

Chapter 14

An Explanation of the ICALT Instrument's Measurement of Teaching Quality in Relation to Teacher Education and Policy in South Korea



Seyeoung Chun, Okhwa Lee, and Deuk-Joon Kim

Abstract The rapid development of South Korea's educational system has attracted international interest. The country is well-known for its high student achievement, as indicated by the OECD PISA research, yet the causes for the high achievement remain unclear. Many argue that high teacher quality is an explanatory variable, even though accurate and rigorous measurement of teaching quality at both the practical and theoretical levels has yet to be established. The ICALT (International Comparative Analysis of Learning and Teaching) developed by van de Grift and colleagues in the Netherlands was recently utilized to assess the teaching quality of Korean teachers, and the results demonstrated a high level of teaching quality when compared to other countries. In this chapter, we discuss the relationship between the ICALT's reported high level of teaching quality and teacher education and policy in South Korea. Several components of teacher education and policy are identified as factors that lead to the quality of the teaching force. They are the well-developed teacher training system, higher level of teachers' socioeconomic status, in- & external-school supervision for enhancing teacher competency, and efficient personal administration for teachers including homeroom teacher, rotation and promotion.

Keywords ICALT · Teaching quality · Teacher education · South Korea

S. Chun (✉)

Department of Education, Chungnam National University, Daejeon, South Korea
e-mail: sychun56@gmail.com

O. Lee

Department of Education, Chungbuk National University, Cheongju, South Korea
e-mail: ohleekorea@gmail.com

D-J. Kim

Chungnam National University, Daejeon, South Korea
e-mail: deukjoon@gmail.com

© The Author(s) 2023

R. Maulana et al. (eds.), *Effective Teaching Around the World*,
https://doi.org/10.1007/978-3-031-31678-4_14

1 Introduction

Korea's rapid economic and social development during the last decades has been attributed to its educational success and development. Changes in the education system have been remarkable in both quantity and quality in the last 70 years. There are so many indicators of educational development that they are difficult to enumerate: for instance, almost 90% of the whole school-age population graduated from high school and entered the tertiary education system in the recent decades, and the illiteracy rate is drastically reduced down to less than 10% from more than 70% since 1945. Universal attainment of primary education was achieved in the 1960s and secondary education in the 1970s. In this chapter, we will explore the findings from Korean administrations of the ICALT (International Comparative Analysis of Learning and Teaching) measure, and analyze connections with Korean teacher education and policy.

One of the most compelling proofs of South Korea's educational power is the outstanding results in the various international assessment of student achievement in recent years. In the last PISA (Program for International Student Assessment) study conducted by the OECD (Organization for Economic Cooperation and Development) in 2018, Korean students were placed in the top tier category. According to the snapshot of South Korea from PISA 2018 country-specific overviews about "What 15-year-old students in Korea know and can do," Korean students scored higher than the OECD average in reading, mathematics, and science. Compared to the OECD average, a larger proportion of students in Korea performed at the highest levels of proficiency (Level 5 or 6) in at least one subject; at the same time, a larger proportion of students achieved a minimum level of proficiency (Level 2 or higher) in at least one subject.

However, little is known about how Korean success and development have been achieved. Quality of teaching is often selected as one of the most convincing factors. Few disagree that the quality of a teacher is the most important aspect of a student's academic success, as it is commonly stated that "the quality of education cannot exceed the quality of teachers." Much past research on student accomplishment has concluded that school disparities are ultimately due to teacher variations and that individual teachers, irrespective of schools, have a significant impact on pupils (Marzano et al., 2001). van de Grift et al. (2017) reviewed a substantial body of research regarding the relationship between teacher quality and student learning and summarized that the results of these research efforts made clear that about 15–25% of the differences in students' achievement might be explained by the work of teachers.

In this sense, many aspects related to the quality and quantity of the teaching force in South Korea can support the plausible reasons for the outstanding performance of students. The teachers in South Korea are selected from the best-talented people and are very well paid. All schools are evenly provided with those good teachers regardless of regional disparities due to the constitutional mandate that everybody has the right to equal education based on ability.

On the other hand, in order to ensure the good quality and quantity of the teaching force for the aim of quality education, government policy efforts have been significantly intensified. In that view, establishing the professionalism of the teaching job has been prioritized: that is, the teacher is entitled to be the expert, the professional who distinguishes themselves from ordinary and general employees. Although there can be many arguments about what it means in the reality of a teaching job or how it can be differentiated from other jobs, several researchers have classified teaching as a professional occupation (Flexner, 1910; Lieberman, 1956). The notable document that specifies the professionalism of teachers would be the ILO/UNESCO Recommendation concerning the Status of Teachers (1966). Article 6 of the Recommendation states, *‘Teaching should be regarded as a profession: it is a form of public service which requires of teachers expert knowledge and specialized skills, acquired and maintained through rigorous and continuing study; it calls also for a sense of personal and corporate responsibility for the education and welfare of the pupils in their charge’*. Article 31 (4) of the Constitution of the Republic of Korea and Article 14 of the Framework Act on Education also stipulate together that “the professionalism of teachers in school education is respected...”.

However, professionalism about the characteristics of the teaching job is very difficult to conceptualize at the academic level as well as the practical level. It is very different from a subjective teacher's point of view. According to a study on the reconceptualization of teacher expertise (Kim, 2006), a teacher's expertise or professionalism is defined as an individual teacher's ability to build skills through experience and training based on their beliefs and knowledge, and to perform the teaching profession appropriately in the school setting. Nonetheless, there are numerous classifications for the concept of teacher knowledge, and there are frequently disagreements and controversies when it comes to real-world issues. Despite these different considerations, there is a tendency to confine teachers' competence to classroom instruction and teaching. Among the many things a teacher performs including classroom teaching, student mentoring and counseling, and other various administrative affairs, classroom teaching is supposed to be at the heart of what a teacher does. Hence even the quality of a school itself may be measured by how classroom teaching is handled, which means the classroom teaching quality is at the heart of the teaching profession.

OECD-TALIS can be regarded as a sister study project to the PISA on students' achievement, started in 2008. According to the OECD/TALIS homepage, the Teaching and Learning International Survey (TALIS) is the first international survey that provides a voice to teachers and school principals, who complete questionnaires about issues such as the professional development they have received; their teaching beliefs and practices; the assessment of their work and the feedback and recognition they receive; and various other school leadership, management and workplace issues ([http:// https://www.oecd.org/education/talis/talisfaq/](http://https://www.oecd.org/education/talis/talisfaq/)). As indicated “it is not an assessment, but a self-reported survey,” The TALIS study focuses on the teaching quality as a kind of skill that can be assessed or measured, but is limited to reporting on the teachers' working conditions by their own voices.

According to the TALIS study, Korean teachers demonstrated lower levels of self-efficacy and job satisfaction, as indicated in Table 14.1. In the same TALIS report, it’s also interesting to find Korean teachers’ autonomy at a higher level, whereas Finnish teachers’ autonomy is at a lower level. Finnish education and Korean education are often compared as they both have high students’ performance yet the educational culture is known very different but the social status of teachers is similar in terms of social respect and economic rewards.

This raises the possibility that teachers’ competence for teaching effectiveness may not be explained by teachers’ self-efficacy, satisfaction, or autonomy in explaining where Korean students’ excellent performance comes from. According to the TALIS study, teacher-related factors are not directly associated with teaching quality; rather, they are indirect variables that help teachers teach effectively. The search for a direct metric of teaching quality that can explain student success is thus worthwhile. In juxtaposition to their pupils’ strong achievement, this negative or lower evaluation report from Korean teachers is a very interesting phenomenon. This phenomenon was stated as the ‘Korean Paradox’ by Kim et al. (2009a: 23–24): “There have been controversies over the role of teachers regarding the remarkable results of Korean students’ achievements. Some critics argue that the academic success of many Korean students is due to private tutoring, rather than their classroom teachers. ...However, the government likes to claim that the Korean PISA achievements are a result of the outstanding educational system and teachers. In some sense, this might be true. ... It might be assumed that the high qualifications of Korean teachers are related to students’ achievement in some ways, but solid empirical evidence is lacking to support this claim definitely.”

This paradox arises from the lack of a firm foundation of knowledge upon which to evaluate educational quality. A recent research initiative called ICALT (International Comparative Analysis of Learning and Teaching) may provide a way out of this conundrum. The ICALT instrument has been demonstrated to be a scientific and accurate tool for measuring and comparing the quality of teaching in various countries and cultures. It was created in the Netherlands by Wim van de Grift and others. In this chapter, the findings of the ICALT instrument’s assessment of

Table 14.1 Trend of change in teaching-learning efficacy (%)

Sorted	Makes good questions for students		Uses a variety of assessment strategies		Explains in different ways when students do not understand	
	TALIS 2013	TALIS 2018	TALIS 2013	TALIS 2018	TALIS 2013	TALIS 2018
Korea	77.4	86.6	66.6	78.0	81.4	89.7
Average of participating countries	87.4	86.7	81.9	81.0	92.0	91.6

Source: reconstructed data from OECD (2019). TALIS 2018 Results: Teachers and School Leaders as Lifelong Learners

Korean teachers' teaching quality will be presented and analyzed in connection to Korean teacher education and policy.

2 Teaching Quality of Korean Teachers

The reason for the disparity and scarcity of information on teaching quality in Korea is that there is no objective and accurate methodology for measuring teaching quality, i.e., we haven't had a good tool to illustrate how well teachers behave themselves in the classroom. Such information and statistics did not exist. However, various studies and approaches have lately been established to scientifically observe and quantify teaching quality and competencies.

Prior research on teacher behavior to improve teaching skills provided general rules and principles, helped to describe the phenomenon and helped to reveal the effectiveness of specific teaching behaviors, but a scientific approach to teaching behavior in the overall classroom context was still uncommon (Chun et al., 2017). In this regard, the research conducted by the van de Grift team at the University of Groningen in the Netherlands has consistently produced a number of positive results in this area by observing teachers' instructional behavior in the classroom which revealed the level of instructional skills, and providing feedback and coaching for improvement (van de Grift, 2007). The Dutch research team expanded it to the worldwide level and titled it ICALT, which stands for International Comparative Analysis of Learning and Teaching, based on various studies conducted in Europe with persuasive results.

This global application of ICALT research began in 2014 with the ICALT III project, in which 18 countries were involved: the Netherlands, Korea, Indonesia, the United Kingdom, China, Hong Kong, Spain, South Africa, Turkey, Malta, the United States of America, Norway, Australia, Nicaragua, Mongolia, Pakistan, Portugal, and Brazil. The study's main topic was whether the quality of teaching can be compared across countries in terms of reliability and validity. Several studies have been published in journals (Maulana et al., 2020a, b; Andre et al., 2020; van de Grift et al., 2017, 2019), demonstrating the reliability and validity of the ICALT observation tool. Those comparative ICALT studies were conducted for secondary school teachers in a few countries, and a comparison for all nations is not finished yet. Using this research instrument, however, it was demonstrated that the ICALT tool may be utilized for worldwide comparative research and that differences in teaching quality can be measured.

The ICALT tool was used for the first comparative study on the teaching expertise in Korea and Netherlands in 2014: 289 Dutch secondary school teachers and 375 Korean secondary school teachers participated. It was found that the six ICALT scales for measuring teaching skills, assessed in South Korea and the Netherlands, were sufficiently reliable and offered sufficient predictive value for student engagement. Multigroup confirmatory factor analysis showed that the factor loadings and intercepts of the six ICALT scales were the same, within acceptable boundaries, in

both countries. This means the average scores of teachers in both countries assessed by the tool can be compared in a reliable and valid way. According to the research, it was found that Dutch secondary teachers fared marginally better in the 1–4 categories of teaching skills, while Korean secondary teachers did better in more advanced teaching domains. In other words, Korean secondary school teachers outperformed Dutch secondary school teachers in the 5–6 domain, the most advanced levels. Provided that those advanced teaching skills have great potential to influence the learning gains of both struggling and excellent learners, it might also contribute, amongst other factors, to the higher level of student engagement evident from the first ICALT research findings in the South Korean sample. According to these findings, the reason why Korean students outperform Dutch students in OECD-PISA accomplishments could be attributed to the high level of teaching expertise in Korea.

Every year, the ICALT-K Korea Research Center (Chief: Seyeoung Chun, Professor of Chungnam National University) trains observation experts and conducts ICALT data collection through class observations of Korean elementary and secondary school teachers. ICALT-K Korea Research Center collected 1976 classroom teaching samples from 2014 to 2021; 598 elementary instructors, 936 middle, and 442 high school teachers; 539 male teachers, and 1420 female teachers. Since the experiment began, 72 trained observers have participated in the observation. They have been attending annual ICALT observation training given by the research center, and Cohen's kappa has shown that they have reached a satisfactory level of agreement of over .70. The statistical criteria for worldwide comparability were also found to have passed the reliability and validity test. The construct validity estimates for all 32 items ranged from .550 to .896, which is higher than the lower threshold of .5. The construct dependability of all six domains was over .90, and the variance extract index was over .60.

Figure 14.1 shows the descriptive level of teaching skills. Although there are slight differences by school level between elementary and secondary, the data leads us to conclude that Korean teachers display very high levels of teaching expertise.

In 2020, an international comparative study of secondary school teachers' teaching skills in six nations (the Netherlands, Korea, South Africa, Indonesia, Hong Kong, and Pakistan) was published, with Korean teachers scoring top in all disciplines (Maulana et al., 2020c). Results of the study showed that South Korean teachers were rated higher in all domains ($p < 0.001$), except for learning climate. Higher ratings on most of the teaching behavior domains for South Korean teachers compared to Dutch, South African, and Indonesian teachers might be related to several effective teaching supporting factors including how teachers in the country are recruited, how they value learning, and how they are supported professionally. There must be various factors reasoning for the high performance of the Korean education system. However, even though that reasoning sounds logical, it must be empirically validated. In this sense, ICALT approach for assessing and comparing the teacher quality and skills is worth valuing its contribution to a better understanding of the quality of teaching as a good factor of Korean success in education.

Based on the ICALT framework, it is plausible to assume that South Korean instructors retain a greater level of teaching expertise, quality, and skills, which

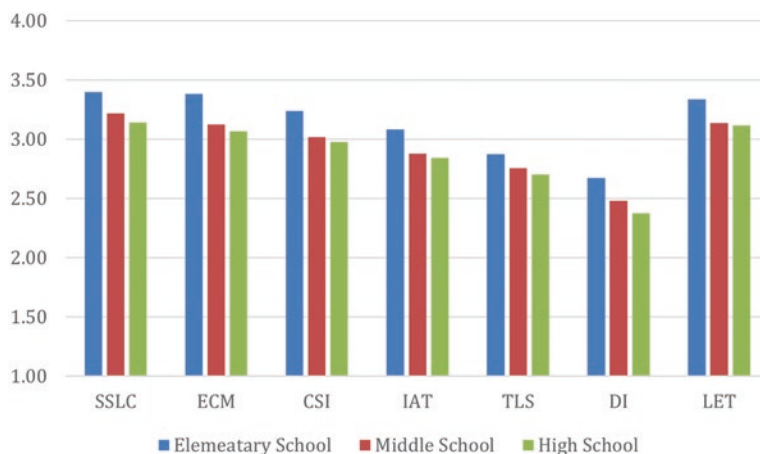


Fig. 14.1 Study on ICALT class expertise-average by school level. (Source: The graph was created by the authors using the data collected by the e-ICALT platformI (<http://icalt.kr>) which is the data collection site to which the trained observers upload the classroom observation data by ICALT tool within the framework of ICALT-K)

explains South Korean students' higher level of learning success in many international studies, such as the OECD/PISA. The following stage in the inquiry is to naturally point to the sources behind the excellent quality of teaching. As is generally known in Korea, there have previously been many suggestions regarding the sources. Teaching jobs have several attractive advantages for workers, such as high job stability, relatively high stable salary, social respect, and lifetime employment.

3 Teacher Education and Policy in South Korea

A number of factors contribute to Korean teachers' high level of teaching ability. However, there is a paucity of information on how Korean teachers can become world leaders in their teaching skill. Every year, the OECD research reveals that the teaching job in Korea is unquestionably one of the most attractive careers in the country, since teachers not only earn the highest compensation in the world, but also have a work guarantee until the age of 62, and have socially high prestige and respect as public servants. It wasn't always like this, though. Teachers' socio-economic position was quite poor until the 1970s. In order to enhance teacher status and quality, various policy efforts and tools have been formulated and implemented over the years.

Teachers should have a national teaching license, which can be obtained from the four-year pre-service teacher training at colleges. Those who want to work as teachers after graduating from pre-service institutions compete for jobs at public schools by taking a demanding examination. After the completion of university education,

those graduates with the national teaching certificate should pass the national examination to be allocated to public schools, and before teachers start to work at schools, they need to take official training, the first in-service education. The remaining processes for a teacher's career are job assignments at schools as a public official, promotion to principal, and finally retirement at the age of 62 with the honorable award of the Order of Service Merit and retirement pension. It is vital to understand the teaching profession within the context of Korean educational policy in the past 70 years.

3.1 Pre-service Teacher Training

South Korea can attract high quality candidates for teacher education institutes. Both entering the university (school of education) and the recruiting test are very competitive. This is not the case in all countries: qualified personnel are in short supply in both developing and developed countries. In the United States, for example, a poll found that approximately 70% of teachers traditionally score below the national average on the SAT, a college entrance exam (Kim, 2006). However, Korea can recruit the very best high school graduates and this tendency has a long tradition from the start of the Korean education system in the 1960s and 1970s. In Korea, initially, there were not enough qualified teachers to meet the demands of education when the population grew rapidly so the demand for expanding the educated population was high.

Teacher Training System When the Korean education system first began, teacher training institutions were in short supply. Instructors' socioeconomic remuneration, including personal treatment and working circumstances, were exceedingly low at the start of Korea's public education system, which made it difficult to recruit qualified teachers. Teaching jobs may not achieve the degree of the economic standard that other jobs might offer during periods of high economic expansion. As a result, the government devised a scheme to entice young people by exempting them from military service and by paying their university tuition. Those initiatives, however, were insufficient to attract young and skilled workers. However, because of the *Sungmun* culture, high regard for the educated and academics, even when the labor market was constrained during a period of economic hardship, teaching jobs remained attractive to young people. As a result, the job market for teachers has returned as a supplier and producer of the education sector as a kind of booming industry, which has resulted in education expansion and development. As a result of a large number of candidates, teacher training colleges were invited to generate the teaching force. At the same time, the number of graduates was insufficient to meet the constantly growing number of schools and pupils. It was a kind of virtuous circle of supply and demand in the education sector.

Changes in the Teacher Training System *Hansung Normal School* began teaching elementary school teachers in 1895 and was promoted to a two-year college in 1961 as the national college of education. Initially, there were ten colleges, which were eventually increased to sixteen. From 1981 to 1984, they were converted to four-year bachelor's universities, and in 1993, they were renamed the National University of Education (Kim et al., 2009b).

Kyungseong Normal College, which was reformed from *Hansung Normal School* in 1895, began secondary school teacher training in 1945. In 1949, it became the College of Education of Seoul National University, while at the provincial level, *Daegu Normal College* and *Gongju Normal College* became public suppliers of secondary school teacher training institutes. Private universities, on the other hand, have been involved in the training of teachers since 1951. *Ewha Woman's University* first opened teacher training programs as a private teacher training institute. When Korea saw a large expansion of secondary education, which resulted in a scarcity of secondary school teachers, numerous private providers started teacher training programs in 1965 to diversify and extend secondary teacher training. However, since the middle of the 1990s, the proliferation of teacher training institutes has resulted in a high level of competition in the current recruitment examination system.

Teacher Training Scale and Current Situation of Teacher Recruiting Thirteen universities offer elementary school teacher education. Secondary education is provided through 46 colleges of education, which include 14 departments of education in general universities, 152 teaching courses in general colleges, and 112 teaching courses in the graduate school of education (Kim et al., 2008: 21–69). Prospective teachers must pass the recruiting examination to work as a teacher at a school (Park et al., 2015: 45–46). The number of graduates from the 2015 elementary school teacher recruitment exam was 4357. However, a total of 9132 persons applied for the exam, and 6173 passed, with a passing rate of 67.6%. From the statistical data retrieved from KEDI Statistics (<https://kess.kedi.re.kr/index>), it was found that the total supply of secondary school teacher certificate holders was 50,828, although only 4.0% of them passed the exam in 2011. In 2015, the government attempted to limit supply by lowering the recruitment rate, which resulted in an 11.6% pass rate. However, the supply-demand gap is far too large to close.

3.2 *In-Service Training and Supervision to Improve Teaching Skills*

The quality of teachers' expertise, which leads to the quality of education, has been systematically monitored in the classroom setting in Korea, labelled as supervision. Supervision is defined as a professional activity that assists teachers in improving their teaching quality and skill. In a restricted sense, it is sometimes defined as educational administration. According to Lee (1984), this perspective of supervision as

offering direction to instructors has prevailed in Korea since the commencement of the new educational system throughout the nation-building period after 1948. Teachers were able to attain their educational goals in the front-line education area because of supervision activity in school, which allowed them to continue their educational research and improve their professionalism. In South Korea, supervision is divided into two categories: in-school supervision and external-school supervision. In-school supervision refers to activities conducted within the school under the leadership of the principal. External-school supervision refers to activities conducted under the supervision of the Office of Education and the Ministry of Education, which are higher levels of education authority than the school.

However, in recent years, supervision has not been of great assistance in improving classes, and it has faced criticism, primarily from higher offices of education and even from school principals, for its bureaucratic control. Traditional supervision may be phased out in favor of new approaches such as consulting, coaching, and mentoring. Nonetheless, in the history of Korean education, the function of supervision in fostering teacher professional growth cannot be overlooked.

3.2.1 In-School Supervision

Preparation of Lesson Plans The planning and execution of lesson plans are at the heart of on-site supervision operations. After the legalization of the National Teachers' Union in 1999, lesson planning became obsolete as a result of labor union collective bargaining. Before 1999, teachers were required to submit lesson plans one week ahead of time and gain the principal's approval. In reality, preparing lesson plans for each class was onerous, and teachers found it difficult to implement lessons in the classroom as intended. Preparing lesson plans and developing teaching materials in this manner was obviously a huge undertaking. The following is the account of a former elementary school teacher from the 1960s.

How would I have written those lesson plans if I had to do it all on my own? There were more than ten class groupings in each grade at the time. After that, each group teacher is responsible for one subject. Group 1 will study the Korean language, group 2 will study mathematics, and group 3 will study music..... When it came to Friday, I just gathered all of the lesson plans from other teachers to copy and edit them for my own usage. Even if you merely duplicate it, you will learn from it, and it may be used to create your own lesson plan. And the grade group leader is in charge of approval before leaving work on Friday, and it goes to the vice-principal and then to the principal for approval on Saturday (when it was not yet a five-day system). I was quite occupied. But, hey, I did it every year, so it was worthwhile, and it became a teacher's habit after that. (Sung**, 70 years old, a teacher and an elementary school principal, and a former superintendent of a school district)

When school education in South Korea began shortly after national independence, it is unclear when the culture and tradition of preparing lesson plans originated. However, it is apparent that it started long ago and from the beginning, and even for seasoned teachers, making lesson plans and preparing for lessons was never easy. Since the year 2000, teachers no longer develop thorough lesson plans for every

class. It relieved instructors of some of their responsibilities, but it also meant that teachers would miss out on opportunities to learn from more experienced teachers. However, some events require teachers to write lesson plans: teachers must prepare a lesson plan once or twice a year for the event of class opening or research class. Lesson plans are also necessary to enter several teaching competitions. Naturally, it is still required in teacher education colleges to teach how to design a lesson plan. Preparing lesson plans bolstered teachers' basic value of teaching ability in a variety of ways.

Open Class and Research Class The open class and research class are two more on-campus monitoring activities. The specifics of how this policy of open class and research class is implemented vary by school, but every year, all schools should plan an open class day with parents, school district supervisors, and fellow instructors. Research workshops are also open to the public during this event, allowing teachers to exchange novel and effective instructional strategies with their peers. Although not all teachers are asked to conduct an open class, every teacher should have one at least once throughout his or her career. There will inevitably be criticisms of the open class, such as that it is only for show and not for actual teaching and learning. However, a teacher's ability to instruct can indeed be enhanced through constructive criticism, allowing the teacher to develop their skills.

Teachers' Learning Community and Group Meetings The teachers' group meeting is the final item on the list of in-school supervisory activities. Teachers' group meetings are recommended to be held once a week and are organized by grades and subjects; for example, teachers of 3rd grade will have a meeting at elementary schools, while teachers at secondary schools will have a meeting organized by subjects. The agenda for the teachers' group meeting is usually for teaching techniques and some issues for worthwhile experiences, as well as preparation for research classes. One of the most essential agenda items may have been how to create test items and score the academic evaluation of formative and summative tests during the semester. The findings of the formative evaluations conducted every month within the context of the standardized national curriculum and textbook system became a significant instrument for students' learning management, while also acting as an independent tool to ask for teacher responsibility. Parents' primary concern is the test results, hence they are extremely sensitive to test outcomes. As a result, the reliability and validity of test items among teachers in the same topic and grade were crucial, and they had to take the form of collaboration to retain fairness as high as feasible. Since the establishment of the KTU (Korea Teachers Union) in 1999, all types of paper-delivered evaluations in schools have been severely limited or abolished under the guises of "procrustean or uniformed exam" and "competitive learning," and the core agenda of student evaluation has gradually vanished, and the teacher's group meeting has lost its vibrancy. In any case, the collaborative culture of teachers' group meetings has made a substantial contribution to the Korean teaching community's professionalism.

3.2.2 External-School Supervision

External-school supervision refers to all related activities and programs carried out by higher supervisory entities such as the Office of Education and the Ministry of Education, which are governed by national laws and systems. Every year, the Minister of Education and the Superintendent of Education set supervision standards to give schools direction and concentration while also providing the required support. Although standards for educational activities have already been set through a uniform national curriculum and textbooks, higher authorities can introduce unique educational activities and propagate new ideas for instructional methods if new educational demands appear in the country.

The Ministry of Education and the Office of Education used the research school system to conduct an experiment in the field and promote it countrywide in order to fulfill particular educational activities (policies) and share new ideas. In addition, when new textbooks are released to correspond to the amended national curriculum, a research school system is implemented as a pilot program before the new textbook is distributed for national usage. In recent years, such actions of higher-level authorities' oversight have been replaced by a variety of educational projects. This transformation, however, faced criticism from school teachers that those projects hinder the development of teaching expertise with autonomy.

3.3 *Standardized National Curriculum*

Korean education is based on a nationally regulated curriculum framework that is changed every seven years. The first curriculum was created in 1954, and since the seventh curriculum was created in 2015, it has been decided to change the curriculum in parts rather than to complete an entire revision. The entire revision of the national curriculum necessitates a lengthy and difficult process to reach consensus among stakeholders, which results in arguments and divides among professional education groups, and, more crucially, the full revision is unable to meet educational demands quickly. The new national curriculum for 2022, on the other hand, is on its way.

Additionally, standardized textbooks and teacher guidebooks based on the national curriculum are released. Those textbooks must pass the ministry of education's rigorous evaluation process. Only a few textbooks are chosen, and along with the physical textbooks, digital textbooks are offered. The national curriculum was used to create a nationally standardized academic evaluation and test. In Korea, a standardized education system might serve as a guideline for teacher quality, with the national curriculum serving as the foundation for instructors to create their own educational abilities.

3.4 Social and Economic Status for Teachers

As government employees, teachers are promised a lifetime career with social standing and secure income incentives. The wage system for teachers was not attractive enough to recruit outstanding young people during the economic development phase in the 1960s and 1970s, but their economic compensation was gradually enhanced by the government’s persistent efforts. The quality of education in Korea has always been a top priority for Korean parents, who have exerted pressure on the government to maintain it. According to an OECD survey (Table 14.2), elementary teachers with 15 years of experience in Korean national and public schools earn up to \$10,000 more per year than the OECD average. A novice teacher’s annual compensation is slightly lower than the average, but it rises as the number of teaching years grows. Teachers’ salaries in Korea have the highest purchasing power in the world.

3.5 Unique Personnel Administration System

If they stay in the profession until retirement, South Korean public school teachers follow a more or less similar career path: teachers are required to take the role of each homeroom teacher besides the subject teacher, to teach at the assigned schools by rotation, and to work hard enough for promotion to become a school principal.

Homeroom Teacher System The homeroom teacher system allowed for schooling with distinct Korean characteristics. In many OECD countries, middle and high schools lack a classroom teacher system. Instead, students are taught by a classroom teacher and go from one classroom to the next to take classes. All students in South Korea have a homeroom teacher, and these homeroom instructors take the role of parents while students stay at school, to serve as a mentor. From the time children start elementary school until they graduate from high school, the system oversees not only their academic progress but also their whole development, providing counseling and assistance in all aspects of their lives. It is undeniable that homeroom

Table 14.2 Comparison of Korean teachers’ salary level with OECD average(as of 2020)

(Unit: USD \$)						
Sorted	Starting teacher			15 years experienced teacher		
	Primary school	Middle school	High school	Primary school	Middle school	High school
Korea	33,477	33,539	32,800	59,103	59,165	58,426
OECD average	34,942	36,116	37,811	48,025	49,701	51,917

Source: OECD (2021). Education at a Glance: OECD Indicators: Table D3.1. Teachers’ statutory salaries, based on the most prevalent qualifications at different points in teachers’ careers (2020). Retrieved from https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en

teachers played a significant part in Korea's educational development. Of course, there are many complaints and avoidances of fatigue directed at homeroom instructors these days, but Korea's educational development has been successful due to this homeroom teacher system.

School Rotation System In Korea, teachers in public schools rotate from one school to another after working at one school for a certain period of time (minimum 3 years and maximum 7 years). The goal of this system is to provide equitable teaching services in remote locations, with good promotion points and monetary recompense for those teachers who choose to serve in these places. Except for Korea and Japan, most countries, especially those with a strong heritage of educational autonomy, lack this structure. During the 1970s industrialization period, this rotation system was strengthened. The system was used to bridge the educational divide between areas by transferring teachers from favored to non-preferred regions, and teachers met pupils from various backgrounds and used the opportunity to try various teaching styles. Students would be able to meet a variety of teachers and obtain a high-quality education regardless of where they live or their socioeconomic status.

The rotation method used to attract young and ambitious instructors by offering incentives, but now the rotation to remote locations is not paid as it once was, resulting in a shortage of teachers with good teaching skills in rural places. Teaching, even in such isolated and impoverished schools, was once a sort of opportunity to take when the economy was not as favorable as it is now. The government also provided incentives in the form of housing, extra allowances, and, most importantly, a system of bonus credits for advancement and transfer to better institutions. However, from a broader viewpoint, good teachers are providing excellent learning circumstances in remote places, and this has helped to improve education quality by reducing the uneven distribution of quality teachers.

Promotion System Teacher and principal are not the same things in many countries: a teacher is someone who teaches in a classroom, while a principal is someone who handles administrative problems in general. The responsibilities of classroom teachers and principals are vastly different. As a result, if a teacher gets promoted to principal, he or she perceives himself or herself to be in a separate position. Teachers' primary responsibility is to instruct pupils, but principals' responsibilities are entirely different: principals are responsible for administering and managing the school. In Korea, however, teachers and principals are all designated as 'The Teacher,' and becoming a principal is a concept of promotion in which the principal is expected to be chosen as the school's best-performing teacher. The most important position in the school is that of a teacher, hence the head of the school should be a teacher. When a teacher becomes a principal, he or she advances to a higher position on the continuum of responsibilities, which is founded on the assumption that the responsibilities are continuous. After working as a teacher in the classroom, they can advance to vice-principal, principal, and scholarship/research posts.

4 Conclusion

Korean teachers are well-known for their high quality, and their social treatment is equally world-class. The high performance of students attests to the quality of the teachers. Students perform well in PISA, TIMSS, and other international comparative studies, but their life satisfaction is at an all-time low. Several international comparison studies, however, demonstrate that teachers and pupils are dissatisfied. This is without a doubt a dilemma. This contradiction was investigated in this chapter through two parts of the teaching profession in South Korea: one through the scientific approach of assessing teaching quality with the ICALT instrument, and the other through a comprehensive review of teacher education/training and policy. The two components were balanced with each other and led to the conclusion that high-quality teaching in South Korea must be the result and outcome of a well-organized teacher system from the beginning of training and recruiting to the end of teachers' well-being as a professional job.

According to the ICALT application for Korean school teachers, they perform at the highest level of teaching quality among the countries involved in the project. This teacher quality is regarded as a highly important factor in Korean students' high performance. Each component of teacher-related policy and implementation was discovered to have served as a driving force in empowering teachers in Korea. Many established traditions of teacher education and policy have contributed to the preservation of high levels of teaching quality. Homeroom teachers, principal promotion from classroom teachers, teacher rotation, good pay, and long-term security, lesson planning and open class, teachers group meetings, and so on are only a few examples of best practice.

This teacher power in Korea was obtained via the building of a professional teaching community during the 70 years since the country's independence in 1948, but since the 2000s, the tradition has been compromised in the name of innovation and future transformation. Instead of losing traditional norms too hastily for the sake of the future, we are encouraged to think carefully and explore creative ways to improve the system. However, in order to perceive and assess the reality of teaching quality and encourage teachers in enhancing their skills, a scientific and objective approach to the observation and measurement of teaching quality should be constructed. From both a practical and theoretical viewpoint, the use of ICALT in this context has proven to be the right approach.

References

- André, S., Maulana, R., Helms-Lorenz, M., Telli, S., Chun, S., Fernandez-Garcia, C.-M., de Jager, T., Irnidayanti, Y., Inda Caro, M., Lee, O., Safrina, R., Coetzee, T., & Jeon, M. (2020). Student perceptions in measuring teaching behavior across six countries: A multi-group confirmatory factor analysis approach to measurement invariance. *Frontiers in Psychology, 11*, 273. <https://doi.org/10.3389/fpsyg.2020.00273>

- Chun, S., Lee, O., & Jeon, M. (2017). A study on the analysis of teachers' classroom teaching expertise using ICALT observation tools. *Educational Engineering Research*, 33(2), 517–536.
- Flexner, (1910). *A. Medical education in the United States and Canada* (Bulletin No. 4). Carnegie Foundation for the Advancement of Teaching.
- http://www.nl.go.kr/app/nl/search/common/download.jsp?file_id=FILE-00008153810
- <https://www.moe.go.kr/boardCnts/view.do?boardID=294&lev=0&statusYN=W&s=moe&m=0204&opType=N&boardSeq=79191>
- <https://www.moe.go.kr/boardCnts/view.do?boardID=294&lev=0&statusYN=W&s=moe&m=0204&opType=N&boardSeq=81851>
- <https://www.oecd.org/education/talis/talis-2018-data.htm>
- <https://www.oecd.org/pisa/publications/pisa-2018-snapshots.htm>
- <https://www.rug.nl/gmw/lerarenopleiding/onderzoek/psychometrisch/>
- <https://www1.compareyourcountry.org/talis-teacher-survey/en/10/1836+1838/ranking/>
- Kim, O. (2006). A study on the reconceptualization of teacher professionalism. *The Journal of Educational Administration*, 24(4), 139–160.
- Kim, T., et al. (2008). *A study on the diversification of teacher training and recruitment*. Ministry of Education, Science and Technology.
- Kim, E., Kim, J., & Han, Y. (2009a). *Secondary education and teacher quality in the Republic of Korea* (A Series Book of Secondary Teacher Policy in Asia). Unesco.
- Kim, G., Park, Y., Jung, G., Kim, K., & Kim, B. (2009b). *A study on the reform of the teacher training system* (RR2009-02). Korea Educational Research Institute.
- Lee, J. (1984). Notes on the concept and system of scholarship. *The Journal of Educational Administration*, 2, 19–43.
- Lieberman, M. (1956). *Education as a profession*. Prentice-Hall, Inc.
- Marzano, R. J., Pickering, D., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. ASCD.
- Maulana, R., Smale-Jacobse, A., Helms-Lorenz, M., et al. (2020a). Measuring differentiated instruction in The Netherlands and South Korea: Factor structure equivalence, correlates, and complexity level. *European Journal of Psychology of Education*, 35, 881–909. <https://doi.org/10.1007/s10212-019-00446-4>
- Maulana, R., André, S., Helms-Lorenz, M., Ko, J., Chun, S., Shahzad, A., et al. (2020b). Observed teaching behavior in secondary education across six countries: Measurement invariance and indication of cross-national variations. *School Effectiveness and School Improvement*, 1–32.
- Maulana, R., André, S., Helms-Lorenz, M., Ko, J., Chun, S., Shahzad, A., Irnidayanti, Y., Lee, O., de Jager, T., Coetzee, T., & Fadhilah, N. (2020c). Observed teaching behaviour in secondary education across six countries: Measurement invariance and indication of cross-national variations. *School Effectiveness and School Improvement*, 32, 64. <https://doi.org/10.1080/09243453.2020.1777170>
- OECD. (2019). *TALIS 2018 results: Teachers and school leaders as lifelong learners*.
- OECD. (2021). *Education at a glance: OECD indicators*.
- Park, S., Park, S., Lee, I., Lee, G., Park, Y., Maeng, J., & Woo, H. (2015). *A study on the reorganization of the teacher training system*. Ministry of Education Policy Research Report.
- van de Grift, W. (2007). Quality of teaching in four European countries: A review of the literature and application of an assessment instrument. *Educational Research*, 49(2), 127–152. <https://doi.org/10.1080/00131880701369651>
- van de Grift, W. J., Chun, S., Maulana, R., Lee, O., & Helms-Lorenz, M. (2017). Measuring teaching quality and student engagement in South Korea and The Netherlands. *School Effectiveness and School Improvement*, 28(3), 337–349.
- van de Grift, W., Lee, O., Maulana, R., Chun, S.-Y., & Helms-Lorenz, M. (2019). Measuring teaching skill of South Korean teachers in secondary education: Detecting a teacher's potential zone of proximal development using the Rasch model. *Studies in Educational Evaluation* (forthcoming online publication first).

Prof. Seyeoung Chun is Professor Emeritus of Education at Chungnam National University, one of the major national universities in Daejeon, Korea. He received his education and Ph.D. from Seoul National University, South Korea, and has been actively engaged in education policy research and has held several key positions such as Secretary of Education to the President and CEO of KERIS. He founded the Smart Education Society in 2013, and has led many projects and initiatives for the paradigm shift of education in the digital era. Since his early career at the Korean National Commission for UNESCO, he has participated in many international cooperation projects and worked for several developing countries such as Nicaragua, Honduras, Cambodia, etc. Education Miracle in the Republic of Korea is the latest book to be published as a summary of his academic life.

Prof. Okhwa Lee is a specialist in educational technology and a practitioner of teacher education. She has been a pioneer of the e-learning, technology applications in education and educational reform through smart education in Korea. She was a member of the Presidential Educational Reform Committee and the Presidential e-Government Committee of the Republic of Korea, also consulting members for various ministries regarding educational applications of technology. She has rich experiences of international collaborations with the Europe Erasmus mobility with Finland Sweden, Estonia, Netherlands and etc., long history of research collaboration with USA, Australia, Thailand and etc. Recently she collaborated with developing countries through the Korean government ODA (Official Development Assistant) programs to Sudan, Nigeria, Nicaragua, Vietnam, Ethiopia, Cambodia, Myanmar, and etc. Her work through ODA focused on teachers' capacity development of teaching skills using technology.

Dr. Deuk-Joon Kim has been active in the fields of 'Electronics Engineering' and 'Information Security' from the late 1980s to the early 2000s. Since then, I've been pursuing education (majoring in 'Educational Technology') and have obtained a Master's degree (2006) and a Doctorate degree (2014) in education. I have worked as a professor at private and national universities and have conducted various research in the field of educational technology, such as development and utilization of educational technology and educational evaluation. Recently, I've been working as an ODA expert in the field of education, participating in various domestic and international education projects and research, and collaborating with domestic and foreign institutions to promote educational innovation and development. In addition, I have presented excellent research outcomes in the field of educational technology, such as publishing papers in numerous international academic journals and presenting at domestic and international academic conferences.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

