

# Teacher education for Teaching English to Young Learners (TEYL): The scope for the integration of data-driven learning

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## Abstract

In 2013, Japanese Ministry of Education (MEXT) announced a reform of English education in order for future generations to be prepared for the increasingly globalized world (MEXT, 2013). Consequently, it is required for universities that offer the official teacher training courses to review the course contents in order to correspond to the changes suggested in the plan. Teacher training courses for primary English education is no exception, as the reform contains changes in English education at primary level from 2020 (MEXT, 2013; 2017a; 2017b). Since it has been reported that teacher factor plays an important role in learning outcome of young learners (YLs) (e.g. Aukrust 2007; Graham, Courtney, Marinis, and Tonkyn, 2017), it is obvious that the teacher education at university level should help prospective teachers to be prepared to teach English at primary schools. This paper discusses the possibility of incorporating data-driven learning into the teacher training courses in order to deepen the prospective YL teachers' understanding and awareness of English language usages which are required in their future teaching context.

*Keywords:* EFL, young learners, teacher education, corpus-based approach to language learning, Data-Driven Learning (DDL), material design

## Introduction

Ministry of Education, Culture, Sports, Science and Technology in Japan (MEXT) issued a plan of reform concerning English education in 2013. The new course guidelines are issued in 2017 (MEXT, 2017), and it became official that 'Foreign Language', with a predominant focus in English language, is going to be introduced as a compulsory subject for Grades 5 and 6. Along with this, MEXT also decided lowering the starting of 'Foreign Language Activities' to Grade 3, following the global trend of

earlier start for foreign language education. Academic years 2018 and 2019 are regarded as transition periods in which practitioners are required to be ready for the new curriculum from 2020.

The reform plan by MEXT (2013) has effects on different areas regarding primary education. Obviously, it is an added challenge for current practitioners, since the plan includes the decision on the introduction of 'Foreign Language' as a compulsory subject. This change in policy also has an influence on teacher training courses offered at university level. It is required for universities that have the official teacher training courses to review their course contents in order to be prepared for the change suggested in the plan. In July 2017, the new course of studies for 'Foreign Language Activities' (MEXT, 2017a) and 'Foreign Language' (MEXT, 2017b) were issued. The content of the course of study for 'Foreign Language Activities' (for Grades 3 and 4) (MEXT, 2017a) is somewhat similar to that of the 'Foreign Language Activities' (for Grades 5 and 6) (MEXT, 2008). However, with regard to the new subject 'Foreign Language' (MEXT, 2017b), which is going to be introduced from 2020 for Grades 5 and 6, the difference is evident in the description of its aims. The following three main aims are mentioned in the course of study for 'Foreign Language' (MEXT, 2017b: 137):

- 1) to attain basic skills for communication through listening, reading, speaking and writing activities, by drawing on the basic knowledge about foreign language (e.g. sounds, vocabulary, expressions, structures, how language works and the differences between English and Japanese)
- 2) to foster basic skills in communicating with others according to the aims or situational contexts through listening/talking about familiar topics, reading or inferring the meaning of familiar words or expressions; and communicating one's idea or feelings through writing or speaking while paying attention to the word order; and
- 3) to deepen pupils' understanding of culture behind the foreign language use, while fostering the independent attitude towards communication with consideration of others.

From the above, it is clear that 'Foreign Language', set as a compulsory 'subject', aims to focus more on the pupils' attainment of 'basic knowledge' about foreign language and 'basic skills' required for communication (MEXT, 2017b: 11). Considering such aims, it is necessary

for the practitioners know how to help pupils achieve such aims through their classes. Though English activities has been a compulsory element of primary education for sometime now, the surveys indicate that teachers are not confident in teaching English (Benesse, 2007). This situation seems to suggest the need for further discussion, especially with regard to 'the language component of teacher training courses' (Hales, 1997: 217), and how teacher training courses can prepare for prospective teachers in teaching English to young learners.

Research into foreign language education with young learners reveal that teacher factor, especially teachers' language proficiency and attitude towards the language they are teaching, tend to influence young learners' learning outcome (e.g. Graham et al., 2017; Muñoz, 2006; Unsworth, Persson, Prins, and De Bot, 2015). Needless to say, better understanding of English indeed benefits practitioners in conducting their English lessons and this is one of the aspects that need to be considered in the teacher education at university level in Japan. Along with the methodological aspects of teaching, it can be argued that prospective teachers need to learn the English language in depth, as their understanding of language certainly will contribute to their teaching in future. Studies in corpus-based language teaching report that the direct exploration of corpora helps learners to be more aware of language usage (Boulton, 2008; Johns, 1991; Lee, 2006; 2011). Therefore, this paper explores the possibility of incorporating the use of corpora in the teacher education, and how such incorporation may be achieved in order to help promoting prospective teachers' language awareness and pedagogical skills they need for their future teaching.

The first part of this paper reviews the issues related to teacher education in teaching English to young learners (TEYL) and young learners' foreign language learning. This is followed by a discussion of corpora and language teaching, with a special focus on the data-driven learning (DDL). The section following this discussion deals with the way corpus based language teaching may be incorporated in the tasks in teacher training courses in order to promote language awareness among prospective YLs' teachers. The final section presents a summary with suggestions for future research.

## Primary English education and teacher training

The implementation of foreign language education in the primary

level at an earlier age seems to be a global trend (Copland, Garton, and Burns, 2014; Muñoz, 2014; Rixon, 2013). The MEXT's reform plan 2013 also includes the suggestion of lowering the introduction of 'Foreign Language Activities' to Grade 3, instead of the current introduction year (i.e. Grade 5). However, as Cameron (2003) reminds us, starting early may not lead to an automatic improvement in L2 language proficiency unless the remaining challenges of both teacher education and secondary ELT are dealt with along with the expansion of TEYL (ibid: 105). Cameron's view is also valid for Japan, and teacher education remains to be one of the biggest challenges in the current situation.

In the early implementation of 'Foreign Language Activities' (MEXT, 2002a; 2003), schools which started the practice mainly relied on ALTs (assistant language teachers who are native speakers of English) to carry out such 'English activities' (Shiozawa, 2005: 66). This situation arose partly because there was a lack of Japanese teachers who were experienced in teaching English at primary level, for primary teachers had never had the responsibility for teaching English until the Action Plan was issued in 2003. In the context of a training system for TEYL teachers in Japan, there has been no official course or qualification authorized by MEXT. Several companies or organizations such as NPOs, local education boards, and universities have been providing workshops and teacher training courses for people who wish to teach at primary level. There are some teacher training programs available for teaching for young learners in private sector. Although these organizations often claim their qualifications are relevant for teaching English to YLs, their certificate is authorized neither by MEXT nor the local educational boards, which means there is no guarantee for successful participants to be able to work at state-funded primary schools.

A survey reports that 75 percent of the teachers surveyed feel that they are not confident in teaching English during 'Foreign Language Activities' (Benesse, 2007: 8-9). More recently, Aeon (2017) reports that nearly 85% of the primary teachers surveyed answered that they can only spare less than an hour per day for English learning. Teacher education is an issue which should have been addressed more carefully before the implementation of English as a compulsory component of the primary curriculum. The criteria for appointing English teachers at primary level may also be in need of modification.

It has been a decade and a half since the implementation of Action

Plan, and more and more primary teachers are required to be involved in teaching English. English language has been taught through 'Foreign Language Activities' from 2011 as a compulsory element, under the course of study issued in 2008, for pupils in Grades 5 and 6. As mentioned earlier, from academic year 2020, Japanese Ministry of Education decided to formally introduce English in 'Foreign Language Activities' for pupils in Grades 3 and 4, and 'Foreign Language' as a subject for pupils in Grades 5 and 6 (MEXT, 2013). As a result of the initiative suggested in this plan (MEXT, 2013), the number of teachers who are going to be involved in teaching of English will be doubled, if not more. Local educational boards have started to take measures against the shortage of teachers with English ability. For instance, according to the announcement regarding the results of teacher employment examination in 2017 (MEXT, 2017d), some local educational boards started to give priorities to the candidates who hold high scores in English tests such as TOEIC or STEP. It is clear that having higher English proficiency will also be an advantage for prospective teachers in their teacher employment examination.

The reform plan (MEXT, 2013) includes the decision of lowering the starting grade of 'Foreign Language Activities' (i.e. from Grade 5 to Grade 3). Such earlier start of foreign language education seems to be a worldwide trend and the starting age of implementation can often be the focus of discussion (Muñoz, 2014; Graham et al., 2017). Muñoz (2011: 130) points out that 'trusting young age of learning with the burden of learning success is clearly not enough'. In the context of Dutch children learning English, Unsworth et al. (2015) also show that both time spent on language lessons per week and teachers' language proficiency had an impact on the test scores examining the development of grammar and vocabulary of young learners (YLS). Graham et al. (2017) investigated the factors influencing YLS' foreign language learning outcome, and report that teaching and teacher factors (i.e. especially the primary teachers' proficiency in the target language, and amount of teaching time) did have an impact on the YLS' learning outcome. Graham et al. (2017: 954) echo the view expressed by Muñoz (2011), and claim that young learner's learning a foreign language require 'plenty and high-quality input, the amount of exposure that they receive in instructed settings is of prime importance, more important than the age at which instruction begins' (Graham et al. 2017: 954). The factors such as the quality of input and amount of exposure (Nikolov, 2009), teachers' language competence (Szotpwicz, 2009) are often

discussed in relation to teacher training (Mihaljević Djigunović, 2009), and reported to have an impact on learners' learning outcome (Aukrust 2007; Muñoz, 2006; Unsworth et al., 2015).

In discussing the quality of input for learners, it is also important to consider the kinds of teaching materials that practitioners employ. Along with the revised course of study (2017a; 2017b), MEXT also issued a guidebook on teacher training for conducting 'Foreign Language Activities' and 'Foreign Language' at primary level (2017c). Judging from the descriptions in this guidebook (2017c), teachers are expected to supplement materials which are suitable for pupils and the content of each lesson. It is encouraged to use songs, chants (2017c: 105) or storybooks (2017c: 106-107) together with the new materials issued by MEXT (i.e. *Let's Try 1 & 2; We Can! 1 & 2*).

In the light of above perspectives, it is clear that better understanding of English will indeed benefit future practitioners in their teaching. Moreover, it is important for them to have the skills in choosing and supplementing appropriate materials in order to promote pupils' positive learning outcome. However, it must be noted that the demands for teacher training course especially for primary teachers are rather heavy, since there are many other subjects in which they need to receive training (see MEXT, 2014a; 2014b). It would be the task of teacher trainers at university level to devise ways to provide opportunities for prospective teachers to achieve attaining necessary skills within the limited time. Though the preparation of such course will remain a challenge, this issue is well worth considering further.

## Corpora and English language teaching

Nowadays, along with the advances of information technology, different kinds of corpora are being compiled. It is also becoming increasingly easy to access large electric databases of naturally occurring spoken and written language through web-based interfaces (e.g. *British National Corpus - BNC; The Corpus of Contemporary American English - COCA*). In addition, many concordance software packages are created and made available, which enabled wider use of corpora in language research across various disciplines and genres. Such development in corpus linguistics, according to Hunston (2002: 137), has 'two major effects upon the professional life of the language teacher'. Firstly, Hunston (ibid: 137;

213) points out that the new ways of describing a language based on corpus evidence can change the teaching contents that language teachers deal with (e.g. 'units of meaning' by Sinclair 1991; 'semantic prosody' by Sinclair, 1991; Louw, 1997; 'pattern grammar' by Hunston and Francis, 1998). Secondly, Hunston (2002: 137) suggests that the exploitation of corpus can also have an effect on the design of teaching materials and syllabi, or it can also offer the basis for new teaching approaches (e.g. Hunston and Francis, 1998; 1999). In addition, studies using learner corpora (i.e. collection of language produced by learners; e.g. *International Corpus of Learners' English - ICLE*, see Granger 1998) or the corpora which include varieties of English (e.g. *Nottingham International Corpus - NIC*; *Cambridge-Nottingham Corpus of Discourse in English - CANCODE*) also offer useful information about L2 learning and language use in different genres. The findings from such corpora are essential in informing the design of syllabi and materials (Carter et al. 1998).

The direct use of corpora in language teaching contexts is another contribution of corpus linguistics. There has been a number of research conducted with regard to the use of corpora in classrooms as language resources (e.g. Boulton, 2007; 2008; Chujo et al., 2013; Cresswell, 2007; Lee, 2006; 2011; Louw, 1991). This direct exploration of corpora by learners is what John (1991: 2) advocated as 'data-driven learning (DDL)'. This approach is claimed 'to have many advantages, including fostering learner autonomy, increasing language awareness and noticing skills, and improving ability to deal with authentic language.' (Boulton, 2008: 582). In addition, DDL approach is considered as a 'kin to the idea of consciousness-raising' in a sense that it promotes inductive learning, allowing learners to find the language rules by exploring the concordances in corpora (Adolphs, 2006: 109).

The contribution of data-driven learning is reported in different English teaching and learning settings. For instance, Boulton (2008) investigated the effectiveness of DDL and reports that 'all levels of students showed improvement' (ibid: 591) in the use of language items (i.e. phrasal verbs) focused through DDL activities. He further argues that his findings 'provide further evidence of learners' ability to detect patterns, which is an absolute prerequisite for such an approach' (ibid: 592). Chujo, Oghigain, Anthony and Yokota (2013) used a corpus of beginner level English (CoBLE) which includes texts from standard textbooks, and designed to focus on the 'remedial-level grammar items' (ibid: 85). In their

actual teaching context employing DDL activities, they also used a parallel corpus tool, AntPConc (Anthony, 2012), which enabled to show both English and Japanese concordance outputs to learners during the DDL activities. Chujo et al. (2013: 85) report that the use of DDL together with the parallel concordancer was effective in teaching grammar, showing that students gained significant improvement in the post test after the DDL activities. In addition, Kennedy (1991: 110) also points out 'although the most comprehensive grammar books and dictionaries have already provided the full information of grammatical functions, the DDL provides a statistical aspect of linguistic description to both support and contradict learners' intuitions about the use of language'.

Despite such positive aspects reported about the use of DDL approach in language classrooms, there seem to be somewhat limited uptake of DDL in EFL education (Flowerdew, 2015). This may also be due to the lack of awareness or the recognition of corpus linguistics among language practitioners. As expressed by Osborne (2004: 252), '[u]nless corpus examples are filtered in some way... many contexts are likely to be linguistically and culturally bewildering for the language learner', and selecting which corpora to use for DDL may be another challenge with language teachers without having the background in corpus linguistics. As Römer (2008) rightly points out, it is the task of corpus researchers to "spread the word" about corpora and inform teachers about what is already available (e.g. online corpora, corpus-based materials and reference works, collections of data-drive learning exercises)" so that the practitioners can benefit from the development in this discipline.

Overall, research reports the effectiveness and benefits of DDL in EFL settings in facilitating learners' consciousness of pattern and lexical items (Lee, 2006; 2011; Boulton, 2008). Since it has also been strongly encouraged to include 'language awareness' as an essential component of teacher education (James and Garrett, 1992; Wright and Bolitho, 1993), the employment of DDL as a part of language teacher education seems reasonable. Considering the value of noticing or consciousness-raising in acquisition research (Ellis, 1997), learning through DDL could contribute to promote prospective teachers' awareness of English usage. It would be worth considering the application of DDL in teacher training which is going to be discussed in the following section.



## Incorporation of corpus-based learning in teacher education

Many researchers (e.g. Block 1991; Harwood 2010; Hutchinson and Torres, 1994; Tomlinson 2003) state that syllabus and material design is one of the important components of teacher training programmes. This is another aspect of teacher education which has been overlooked so far in Japan, but should not be ignored, considering how the content of a syllabus can be put into practice by teachers. Although most teachers may not need to (or, indeed, have the authority to) establish a syllabus from scratch, knowing about the origin of different syllabuses helps to give them insight into what they are doing, and make adaptations to the material they are given to work with as suggested by Brown (1995:14). In terms of material design, research suggests (e.g. Tsui, 2003) that novice teachers often find it difficult to adapt materials to suit learners' individual needs. Block (1991) suggests that material design is part of the responsibility of each teacher who needs to be accountable for what happens in their class. It is necessary for teachers to be equipped with the ability to rearrange the content or materials in order to adapt them to the needs of learners (Samuda, 2005: 235) as, clearly, they are in the best position to assess the individual requirements of their own students. Therefore, enabling them to contextualize the language in a more accessible way for learners would be another important aspect in teacher education.

Nevertheless, considering the limited time affordable for teacher training course for primary teachers mentioned earlier, one possible way could be incorporating DDL with the tasks of material design. Such incorporation of DDL in materials design could provide prospective teachers not only the opportunities to 'notice' patterns of language, but also to experience the pedagogical skills necessary for their future teaching (i.e. designing materials suitable for a class and its objectives).

While there are a number of readily accessible corpora available, the appropriateness of such corpora for this particular learning context is another issue. There are some attempts made in creating corpora in relation to Japanese TEYL, which are used for the analysis of language used in textbooks published for young learners (Fujiwara, 2010) or for producing English vocabulary wordlists for primary school children (e.g. Chujo and Nishigaki, 2004; Chujo, Oghigain, Uchiyama, and Nishigaki, 2011; Ishikawa, 2007). Chujo et al. (2011) used a corpus of ten picture dictionaries and spoken section of CHILDES (Child Language Data Exchange System)

in order to identify the vocabulary suitable for young learners' everyday usage. Using such existing and readily available corpora could be one of the possible options, however, one attention must be paid in terms of the characteristics of data included in those corpora. It is often pointed out that the language usages observed in textbooks are somewhat contrived (e.g. Gilmore, 2004) and textbooks often include created dialogues which does not reflect the reality of naturally occurring language. Moreover, the focus on wordlists also recalls the notion of de-contextualised list of words, and with such focus, phraseological information could be dismissed. One of the advantages of the direct exploration of corpora in DDL approach is 'improving ability to deal with authentic language' (Boulton, 2008: 582), therefore it might reduce the positive effects of DDL approach if the corpus only contains the textbook written for children or word-based data.

Clearly, further consideration is required in deciding the content of a corpus, for the purpose of DDL with prospective teachers aiming to promote their language awareness as well as to be used as a source of materials. It can be argued that it is necessary for such corpus to include a collection of both textbook materials used with children, and authentic materials which are created with young learners in mind for their general use. Having the latter is important in DDL, as they add extra usages (e.g. phraseological information, rather than single word presentation). Moreover, having more authentic data other than textbook will give teachers opportunities to compare the usages between them and they may be able to add some accessible usages in their teaching materials for their learners. This, as a result, could also contribute in optimizing the learning opportunities of young learners by providing materials which reflect more natural usage of lexical items with phraseological information which are significant in the corpus.

With the application of DDL for teacher education in mind, the corpus can thus be compiled with language resources, as a reference tool, for prospective teachers' educational use. It can be suggested that the corpus contains two sub corpora of 1) official textbook materials used in school context, including teachers' guides; and 2) authentic texts which contain representative language use in contexts that young learners are familiar with. Considering the suggestions in MEXT (2017c), it could contain data such as lyrics of children's songs, nursery rhymes, stories written for child readers, and transcription of Children's TV series or movies. However, the selection of contents for these sub-corpora involves further specification

and it is required for the researcher to go through necessary procedures in obtaining permissions from the copyright holders for the educational use. Although, the size of the suggested corpus would not be 'large' by any standard, Aston (2000: 10) highlights the benefits of working with smaller but specialised rather than general corpora. O'Keeffe, McCarthy, and Carter (2007: 198) share this view, and point out that it is easier to define and delimit 'the pedagogical goals in terms of how they are used and applied' with specialised corpora.

The proposal is to incorporate the task of material design and DDL activities in which prospective teachers are required to consult the specialised corpus in deciding the sample of lexical items they use in their materials, rather than relying only on their intuition or their own learning experiences. The concordance lines visually represent patterns, which are particularly useful in raising awareness of the phraseological features of English. As mentioned earlier, the textbook data tend to be often 'contrived', and, using the two sub-corpora mentioned above, it is also possible to compare the instances from those two sub-corpora and encourage prospective teachers to notice the differences in the 'contrived' and the 'authentic' usages of certain lexical items. Such comparison might contribute in making prospective teachers aware of the reality of language feature in textbooks (i.e. limited usages presented to young learners). Through such DDL activities, prospective teachers are encouraged to discover linguistic features that are pedagogically relevant and useful items for young learners, and create their materials for their teaching practice. This, as a result, may contribute to the improvement of the quality of input provided for learners.

It should be noted, however, these consciousness-raising activities should not be regarded as an 'end in themselves' (Jones, 2001: 161) and it can be suggested that these activities should thus be supplemented with other activities. It is important to note that the suggestion of this paper is not to replace all aspect of teacher training with DDL. The proposal is in line with what Bernerdini (2004: 32) puts it:

... corpus-learner, and indeed corpus-teacher interaction are not replacements for learner-learner and teacher-learner interaction but rather should be seen as an added value offered by corpus-aided discovery learning.

Nevertheless, I would argue that encouraging prospective teachers to

consult corpora in their task of material design would help them in the long run. As Römer (2008) suggests, by integrating corpus-based exercises in teacher training programs, it is possible for prospective teachers to know 'how they could profit from the use of corpora in language teaching and learning in their future job' (ibid: 92). Having the skills and knowledge to use or access corpora will assist them in tailoring their teaching materials to the needs of learners or the demand of the course. This is an aspect which can be applied not only to the YL teacher training but also to teacher education of any levels in general, given the condition that the nature of corpora fits their teaching purposes.

### Summary and Future research

There are challenges that need to be dealt with for the successful implementation of reform plan suggested by MEXT (2013). Above all, as Graham et al. (2017: 952-953) rightly state, ensuring that the foreign language 'is taught by a well-trained, linguistically proficient teacher, and allocate sufficient time to its teaching' would be of utmost importance for young learners' positive learning outcome. It is no exaggeration to say that primary teachers in Japan hold the key to the success of primary English education. Therefore, it is the duty of the institutions that offer the teacher training courses to promote prospective teachers' target language competence while preparing them with pedagogical skills they need for future teaching.

It is suggested that prospective teachers can be encouraged to appreciate the value of corpora, through DDL. Showing how to utilize the resources such as corpora at the training stage would benefit not only in promoting the prospective teachers' language competence but also in preparing them to deal with tasks they are likely to face in their future teaching (e.g. creating supplemental material design or consultation of English usages). It is also suggested that the procedure of making materials by consulting the corpora through DDL may also serve as 'consciousness-raising' for prospective teachers, as the direct exploration of concordances generally enhances 'noticing', which are also the components generally encouraged to be included in teacher education (James and Garrett, 1992; Wright and Bolitho, 1993).

This initiative would be useful not only in assisting prospective teachers to be more aware of the language features presented to young

learners, but also in contributing to the 'popularization of corpus linguistics among English teachers' (Mukherjee, 2004: 243). This, in effect, might lead to the increase of the DDL use in teaching YLs, which has yet to be appreciated widely in the current Japanese TEYL context. The future research include:

- 1) the compilation of the specialised corpus of YLs' teacher resources suggested in this paper, while exploring the possible integration into the Multi-modal Corpus Tool (MmCT) proposed in Hirata (2016);
- 2) conducting empirical studies of DDL in accordance with the task of material design in a teacher training course; and
- 3) evaluation of the approach suggested in this paper.

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