

Change of the National English Curricula in Korea and Considerations for the Next Curriculum

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Abstract

This study investigates the national English curriculum, social and academic culture, roles and positions of (English) teachers and students, and their changes in Korean history. Based on this exploration, the author discusses considerations to advance the current Korean English curriculum and where the next curriculum is to be headed in the era of the fourth industrial revolution (4IR). Given that the 4IR welcomes people who have high qualities in complex problem-solving, critical thinking, creativity, management, collaboration, decision-making and negotiation, significant changes in teacher and student roles and teaching practice are needed. The Korean pedagogical background of teacher-led practice, text- or grammar-based learning, test-preparation lessons and pursuit of competition in English education should not be obstructions for these changes. Thus, the author suggests the application of AI programmes and problem-based learning for the realisation of more learner-centred, democratic, and constructive learning. This study will provide educators in East Asian countries as well as in Korea with several rationales to deliberate for their next curriculum design.

Keywords: Korean social change, national English curriculum, curriculum reform, the fourth industrial revolution, problem-solving skills

1. Introduction

Social changes, such as an increase of international mobility, modification of borders, and turnover of political power, have demanded transformation of perspectives on language and language education. In the twentieth century, socio-economic trends of globalisation boosted worldwide use and learning of the English language with the need for improved international communication (Duff, 2014; Richards, 2006). The histories of colonialism also became the bases of nationwide education of powered languages, including English (Phillipson, 2003; Spolsky, 2017). In addition, sociocultural or religious values embedded in particular languages often activated learning of those languages (Fishman, 2006; Spolsky, 2017). Recently, development of a variety of digital technologies based on artificial intelligence requires people's improvement of digital literacy as well as English-language competency, which even requires changes in the academic culture (Ahn, 2018; Jung, 2018; Kim, 2021; Kim & Kim, 2017; Lee, 2020).

These changes and events resulted in constant alteration of states' language policies to keep the national language education in tune with the states' regimes related to their social, cultural, political, religious, and economic aspects, and relevant meta-discourses. According to Spolsky (2017), language policy reflects the usual language behaviour in the community (a descriptive statement about *practice*), desirable language behaviour (a normative statement about *beliefs and ideologies*), and institutional intention to influence the existing practice and beliefs (the *national management*). Thus, exploration of the history of language policy and the accompanying national curriculum discloses discursive, pedagogical, and linguistic aspects that a country has valued for the development of the state and the people, and also reveals the directions their curriculum is supposed to be headed.

The current study investigates the development of English education policies and national English curricula in Korea alongside the comprehension of their social, cultural, political, and economic changes, according to three particular periods: 1) pre-modern society before liberation from Japan; 2) state formation and modernisation after liberation

until the proclamation of a globalisation policy; and 3) contemporary Korea since globalisation. Based on this exploration, the researcher discusses their pedagogical aspects that should not be obstructions in designing and realising their next curriculum and considers in what ways their current national English curriculum can be complemented and improved. The exploration and discussion will provide educational researchers in East Asian countries as well as in Korea with several rationales to deliberate for their next curriculum reform.

2. Pre-modern Society and the Influence of Japanese Colonisation (until 1945)

2.1 Confucian Society and Academic Culture

Located between China and Japan, Korea has been influenced by Chinese socio-cultural values and ideologies. Japan has accepted those elements through its own Western-style feudalist background (note 1) (K. J. Kim, 2006). Despite numerous invasions and colonisation, Korea has been a political and civilisational entity for over two thousand years (K. J. Kim, 2006).

The first state, Kojosen, was established in 2333 BC. The Period of the Three States consisting of Goguryeo, Bekjae, and Silla was maintained from 1C BC to 7C AD, and Silla unified the others in 668 (Association of Korean History Teachers [AKHT], 2010). In 935, the Goryeo dynasty was set up and lasted until 1392 (Lee, 1984). The Joseon dynasty lasted for over 500 years and ended in 1910 with the Japanese invasion (AKHT, 2010).

Since the Period of the Three States, Buddhism and Confucianism have been influential in Korea. The unified Silla and Goryeo practised Buddhist principles, while basing their political codes in Confucianism (AKHT, 2010). Through state examinations that assess the interpretation of Chinese characters and comprehension of Confucian values, Silla recruited officials from the aristocrats. This system, which was borrowed from China, continued in the Goryeo and Joseon dynasties and the national religion of Joseon was Confucianism (AKHT, 2010). It was retained after Hangeul, the Korean alphabet, was created by King, Se-Jong, in the Joseon dynasty, in 1443. This way, ancient Korea was immersed within Confucianism and Chinese language and culture.

The main Confucian values in Korea are revealed in *Sam-Kang* (三綱), the three principles about the behavioural and relational moralities. It is comprised of *Kunwisinkang* (君爲臣綱), which means servants should serve and obey their lords; *Buwijakang* (父爲子綱), which means sons should serve and obey their fathers; and *Buwibukang* (夫爲婦綱), which means wives should serve and obey their husbands (Shin, 2011). The *Sam-Kang* formed the foundation of the educational content and principles of relationships in Silla, Goryeo, and Joseon (Shin, 1998). Most social relationships in Joseon, including between teachers and students, were vertical, authoritarian, and patriarchal (K. J. Kim, 2006; Kwon, 2007).

In the Joseon dynasty, the male children from the aristocratic class could study in *Seodang*, a public primary school, while commoners' children were partially allowed to attend later on (Central Institute of Korean Studies, n.d.). The *Seodang* contained a teacher, who was an old, educated, and retired male (Central Institute of Korean Studies, n.d.). He taught the children Chinese characters and literature, letting them comprehend and memorise them through repetition (Choi, 2005).

The aristocratic children also studied in *Seowon* (Lee, 1984) or were educated by a private tutor or continued self-study to prepare for *Guageo*, a civil service exam. They normally started preparation at five and passed it in their late 30s (Lee, 1998). As *Guageo* was the only means that enabled social mobility (Park, 2009), many men focused on passing the exam and their parents or wives supported the family (Lee, 1984). *Guageo* had several levels of assessment and each guaranteed a different official rank. A limited number of applicants passed the high-level test and were allowed learning in *Sungkyunkwan*, the only public higher education institute (Lee, 1998). In sum, language learning was essential critical means for social success, though Confucius meant learning to be a method for finding an ego (Choi et al., 2007).

In the educational institutes, teachers were regarded as similar to parents and students were expected to obey them (Keum, 1980). This hierarchical relationship based on authoritarianism is revealed in *Sajeyudo Saducjeshin Jungdojikak* (師弟有道 師德弟慎 正道智覺), presented in the *Sa-Ja-So-Hak*, a book for children's learning about moral principles. It states that when a teacher teaches students with virtue, students have to learn discreetly and they then can recognize the righteousness wisely (Shin, 2011). Thus, teachers were ethical role models (Richey, 2008) and truthful and authoritative guides who help students become a sage (C. H. Shin, 2012). However, it seems that as Confucianism values the relational harmony (Li, 2006), the teacher–student relationship could be rather warm and supportive.

In the Confucian hierarchical structure and the patrimonial system, commoners could not easily accumulate wealth

(K. J. Kim, 2006) and their social mobility and voicing were also controlled (Kwon, 2007). Thus, they could not lead the Korean civilisation. Nonetheless, alongside the lead of the state and elites, Confucianism, with its own potential for societal transformation (Metzger, 1977) and its practical attributes that value material desire and development (Lee, 2007), fostered the civilisation and socio-economic development of Korea (K. J. Kim, 2006).

2.2 (Education) Education under Colonisation

English education started in the late 1800s, during the late Joseon dynasty, when modern schools were established by US missionaries and the state's open port policy was activated (Park, 2007). As the US was recognized as a developed capitalist country by Koreans, learning English was acknowledged as a way to promote modern civilisation and social advancement (Kang, 2007).

In 1910 the first modern Korean nation-state was colonized by Japan (Kang, 2007). Japanese became the official language so learning Japanese was essential for social success (Kang, 2007). English language learning was reduced in the curriculum, and this gave rise to many private English institutes (Kang, 2007). However, as the US missionaries who taught English were forced to move back to the US, there were few English teachers (Park, 2007). English language learning mainly relied on books from Japan, so Japanese English grammar, reading-centred learning, and the grammar translation method (GTM) were applied in Korea (Park, 2007). These have survived until today (Han, 2016; S. Kim, 2006; Nam, 2017).

3. State Formation, Modernisation, and English Education after the Liberation (until 1995)

3.1 Economic Growth, State Identity, and the Status of English

After liberating from Japan in 1945, the South was managed by the US, so South Korea pursued capitalist development (K. J. Kim, 2006). Democracy was adopted in Korea, which was mixed with its authoritarianism and bureaucracy based on Confucian values. With the need to maintain social order and security after the Korean War, a military government was formed assisted by the US (Yun, 2007). Thus, the state-centred social system could be combined with the Confucian hierarchy. This seems to have made the state a powerful regulator of the economy in the 1960s (K. J. Kim, 2006) and led to their economic growth and Confucian capitalism (Kwon, 2007). Confucianism was transforming and reconciled with capitalism, democratisation, modernisation, and Americanisation.

The entry of the US into the Korean War in 1950 confirmed its influence on the politics, economics, and (English) education of Korea (Yun, 2007). During the initial period of Korean state formation, the US temporarily announced English as the official language. Korean people with US degrees participated in policymaking and formed the dominant elite classes (Yun, 2007); English competence was essential for social success (Park, 2007). Their pro-American line was applied in forming the national curriculum. Thus, American English was considered as standard English (Yun, 2007) and modernisation as a process of Americanisation in Korea (K. J. Kim, 2006; Song, 2007).

3.2 The Development of National English Curricula (from the 1st to the 6th)

The directions of education were reframed within the policy regimes of the US. English-language learning was steadily encouraged alongside Korean economic development and their increased need for English communication in industries. People with PhDs in English education, literature, and linguistics from the US formed the basis of the English education system and participated in the development of the national English curriculum (Park, 2007).

From the preparatory stage (1946–1954) until 1997, national curriculum was reformed six times (Ministry of Education, Science and Technology [MEST], 2008). As the goals and content of the curriculum are based on the educational philosophy and national and social needs (MEST, 2008), the Korean national curricula reflect social changes by the US and Japan, and the changing needs for English and English education as well as the Confucian values. The main pedagogical principle in ELT during the preparation period was the GTM (MEST, 2008), influenced by the Japanese form-focused learning (Park, 2007). The GTM principles are partly in line with the Korean existing learning mode of reading, translating, interpreting, repeating, and memorising Chinese language. This attribute seems to contribute to the unwavering status of the GTM in Korean ELT (Han, 2016, 2022).

In 1954, the first national English curriculum was established and American English was adopted as standard English (MEST, 2008). The second one was produced in 1963 and lasted until 1974 (MEST, 2008). Then, as it was shortly after the end of the Korean War where immediate communication between multinational soldiers was necessary and Skinner's behaviourism was popular (Sunderberg & Michael, 2001), training in listening and speaking was stressed

through the audio-lingual method (ALM) that requires continual repetition (Park, 2007). The third curriculum was created in 1974 and used until 1981 (MEST, 2008). Based on the Bruner's cognitive learning theory, it emphasized the development of students' cognition and structural knowledge through English learning (Jin et al., 2002), while declining the GTM (MEST, 2008).

In the fourth period (1981–1988), influenced by structuralism, the cognitive approach, Chomsky's transformational generative grammar (Jung, 1998), human-centred education, and internationalisation, teaching English conversation skills and phonics through the ALM was encouraged (MEST, 2008). The fifth period (1988–1992) emphasized teaching verbal communication skills (MEST, 2008), but the communicative approach was not activated (Jung, 1998). Using the ALM and the GTM were still the general pedagogies (MEST, 2008). The sixth curriculum lasted until 1997, which shared a similar framework to that of the fifth. However, in the attempt to eliminate the GTM, it tried to adopt the notional and functional approach (MEST, 2008), which was initiated in Europe in the 1970s (Brown, 2000).

4. English Education in Contemporary Korea Since Globalisation (since 1995)

4.1 Globalisation and Changing Academic Culture

Going through social changes, marked by a mixture of Confucian culture, colonisation and nationalism, the Korean War, the US influence and Westernisation, democratisation and authoritarianism, and state-led capitalism, the identity of modern Korea has become complicated (K. J. Kim, 2006). Then, the state's globalisation policy in 1995 facilitated Korean people's engagement in international trade and national economic growth (Park, 2007). However, to overcome the economic crisis in 1997, Korea adopted neoliberal ideas with the suggestion of the International Monetary Fund (Lee & McNulty, 2003). By applying the neoliberal principles such as maximized competition and state control over every domain, the government has actively got involved in controlling the systems of economics and education since 1997 (Ji, 2011) and encouraged learner competition in education. Neoliberal ideas have been strengthened by the managerialism based on the bureaucratic structure (Yi, 2011) and Confucian authoritarianism of Korea (Lee & Lee, 2007).

Recently, a postmodern tendency (K. J. Kim, 2006; Kwon, 2007) and post-authoritarianism (Jung, 2012) seem to emerge and unconditional obedience to authority decreases. Teachers pursue practising communication-based teaching practice (Park, 2005). Constructivism seems to be becoming a dominant teaching and learning theme in modern Korea, as in Western mainstream education (Han, 2007). Thus, the combination of pre-modern tradition and a selective Western modernity (K. J. Kim, 2006) constitutes the attributes of Korean academic culture.

4.2 Education Fever and the Growth of English Education

The national English education policies were framed within the idea that the population's English proficiency is essential for the state's economic growth in the globalisation era (Ministry of Education [MOE], 1997). Korean financial crisis in 1997/98 triggered the need for people who can participate in the neoliberal market with English competency (Uhm, 2007). Political, economic, and cultural influences from the US (Lee, 2008a) and the development of information and communication technology (ICT) also facilitated English education and the paradigm change of the English curricula (M. H. Kim, 2018).

However, Koreans' great concern about (English) education seems to be driven by their social system in which high (English) test scores guarantee social success (Booth, 2018). This concern is expressed as 'education fever'. This represents Korean parents' desire for their children's social success through academic credentials (Kim et al., 2005). High English test scores enable the achievers to be placed in higher education and to apply for a job while the scores do not represent their general work ability (note 2) (Choi, 2007). Thus, English competency/scores has become a social capital (Song, 2007), which reproduces social class in contemporary Korea.

4.3 The Seventh National English Curriculum and English Pedagogy at the Secondary Level

In 1997, the Seventh National English Curriculum was implemented based on the state's globalisation policy and constructivism. The general goal of the high school curriculum was to advance students' English communication competence, understanding of different cultures, and introducing Korean culture globally (MOE, 1997). For these pursuits, the curriculum adopted a communicative language teaching (CLT) approach (MOE, 1997) and aimed to develop students' communicative competence, such as grammatical competence, discourse competence, sociolinguistic competence, and strategic competence (Canale & Swain, 1980). However, because of misconceptions of CLT and the insufficient guidance on its application (Flattery, 2007), CLT has been often confused with teaching English in English (Han, 2016, 2017), memorising dialogue (Beaumont & Chang, 2011), or teaching English

speaking (Lee, 2008b) in Korea.

The seventh curriculum employed the learner-centred approach (MOE, 1997). Thus, it pursued more democratic and constructivist ideas and applying methods for learner-centred communicative lessons, cooperative learning, and task-based learning. This represents a transformation in the teacher–student relationship and pedagogic practice in Korea. Level-differentiated learning was also pursued for in-depth and supplementary learning (MOE, 1997). Teachers were required to prepare various activities, individual worksheets, and assignments (MOE, 1997). Plentiful authentic activities were required to improve learners' communicative skills, but most textbooks consisted of simple drills in unnatural settings and did not include materials for group activities (Flattery, 2007).

4.4 The State English Education Reinforcement Policy

Based on neoliberal ideas, Lee's government (2008–2013) encouraged pragmatism and competition in every area including English education. Their conception of pragmatism meant teaching and learning oral communication skills (Lee, 2010; MEST, 2008). They ascribed people's low speaking competency to the low quality of public English education (Kim, 2008). Thus, the Ministry of Education, Science, and Technology (MEST) suggested the State English Education Reinforcement Policy (Kang, 2008). The state expected this would reduce people's private tuition costs in English learning (Lee, 2008b), which reached approximately 15 trillion Won (7.5 billion pounds) (Lee, 2008a) as well as enhance students' speaking competence (Lee, 2008b). The key contents were (a) practising English immersion education particularly in primary schools (Lee, 2008b), (b) teaching speaking through teaching English in English (Seong, 2010), (c) diversifying English teacher recruitment methods, and (d) developing National English Ability Test. However, most of these policies were discarded in the next government.

4.5 Revisions of the Seventh Curriculum and Main Principles

The following governments did not produce education policies that require significant changes of the English education system. They revised the seventh curriculum in 2007, 2009, and 2015 (National Curriculum Information Center [NCIC], n.d.). The 2007 Revised National English Curriculum maintained the general principles of the seventh curriculum, and the 2009 Revised National English Curriculum produced e-textbooks available on smart devices (MOE, 2017). The 2015 Revised National English Curriculum, which is currently being implemented, focuses on the development of the students' competencies in communication, self-management, community, and knowledge and information processing (MOE, 2015). It seeks to develop learners' communicative competence and lead them to develop good civility, creative thinking skills, and global citizenship. Specifically, it aims to improve learners' four language skills, interest and confidence in learning and using English, inclusive attitude towards different cultures, and ability in value judgement. This curriculum broadly considers learners' development of language competence, (meta)cognition, academic motivation, autonomy, sociality, personality, and cultural sensitivity, which reflects the reinforcement of learner agency in education. In this curriculum, teaching listening and speaking is the focus in primary levels, and reading and writing are the focus in secondary levels (MOE, 2017). The general principles are summarized as follows (MOE, 2018).

- facilitating learners' motivation and confidence in English-language learning
- considering learners' English competencies and cognitive and affective features
- improving learners' communication, information processing, and self-management skills
- facilitating learners' self-directed learning by means of learner-centred tasks
- applying cooperative learning, group work, problem-based learning, and task-based learning for interactive classes
- employing a variety of materials and activities
- teaching in combination of speaking, listening, reading, and writing skills
- letting learners use English as much as possible
- helping learners to build their competency in creative thinking
- having learners experience personality education
- letting learners learn about various cultures.

To decrease domestic expenditure on private English education, in 2018 the MOE changed the relative evaluation of English subject in the Korean Scholastic Aptitude Test (KSAT) into the criterion-referenced test (Jung, 2018). This

change seems to contribute to lessen students' burden for English-language learning, but it is often assumed as the rationale of students' demotivation in English learning (Jung, 2018).

5. Reflection on the Current Pedagogical Context of Korea for Curriculum Improvement

As reviewed in the previous sections, Korean society has been formed on the bases of a Confucian, hierarchical, and authoritarian cultural background, as well as the systems of managerialism (Kim, 2006; Kwon, 2007; Lee & Lee, 2007; Yi, 2011), and has grown combined with the values of capitalism, neoliberalism, democracy, post-authoritarianism, and learner-centredness (Jung, 2012; K. J. Kim, 2006; Kwon, 2007; Moberand, 2018). As a result, several inconsistent values co-exist in contemporary Korea. Thus, while it is reported that rigidity in teacher-student relationships is lessening, the classroom atmosphere remains rather teacher-led than student-led (DeWaelche, 2015; Han, 2022; S. Shin, 2012), and the student-centredness in (English) education is likely to mean giving students what they want (to learn) instead of having them construct knowledge themselves (Han, 2016).

Over the process of modernisation as well as in ancient societies such as in Silla, Goryeo, and Joseon, elitism and selectionism by test scores have been dominant, so English education has been focused on teaching students to achieve high test scores. This tendency is commonly observed in English-language classrooms in Korea and even in East Asian countries that share a similar cultural background (Chen, 2014; Pham, 2013; Yamaguchi & Ueno, 2015). Thus, despite ten curriculum reforms for the establishment of learner-centred communicative classes, teacher-led, GTM-based, text-based, and test-preparation lessons are still prevalent (Han, 2021b; S. Kim, 2006; Nam, 2017). This seems to have become the current Korean academic culture since, in their ancient societies, the Chinese language was taught in a teacher-led way and tested for selection and better social status (Choi, 2005; K. J. Kim, 2006; Kwon, 2007). Therefore, even with some endeavours for eliminating authoritarianism and increasing learner-centredness in education, it still seems unfeasible to reliably practise lessons that are communication-based, interactive, democratic, and learner-centred and that facilitate students' creativity, information-processing ability, autonomy, self-management, metacognition, sociality, and cultural sensitivity (MOE, 2015, 2017, 2018), as the latest Korean national English curriculum pursues.

Nevertheless, these limitations do not mean that the reform of the English-language curriculum is worthless or impossible. Rather, they imply that a new curriculum needs to provide more specific procedures by which teachers and students recognise (English) education as a way of developing individual potentials, and experiencing constructive, process-centred lessons, not for selecting high achievers through competition. For Korean society to reconcile its existing values of Confucianism and rather vertical cultural tradition and social atmosphere with the values required in the new era – in which creative, flexible, and metacognitive people are required – the specific direction and method of a new curriculum should be discussed with comprehensive considerations of its social and global needs and changes. Development of a curriculum through such considerations will also enable Korean students to reduce the burden of language learning and enjoy the learning process (Schleicher, 2018).

6. Considerations to Improve the Current Curriculum in the Era of the Fourth Industrial Revolution

The new era requires improvement of the current national English curriculum. While the latest curriculum aims to develop several attributes of learners that they are supposed to be equipped with for national and personal competitiveness, other various competencies are recently suggested globally and nationally as essential in the era of the fourth industrial revolution (4IR). In the 4IR, which is the convergence of digital, biological, and physical innovations built on the digital technologies, artificial intelligence, big data, Internet of things (IOT), virtual reality (VR), augmented reality (AR), robotics, 3-D printing, and genome editing are in daily use, which brings about substantial changes in every socio-economic, industrial, and institutional system as well as individual lifestyles (Schwab, 2016, 2018). In this era, the person who can address complex problems through logical, critical, and creative thinking; an interdisciplinary perspective; digital literacy; collaboration; and communication is to be welcomed (The five-year plan for Moon's government operation, 2017, cited in Kim, 2019b; Lee, 2020). This means that language learning needs not be limited to enhancing students' literacy, and approaches to (English) education, roles of teachers and learners, their relationship, teaching and learning materials, pedagogic methods, and classroom environment should also change.

Thus, the Korean government introduced the I-Korea 4.0 policy as a plan for building a people-centred 4IR and enforcing the national capacity for technology (Presidential Committee on the Fourth Industrial Revolution, 2017). The MOE produced the plans for adopting artificial intelligence technologies in school curricula in 2019, 2020, and 2021 (Kim, 2019a). However, such plans do not involve specific measures for transforming English teaching and

learning procedures in schools to be more democratic, learner-centred, interactive, and constructive. Therefore, based on the consideration of the potential influence of the 4IR on school English education and the attributes of the Korean teaching and learning culture, the following strategies can be suggested as critical components for improvement of the Korean national English curriculum.

6.1 Adoption of New Software and Change of English Teacher Roles

While the Korean MOE has tried to reject the GTM since the 1970s and activate CLT since the late 1980s, the GTM or text-based lessons are still prevalently practised in a teacher-led way for students' preparation for the KSAT (S. Kim, 2006; Nam, 2017). In addition, given that many of the current Korean teachers learned English through the GTM when they were students and have been accustomed to using it (Han, 2016, 2021a), driving the GTM out of the English classroom seems difficult. Nevertheless, the application of various smart programmes and devices based on AI programmes can increase the possibility that teachers exercise learner-centred lessons and expand their pedagogic roles to improving students' different abilities, as students themselves can develop their linguistic knowledge and basic language skills with the help of the new programmes beyond time and space (note 3). Thus, English education in schools can focus more on improving personality, cultural sensitivity, collaboration and social skills, communication and negotiation skills, value judgement of information, and critical and creative thinking of students, which are essential learner capabilities required in both the era of the 4IR and the latest curriculum. Teachers can also concentrate on developing new pedagogic materials and activities or giving students vocational guidance.

Recently, Google translator, Naver Papago, and Systran, which are based on artificial neural network machine learning to translate sentences using big data (Kim & Kim, 2017), real-time interpreter (Jung, 2018; H. D. Kim, 2018; Lee, 2020), and textbooks containing VR or AR (M. H. Kim, 2018) are partially used in state school English classes in Korea. ALICEbot, which is a chat bot, and Irobi can also be employed to improve students' English writing competencies (Kim & Kim, 2017). Different AI programmes or robots, which have intelligence similar to humans so they can solve given problems based on automation, such as the technologies of automatic speech recognition, natural language parser, and speech synthesiser, are being developed and sophisticated, and they are expected to receive and evaluate learners' language outputs and respond to them with modified feedback (Lee, 2019). This will enable students' customised language learning in and outside the classroom.

There are some concerns that these technologies can reduce students' motivation in English-language learning in schools and jeopardise teachers' position (Ahn, 2018; Jung, 2018; Lee, 2020; Park et al., 2020). However, this concern rather seems a signal that demands the noteworthy change of the roles of public English education and English teachers and their students. Particularly, teachers need to be providing, guiding, facilitating, and assisting students' learning, instead of transmitting a great deal of knowledge. That is, the teachers who can teach the various competencies and skills suggested above are to be metacognitive teachers. Since development of such competencies and skills means development of students' metacognitive competencies, such as monitoring/comparing their personal and social values and regulating them based on analytical, comprehensive, and flexible perspectives, metacognitive teachers can educate their students to have such metacognitive competencies (Hiver & Whitehead, 2018). Metacognitive teachers can actively manage their own pedagogical problem-solving processes through definition of the problems based on the analytical lens, development and application of new strategies, real-time evaluation of their own practices and learner responses, and learning from pedagogical experiences (Han, 2021a, 2021b). They do not focus on giving knowledge to their students as current Korean English teachers do. Such teachers know the significance of critical awareness of their own cognitions, emotions, actions, and contextual requirements, and they make negotiations among them; thus, they can lead their students to manage their own learning processes based on similar protocols and help them construct their own knowledge and learning plans themselves. This implies that noteworthy transformation of teaching and learning is necessary in Korea in which teachers have been at the centre of the teaching and learning process. Therefore, the practical procedures to educate both teachers and students to be pedagogically metacognitive, and thus to be autonomous educational agents in the new era, need to be specified in the current and the next curriculum and related policies.

6.2 Focus on Enhancing Problem-Solving Skills

Korean students can develop their metacognitive skills while using metacognition in English-language learning. One such method is employing problem-based learning (PBL) in English education. People in the 4IR are expected to have high qualities in complex problem-solving, critical thinking, creativity, management, collaboration, emotional intelligence, judgement and decision making, negotiation, and cognitive flexibility (Ahn, 2018; World Economic Forum, 2016). Thus, instead of producing knowledgeable or well-memorising persons, education is supposed to develop people who can address complicated, unexpected, ill-structured, real-life problems in analytical, creative,

and interactive ways. Experiencing problem-solving processes, students can naturally develop such competencies as well as improve language skills, and even learn to think and act in English.

In PBL, which is an innovative, self-directed, collaborative approach (Ansarian & Lin, 2018), students analyse a given problem, identify knowns and unknowns, form hypotheses and strategies, and learn new knowledge by the application and evaluation of these (Hmelo-Silver, 2004; Mathew-Aydinli, 2007). In these processes, they cooperatively compare what they know and what they perceive, search for what they should know, judge the value of these, and try to determine the best solution through knowledge sharing and multiple meaning negotiations (Han, 2021a, 2021b). In addition, the discussion-centric quality of PBL can contribute to students' language learning (Ansarian & Lin, 2018). Thus, through PBL, students can enhance their various cognitive and metacognitive skills as well as competencies in collaboration, communication, and self-directed learning in social ways (Lee, 2017; Tan, 2003). This way, Korean English learners can deviate from repeating and memorising knowledge for test-preparation and focusing on competition with each other for high scores or ranks in English tests and proceed to enjoying knowledge exploration and construction. Therefore, by adopting PBL in the English curriculum in the secondary level or below, Korean students will have chances to develop competencies essential in the 4IR that their AI robots may not easily help them develop (note 4).

Then, teachers as facilitators can help their students construct knowledge themselves (Barrows, 1994). By applying real-life problems, such as matters related to climate change, environmental pollution, cultural difference and inclusiveness, career selection, change of labour market in the future society, and ethics in the 4IR, which do not have a single solution (Ansarian & Lin, 2018), teachers can lead their students to immerse themselves in the learning process with interest (Park, 2019), realise multidisciplinary lessons, and improve several qualities of the students that their future society and current curriculum are oriented towards. In addition, in this process, Korean English teachers can be outside their traditional role of a knowledge transmitter and familiarise themselves with the role of a learning assistant and the learner-centred democratic academic culture.

Meanwhile, it is observed that recently Korean English teachers regard learner-centred lessons as positive, but they are not skilled in implementing such lessons with various materials and activities and integrating content, materials, and activities (Han, 2021b; Kim & Kim, 2017). Thus, professional development programmes seem necessary to support teachers to organise and practise problem-based English language lessons including meaningful content and materials. Through relevant professional learning, teachers can recognise their responsibilities as professionals who should context-sensitively interpret the curriculum and design negotiated pedagogies. In addition, while preparing and running learner-centred PBL lessons, Korean teachers of the English language will get out of their accustomed method of teacher-led GTM and learn to transform their roles and identities in English education to be tailored to the 4IR.

7. Conclusion

This study investigated the national English curricula, social and academic culture, roles and positions of (English) teachers and students, and their changes in Korean history. Based on this exploration, the author reflected on the pedagogical context of Korea and discussed considerations to advance the current Korean English curriculum and where the next curriculum should be headed in the era of the fourth industrial revolution (4IR). Given that the 4IR welcomes people who have high qualities in complex problem-solving, critical thinking, creativity, management, collaboration, decision-making, and negotiation, significant changes in teacher and student roles and teaching practice are needed. The Korean pedagogical background of teacher-led practice, text or grammar-based learning, test-preparation lessons, and pursuit of competition in English education should not operate as obstructions for these changes. Thus, the author suggested the application of AI programmes and PBL for the realisation of more learner-centred, democratic, and constructive learning.

Recently, studies of the reflections on the current national English curriculum and its improvement have been performed by the Ministry of Education (2021), the Korea Institute for Curriculum and Evaluation (Pae & Joo, 2021), and several lecturers in higher education institutes (Lee, 2022; No, 2021). The author expects that their considerations and suggestions are fully based on the comprehensive understandings of the academic culture, its limitations, and changing social needs of the current Korean society, and the discussions in the current study also contribute to the improvement of the national English curriculum alongside such institutional understandings. These speculations would provide some of the rationales for other East Asian countries in similar social and educational conditions to consider for their next curriculum reform.

Conflict of interests

No potential conflict of interest was reported by the author.

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Notes

Note 1. Confucianism was mixed with Taoism in China; integrated with Shintoism and a localised Buddhism in Japan in their feudal system; and mixed with Buddhism and Shamanism in Korea (K. J. Kim, 2006). These different religious backgrounds influenced the establishment of the countries' different cultures, social developments, identities, and education (K. J. Kim, 2006).

Note 2. The correlation between English-language competency and labour productivity or the exportation rate of ICT service or personal incomes cannot be ignored in global charts (Kim, 2019c).

Note 3. Teachers need to learn how to handle and apply different ICT tools and programmes in English learning (Kiddle, 2013). Studies show that Korean English teachers are aware of the significance of the application of technologies in ELT, but they have not been trained in the specific procedures to employ them (Kim & Kim, 2017; Lee, 2020; Park et al., 2020).

Note 4. Many Korean lecturers in the 2017 Global Industry-University Collaboration Forum also shared positive ideas about the practicality and necessity of applying PBL in higher education (Lee, 2017).

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