion activities, third, use of smart devices, fourth, problem-solving learning opportunities, fifth, various assessment methods, sixth, self-assessment opportunities, seventh, student interaction, eighth, classroom multi-purpose space.

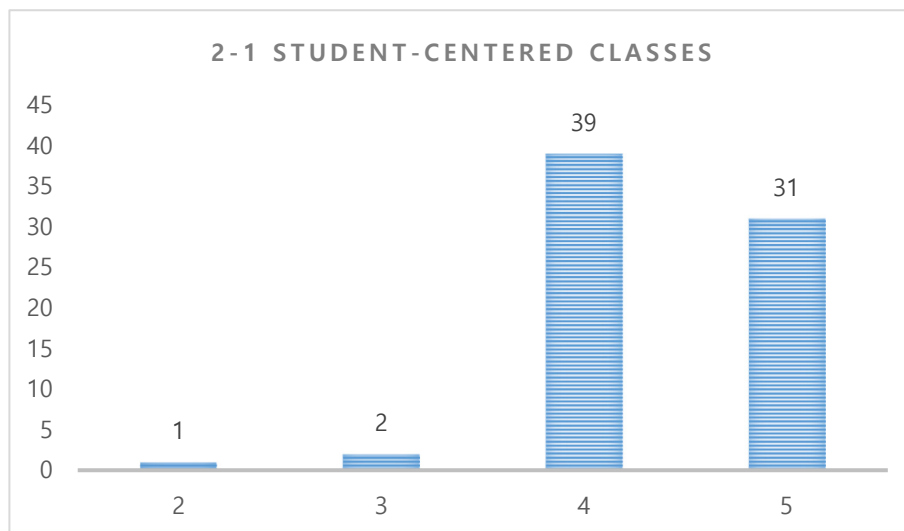


Figure 10. Connect with the Local Community

First, the answer to the importance of student-centered classes is as follows. Of the respondents, 39 said that

student-centered classes are very important in the future school, and 31 said that it is important.

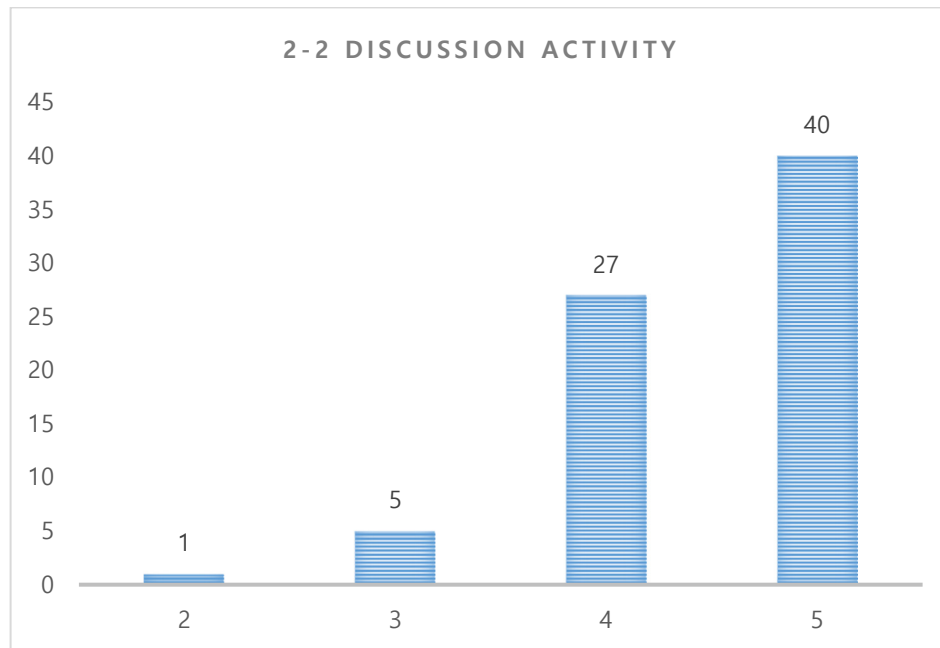


Figure 11. Discussion Activity

Second, the importance of discussion classes is as follows. Among the respondents, 27 said that discussion was important as a teaching-learning method suitable for future schools, and 40 said that it was very important.

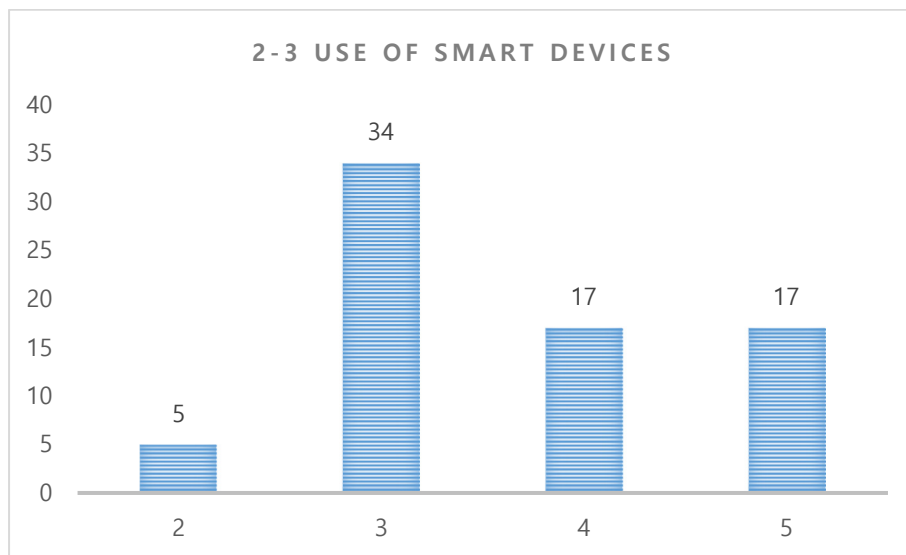


Figure 12. Use of Smart Devices

Third, the importance of using smart devices is as follows. As to whether smart devices are suitable for future schools, 34 of the respondents answered 'normal'. 17 people thought it was important and 17 people thought it was very important. It was confirmed that there were not only positive responses to the use of smart devices.

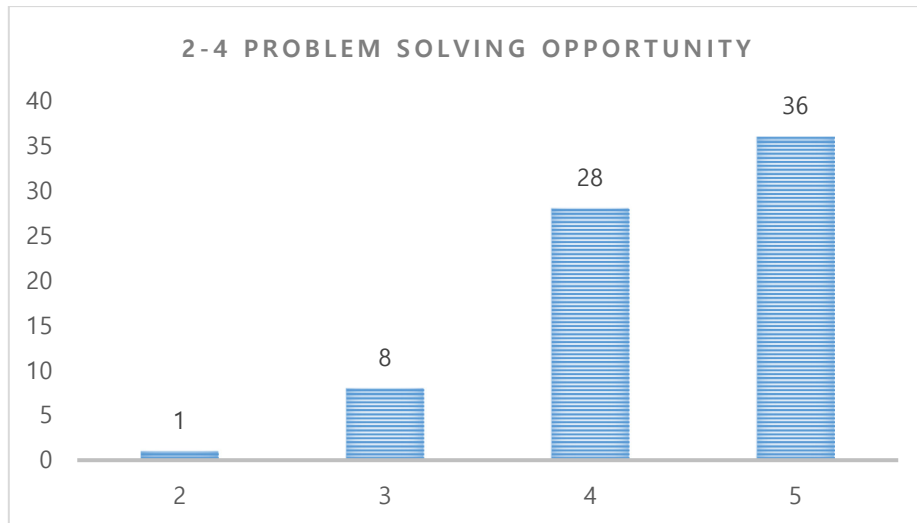


Figure 13. Problem Solving Opportunity

Fourth, the importance of problem-solving learning opportunities was as follows. Thirty-six of respondents said it was very important for students to have problem-solving learning opportunities in their future schools, and 28 said it was important to them.

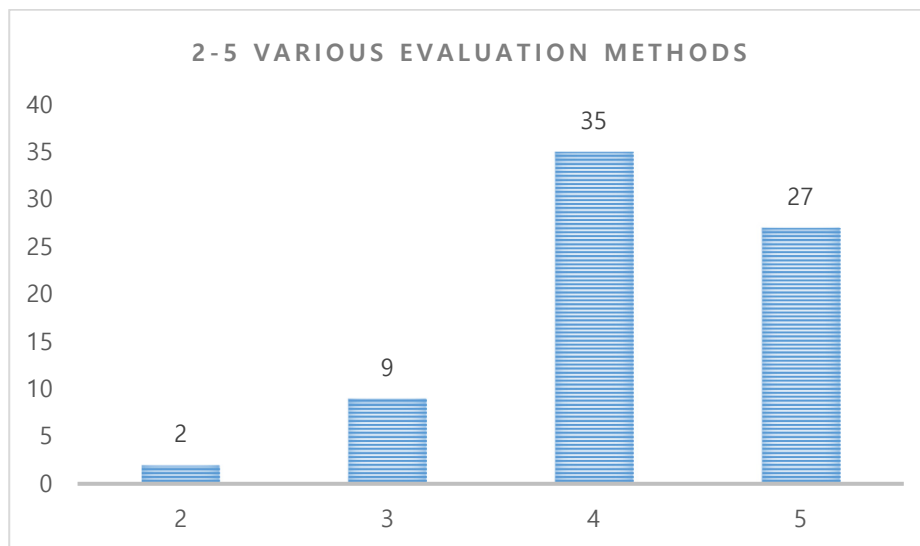


Figure 14. Various Evaluation Methods

Fifth, the importance of using various evaluation methods is as follows. Among the respondents, 35 said that the use of various evaluation methods was important, and 27 said that it was very important.

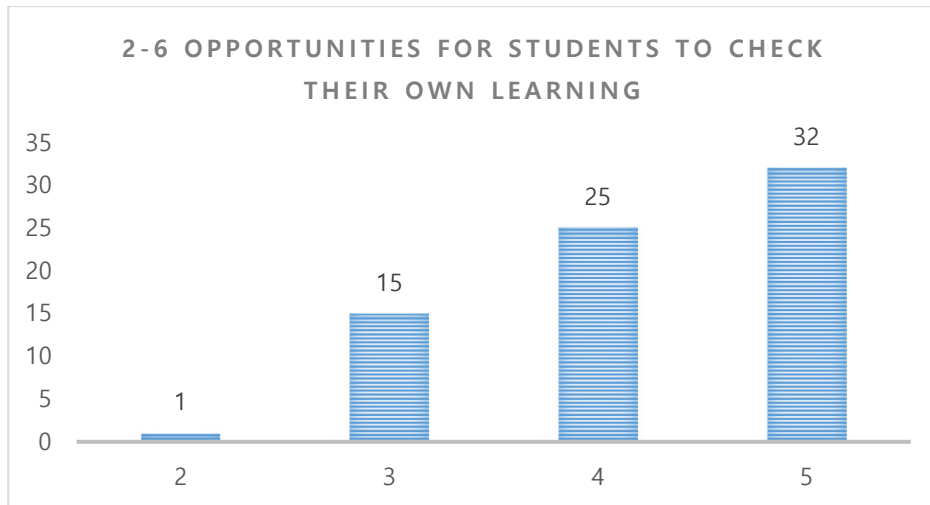


Figure 15. Opportunities for Students to Check Their Own Learning

Sixth, the importance of the learner's self-evaluation opportunity was as follows. Thirty-two of the respondents said it was very important for learners to have the opportunity to evaluate themselves in future schools, and 25 said it was important.

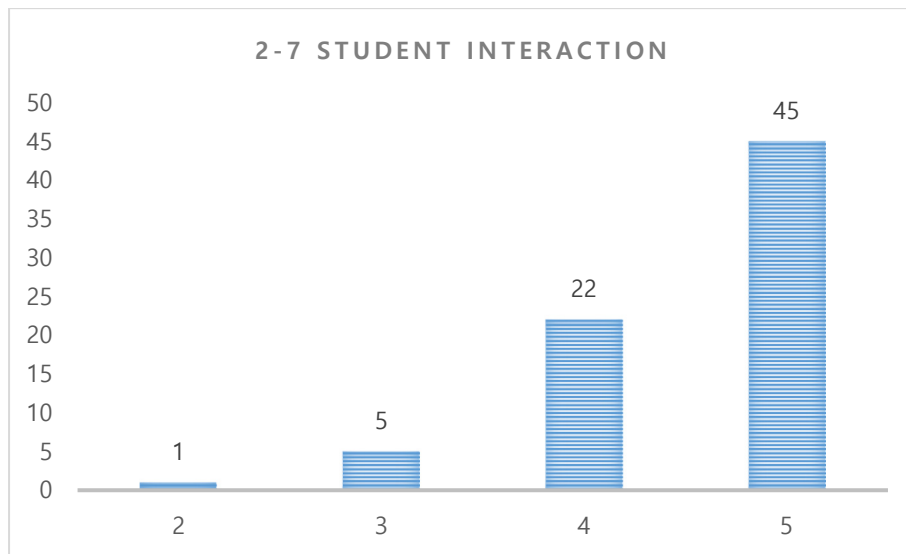


Figure 16. Student Interaction

Seventh, for the importance of student interaction, 45 of the respondents answered that it was very important, and 22 answered that it was important.

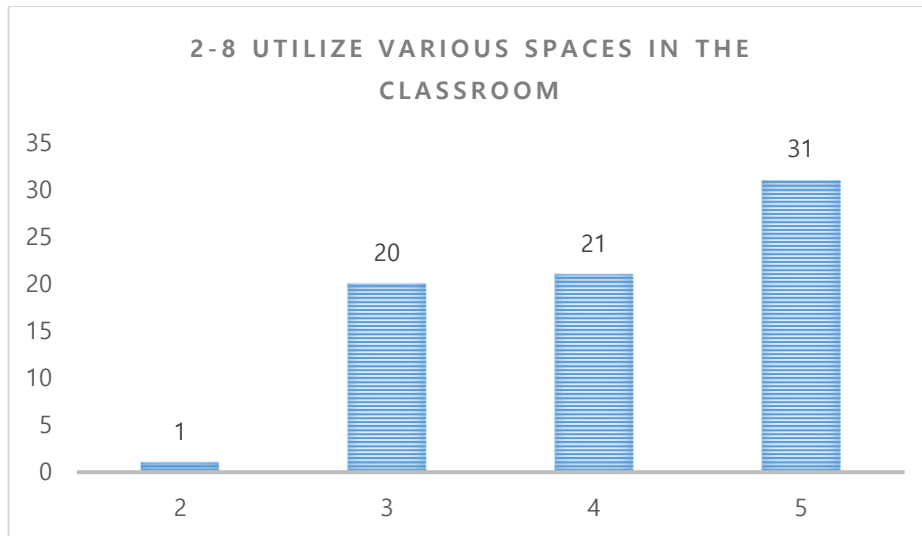


Figure 17. Utilize Various Spaces in the Classroom

Finally, 31 of the respondents said it was very important, and 21 said it was important to the importance of using a variety of classroom spaces.

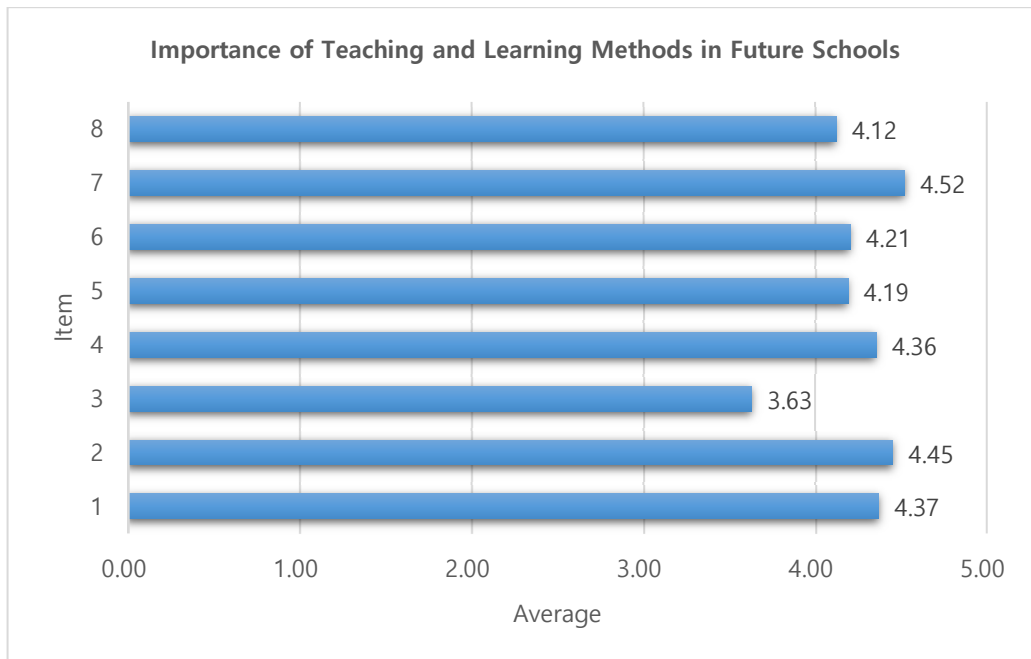


Figure 18. Importance of Teaching and Learning Methods in Future Schools

The result of combining the above 8 items is as follows. Among the teaching and learning methods of the Future School recognized by teachers, the most important were first, student-to-student interaction, second, discussion-centered class, and third, student-centered class. On the other hand, according to the teachers, education using smart devices showed relatively low importance compared to other questions.

5. Conclusion

In the future, students will learn at a very different school from today. How the future school culture will be different from today's school culture and what teaching-learning methods will be important in the future school are important

questions for us today. This study investigated teachers' perceptions of the above research questions.

Among the overall school culture and educational vision recognized by teachers, the most important thing for teachers is to operate a competency-based curriculum and set educational goals suitable for the future society. On the other hand, although teachers thought that the interaction between the teacher learning community and the teacher was important, it was relatively less important than other items.

In other words, it is important to set goals for schools in a future-oriented manner. It is important to set a unique purpose for each school because the schools in the future are different from school to school. In addition, students should develop the ability to think and practice rather than memorize simple knowledge. Also, what teachers think is the most important is the active participation of students in learning. Students should learn to discuss rather than acquire knowledge in school. They also need to learn how to interact with each other and build positive relationships. Through interaction, students will learn from each other and grow together. Of course, handling smart devices is important, but the most important thing for teachers is the human interaction between students and students.

In the classroom, many students fall asleep during class, and few children pay full attention to class. For many children, school is just a place to get a diploma. This classroom is a pain for both children and teachers. This is because the content of the class is either too difficult to understand or not interested at all. Schools need to change. Curriculum must also change. Future education should teach students various contents. Students should be interested in and internalize the content of their learning. The way to achieve this is to first set the school's future goals. And to achieve that goal, a competency-based curriculum must be designed. Students must learn skills beyond knowledge through interaction. And this can be realized through discussion and student-centered education.

This study has the following implications. Research supports that change in the future school is not a space for simple knowledge acquisition. The current school structure may be an optimized space for knowledge acquisition. A standardized space is suitable for control, but it is far from creative thinking. This is similar to the description of the panopticon (Foucault, 1975). Then, discussing how the future school space should be structured will be an important task in the next study. This is related to the research topic of how education is conducted in a specific space. The OECD has studied the need for space flexibility through various reports on space for education (Blyth & Velissaratou, 2019; Kankaraš & Suarez-Alvarez, 2019).

Also, it is necessary to consider changes in teaching and learning methods for capacity building in the future society. This is because a change in the curriculum inevitably entails a change in the teaching method. For example, it may be a future teaching method that gives learners a lot of discussion opportunities through the flipped learning method (Ekici, 2021; Karabulut - Ilgu, Cherrez, & Jahren, 2018). Also, project-based learning may be able to foster creativity in future students (Kokotsaki, Menzies, & Wiggins, 2016; Miller, Reigh, Berland, & Krajcik, 2021). Contemplation on educational methods to achieve future core competencies will be the subject of research for the next step. And the space for the successful implementation of this changed educational method will be the future of the school. Perhaps the changed school can be implemented in a virtual space like the metaverse (Suh, & Ahn, 2022; Hyun, Kim, & Park, 2022). From this comprehensive view, the appearance of education in a place without time and space constraints is likely to be the image of the future school.

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