# An Analysis of Two English Textbooks for Elementary School in Japan：Focusing on Teaching Pronunciation ${ }^{1}$ 

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## 1．Introduction

In Japan，English officially started being taught as a subject in Grade 5 in the academic year of 2021. It is expected that physiologically students in the 5th and 6th grades can learn English better than older students，including even junior high school students，especially spoken English．In this sense，the introduction of English education in elementary school is understandable and promising，though some people disagree with this idea，stating，for example，that learning Japanese should be prioritised in elementary school．

Globally，English is an indispensable language in many fields，such as business，politics，science and technology．Many people in the world use it every day as a lingua franca for communication．It is also used extensively on the Internet．In Japan，however，many Japanese people do not feel that English is necessary to lead an everyday life，and this may be one of the reasons why many of them are reluctant to learn English．Despite this domestic reality，the international role of English will grow year by year．

If this international prospect is seriously taken into consideration，it is natural that English education in Japan should be improved further，and the introduction of English into elementary school subjects is a significant step to achieve this goal．Since all school subjects are taught with textbooks authorised by the MEXT（Ministry of Education，Culture，Sports， Science and Technology）in Japan，the role that these textbooks play cannot be ignored．Therefore，it is worth examining how they are compiled and what ideas are in them to teach English in elementary school of Japan．This paper focuses on how English pronunciation is taught in these textbooks because
this is one of the most important areas，especially for young learners．

## 2．Data

The following seven publishing companies in Japan have published MEXT－authorised textbooks for elementary school students．They are shown in alphabetical order，followed by the name of their textbooks．
－Gakko Tosho－Junior Total English
－Kairyudo－Junior Sunshine
－Keirinkan－Blue Sky Elementary
－Kyoiku Shuppan－One World Smiles
－Mitsumura Tosho－Here we go！
－Sanseido－Crown Jr．
－Tokyo Shoseki－New Horizon Elementary English Course

This paper chooses two textbooks for 5th graders： Kairyudo＇s Junior Sunshine 5 and Tokyo Shoseki’s New Horizon Elementary English Course 5．In what follows，these textbooks will be shown as Junior Sunshine and New Horizon for short．There are two accompanying CDs in Junior Sunshine and four CDs in New Horizon．

## 3．Results

The following list shows information in each lesson or unit which is related to teaching English pronunciation in the two textbooks．Here，in addition to individual segments，words are also used to retrieve this information because they are small units and can be used to improve the pronunciation of segments as well as word stress．Notes written in the teacher＇s book are also added in the list．

## Junior Sunshine

Lesson 1

1. ABC song, with a note that the consonant for the name of the letter ' C ' should not be pronounced in the same way as the consonant of the Japanese 'shi'

## Lesson 2

1. Names of months with music
2. Ordinal numbers with no music

## Lesson 3

1. Names of subjects with music, with a note that the word-initial /m/ (e.g. 'music') should be highlighted by inserting a pause before the following vowel
2. Names of days of the week with music
3. Name of each letter of the alphabet, followed by an example word and a sound represented by that letter, with chants (e.g. 'A' is for 'ant', /æ, æ, æ/)
4. $/ \mathrm{d}, \mathrm{k}, \mathrm{z}, \mathrm{p}, \mathrm{l}, \mathrm{b}, \mathrm{t}, \mathrm{a}, \mathrm{g} /$, each of which is pronounced three times

## Lesson 4

1. Verbs of action with chants
2. Same as No. 3 in Lesson 3

## PROJECT 1

1. Numbers 11 to 20 with music
2. Names of months with music
3. Names of days of the week with music
4. ABC song, with a typical sound of each letter (e.g. /æ, b, k, d, i, f, g, ...)
5. Comparison of word-initial consonants by listening to two or three words, such as 'cow''box', and 'rock'-'leg'-‘lemon'. Notes are added: (1) to insert a pause after each word-initial consonant to distinguish one from the other. (2) for consonants which do not exist in Japanese (e.g. /r/ vs. /l/), they should be pronounced slowly, clearly and emphatically with enough pause before the following vowel.
6. Comparison of word-initial consonants, where
two letters are given (e.g. ' $t$ ' and ' $d$ ', ' $c$ ' and ' $g$ ') and students are asked to decide which consonant is included in each of five words given (e.g. 'table’, 'desk', 'tomato’, 'door', 'tea'). A useful expression for this exercise is noted: 'Listen. Table. Table. Is it /t/ or /d/?’ To have students pay attention to the difference in each pair, it is advised to compare /terbl/ with /derbl/ by changing the word-initial consonant. The difference between hard C (meaning $/ \mathrm{k} /$ ) and soft C (meaning / $\mathrm{s} /$ ) is also added.

## Lesson 5

1. Place names with chants
2. Daily items as chants
3. Same as No. 4 in Project 1
4. Choosing words which include word-initial $/ \mathrm{b}, \mathrm{f}, \mathrm{t}$, p, m/
5. Choosing words which the teacher says

Lesson 6

1. Same as No. 4 in Project 1

## Lesson 7

1. Animals in the Zodiac as chants
2. Individual phonemes followed by a word that contains them repeated twice (e.g. /b, æ, t/, 'bat', 'bat')
3. $/ b, p, f, v, t, k, z, r, d, g /$, each of which is pronounced twice
4. Listening to individual phonemes and thinking of a word that contains them, (e.g. from $/ \mathrm{m}, \mathfrak{x}, \mathrm{t} /$ to 'mat'. A note is added: when students write 'tap' after they hear /ta:p/, teachers need to have them pay attention to the difference between /a:/ and $/ æ /$ and have them be aware that the latter vowel tends to be spelt as ' $a$ '

## Lesson 8

1. Food names as chants
2. Numbers $100,200, \ldots, 900$ with music
3. Same as No. 4 in Project 1 and same as No. 2 in Lesson 7
4. Word practice
5. The teacher says a consonant and his/her students think of words which begins with that consonant

## Lesson 9

1. Food names as chants
2. Words of contrast with no music
3. Same as No. 4 in Project 1 and same as No. 2 in Lesson 7

## PROJECT 2

1. Words whose pronunciation is different from Japanese, with a note that a vowel should not be added at the end of such words
2. A note that stressed syllables should be pronounced longer rather than strongly
3. Intonation for a statement and listing, which is marked with arrows

## New Horizon

Unit 1

1. In Sounds and Letters: how to pronounce capital letters: (1) A-Z, (2) A-G and H-N, (3) O-T and U-Z, and (4) capital letter bingo

## Unit 2

1. In Sounds and Letters: how to pronounce lowercase letters: (1) a-z, (2) a-g and h-n, (3) o-t and $u-z$, and (4) lower-case bingo

## Unit 3

1. In Sounds and Letters: letters that look similar: C and G, a and o, I and i, etc

## Unit 4

1. In Sounds and Letters: (1) dictation for capital letters: A, B, etc., and (2) location of the primary stress in two-or-three-syllable words (e.g. 'baby' and 'butterfly'), using the word list on page 94

## Unit 5

1. In Sounds and Letters: (1) dictation for the lowercase letters: $a, b$, etc., (2) location of the primary
stress in two-or-three-syllable words, using the word list on page 94 , and (3) identification of the same word-initial consonant (e.g. 'bird', 'bat', 'gorilla', 'butterfly', and 'horse'), using the word list on page 95

## Unit 6

1. In Sounds and Letters: (1) dictation for the lowercase letters: $a$, b, etc., (2) identification of the same word-initial consonant, using the word list on page 95 , and (3) identification of the same wordfinal consonant (e.g. 'can', 'pan', ‘ship', 'fan', and 'cat'), using the word list on page 95
2. Sentence stress: 'I go to school' with a dot above 'go' and 'school'; and 'What do you like?' with a dot above 'what' and 'like'
3. Linking: 'stand up', 'sit down' and 'nice to meet you', where, in each case, the final sound of the first word is linked with the first sound of the second word

## Unit 7

1. In Sounds and Letters: a typical pronunciation of each letter of the alphabet is learned with illustration of animals, using the list on page 96, for example, /æ/ with 'ant'

## Unit 8

1. In Sounds and Letters: a typical pronunciation of each letter of the alphabet is learned with an illustration of a food, using the list on page 96 , for example, /æ/ with 'apple'

## Picture Dictionary

1. Words (words describing feeling, numbers, words describing weather, etc.) with music

## 4. Analysis and Discussion

This section analyses major features about teaching English pronunciation which are found in the two textbooks.

## 4-1. Overall process of teaching pronunciation

Neither of the textbooks has specific pages devoted to teaching all General American phonemes. Only the teacher's book in New Horizon has a list of how to pronounce some phonemes, which corresponds to the letters of the alphabet. Both textbooks use chants and music extensively to help students learn words and expressions.

New Horizon deals with English pronunciation in a stylised way with similar exercises in each lesson, but they are not specifically focused on pronunciation. They are more concerned with the sound-letter relationship. On the other hand, Junior Sunshine includes various kinds of pronunciation exercises though they are not systematic. It also gives some useful hints for practicing pronunciation in its teacher's book. In Lesson 3, practice of individual phonemes is given, but this is based on the ABC song, so it cannot include all English phonemes. In this lesson, nine phonemes are selected separately to practice. In Project 1, the ABC song is sung with a typical pronunciation of each letter, which is selected in Lesson 3. This is a unique exercise and is repeated in Lessons 5, 6, 8 and 9. Word-initial consonants are practiced in Lesson 3, Project 1 and Lesson 5. A noteworthy point in this practice is to have students make a pause before they pronounce the following vowel. This makes the target consonant prominent, but it is doubtful whether this is effective because the CV structure is strong and not easily separable. If a word-initial consonant is the $/ \mathrm{m} /$, as presented in the teacher's book, it can be pronounced long and be a good example for this practice. However, this does not work for plosives as they are instantaneous sounds. In Lessons 7, 8 and 9, an interesting exercise is given, in which the relation between a word and its phonemes is practiced. From a given set of phonemes, students are supposed to think of a word that contains them. A similar exercise is introduced in Lesson 8, where the teacher says a consonant and then his/her students think of any word which begins with this consonant. These exercises are useful because they help students become aware of phonemes in words. In Project 1,
some English consonants which are non-existent in Japanese are presented, but there is no explanation as to how they can be pronounced. Project 2 presents useful advice to learn English pronunciation: (1) do not add any vowel after a word-final consonant, and (2) length is a more important factor than strength for stressed syllables. The second point is counterintuitive for many Japanese because they know English is a stressed-timed language and, for this reason, they think strength is the most important factor for making a syllable stressed.

The Course of Study mentions four key points in teaching English pronunciation in Grades 5 and 6:
A) Current standard accent
B) Sound changes in connected speech
C) Basic stress patterns in words, phrases and sentences
D) Basic intonation in sentences

The first point is obvious. To learn English as a foreign language, a current standard accent is naturally selected. There is a question as to which standard accent should be selected. In Japan, this has been General American after World War II, and the two textbooks choose this accent as their model of English accent. As for the second point, The Course of Study gives three cases: (1) CV linking, as in 'I have a pen', (2) elision, as in 'Good morning', and (3) coalescent assimilation, as in 'Nice to meet you'. These three points are explained on a half of a page in New Horizon. Examples of the CV linking are used frequently in both textbooks. A good example of elision is 'I can't read English well', where the /t/ of 'can't' is elided (Lesson 4 of New Horizon). As shown below, coalescent assimilation is also sometimes used. Since the speech rate is low in the two textbooks, sound changes are less likely to occur. In the case of the third and fourth points, Junior Sunshine uses two pages to explain them. New Horizon gives many examples of word stress. It gives two examples of sentence stress on a half of a page. These four major points are included in both textbooks, but are treated
lightly.

## 4-2. Phonemes and allophones

All English phonemes should be taught at an early stage of learning because they are fundamental in spoken English. Failure to pronounce them reasonably well will prevent speakers from making themselves understood in English and cause communication breakdown. It is understandable, however, that not all learners can pronounce all English phonemes well enough, but this is not a good reason for treating these phonemes lightly. In fact, many Japanese learners of English fail to achieve reasonably good English pronunciation.

In General American, there are 17 vowel phonemes ${ }^{3}$
 and 24 consonant phonemes / p, b, t, d, k, g, f, v, $\theta, \partial$, $\mathrm{s}, \mathrm{z}, \int, 3, h, t \int, \mathrm{~d}_{3}, \mathrm{~m}, \mathrm{n}, \mathrm{y}, \mathrm{l}, \mathrm{r}, \mathrm{j}, \mathrm{w} /$, and students in elementary school should have a chance to learn all of them before they become junior high school students. However, at least in the two textbooks for Grade 5, this is not made possible.

In Lesson 3 of Junior Sunshine, some phonemes are practiced by using the ABC song, where each letter of the alphabet is pronounced as its sound used in a word given. For example, the letter ' $A$ ' is pronounced $/ \mathfrak{æ} /$ as used in 'ant'. The 26 phonemes learned with the use of this song are: /æ, b, k, d, e, f, g, h, i, d3, k, l, m, $\mathrm{n}, \mathrm{a}:, \mathrm{p}, \mathrm{k}, \mathrm{r}, \mathrm{s}, \mathrm{t}, \Lambda, \mathrm{v}, \mathrm{w}, \mathrm{ks}, \mathrm{j}, \mathrm{z} /^{4}$. Immediately after this practice, the following phonemes are provided for practice: /d, k, z, p, l, b, t, a: g/. In Lesson 7, after the ABC song with the above phonemes, each phoneme in 'mat', 'map', 'cat', 'cap', 'top' and 'ten' is pronounced. Then, the following selected phonemes are presented for repetition: /p, f, v, t, k, z, r, d, g/. This works well in practicing phonemes, but it is not known why these phonemes are selected. In New Horizon, such practice is not given, but in the teacher's book, there is a list of phonemes displaying typical realisations of these letters of the alphabet with illustrations of how to pronounce them, their phonemic symbols and some notes to pronounce them.

Neither Junior Sunshine nor New Horizon presents
an exercise to practice pronouncing all American English phonemes systematically. However, students should have a chance to learn all these phonemes to understand the sound system of English. Use of a figure or a table is helpful to achieve this purpose. It is not necessary to introduce phonemic symbols to elementary school students, but the so-called lexical set, which was devised by Wells (1982), is helpful to learn the vowel phonemes of General American. However, his lexical set includes words difficult for beginners, such as FLEECE ${ }^{5}$ for /i:/. So, to make his lexical set more practical to beginners, they should be replaced with easier words. Illustrations displaying them may be added for practical use. FLEECE, for example, can be replaced with TEA. Yuzawa (2014) came up with the following lexical set for elementary school students:

PIG, HEAD, CAT, SUN, FOOT, TEA, BIRD, ARM, ALL, MOON, FACE, LION ${ }^{6}$, TOY, HOUSE, PHONE, A (THE) ${ }^{7}$

Occasionally, teachers should refer to this lexical set to practice the vowel phonemes. This is useful to both teachers and students when they want to identify a particular vowel about which they want to talk. As for the consonants, spelling is good enough to achieve this purpose, as many phonemes can be equated with letters of the alphabet.

Some phonemes are particularly difficult for Japanese learners of English, especially those which do not exist in Japanese, such as $/ 1 /, / \mathrm{r} /, / \theta /$, $/ \mathrm{\delta} /$ and $/ \partial /$. In Unit 1 of New Horizon, the first two consonants appear in a single short utterance 'I like rice'. It may not be necessary to teach the accurate way of pronouncing them at this stage, but it is advisable for students to be aware of some perceptual difference between /l/ and $/ \mathrm{r} /$ and between them and the Japanese flapped $/ \mathrm{r} /$ (i.e. [r]). These two English phonemes are difficult to both produce and perceive for Japanese. From time to time, the production and perception of them should be practiced. They should also be compared with the Japanese /r/. This will help students learn how this

Japanese phoneme is pronounced. In relation to this topic, it is noticed that Japanese names such as 'Sakura' and 'Hiroshi' are pronounced with the Japanese /r/, not the English /r/. It is debateable whether these Japanese names should be pronounced in the Japanese way or in the English way, but it is worth practicing pronouncing them in the English way. Another difficult phoneme for Japanese learners of English is schwa. Since this is the most frequently used vowel in English, it is advisable for them to pronounce this well. Even at an early stage of their learning, there is a chance for them to be aware of this vowel and its qualitative difference from strong vowels. In Unit 1 of New Horizon, for example, this vowel is used in words such as 'Lisa' and 'American'. If they understand the sound quality of schwa, this will also help them learn the English stress-timed rhythm.

The voiceless dental fricative appears in an early lesson in both textbooks: in Unit 2 of New Horizon and in Lesson 2 of Junior Sunshine, where a birthday is a topic of conversation. This is an unfamiliar phoneme for Japanese because it does not exist in the Japanese phonological system. Since they cannot easily distinguish this phoneme from the /s/, they should spend some time being familiarised with it. However, there is no specific note to explain how to teach this phoneme in the teacher's book. Teachers should teach their students how to pronounce this by telling them to place ${ }^{8}$ their tongue between the upper teeth and the lower teeth or to put it behind the upper teeth. The latter way may be easier. Roach (2009) states that this way is normal rather than the other. In practicing this voiceless dental fricative, it is effective to use a minimal pair drill by comparing it with /s/. It is not necessary for Japanese learners to compare it with /f/ or /t/ as this difference is not problematic to them. However, teachers need to keep in mind that some people in the world use either of them. During this practice, its voiced version $/ \mathrm{\delta} /$ should also be introduced, with example words, by comparing it with $/ \mathrm{z} /$, as in 'then' and 'Zen'.
Mastery of the English phonemes is important, but it is not enough. Some allophones should also be learned. The phoneme /t/, for example, is realised
differently. It is pronounced differently in 'ten', 'city', 'stay' and 'meet'. In Unit 1 of New Horizon, both the voiced /t/ and the word-initial /t/ with aspiration are heard in 'exciting' and 'teacher', respectively. The two realisations of the /t/ are very different from each other. Students who notice this fact may wonder why the same letter is pronounced differently and be puzzled. ${ }^{9}$ Their puzzlement should be solved before it is too late. During this lesson or sometime after, teachers can ask them if they are aware of the mismatch between the letter and its sound. When their answer is positive, it is a good chance to explain this. Once they have learned this reality, they may have no problem in pronouncing words, such as 'total' in Unit 6 , which have these two different realisations of the /t/. Another example of this kind is noticed in Unit 7, where the /t/ in 'visit a shrine' is pronounced differently by two speakers in the same dialogue: the plosive /t/ and the voiced /t/. Demonstrating a variety in recording is understandable, but at this very early stage of learning, the /t/ in the same phrase should be realised identically. Among speakers in the recording studio, there should be common understanding about which pronunciation should be used before recording, and the recording itself should be monitored carefully outside the studio.

## 4-3. Words and expressions

Practice of word pronunciation is helpful in making students aware of the stress-timed rhythm in English words. Correct stress placement is one of the significant factors in making spoken communication successful. Practice of word stress also helps students understand the notion of syllables. In both textbooks, words are not simply pronounced. They are almost always accompanied by music or chants ${ }^{10}$. This is an effective way of helping students not only remember these words and but also learn the English stresstimed rhythm. In New Horizon, many words, which are collected per category in a booklet called Picture Dictionary, are pronounced with chants. Some of these categories are feelings, numbers and colours.

In Junior Sunshine, the model pronunciation of words is recorded with chants first, and then only the
same chants are recorded to have students pronounce these words by themselves. In New Horizon, in learning expressions for asking someone his/her name and answering its spelling, not only a key expression 'How do you spell your name?' but also all 26 letters of the alphabet are presented with chants. Since each letter of the alphabet is basically made up of simple monosyllables ${ }^{11}$, this will help students focus on individual phonemes. ${ }^{12}$

In addition to chants, music is used to have students learn expressions, such as 'Hello. How are you?' in both textbooks. First, students listen to these expressions with music, and second, they listen only to music. This use of music also helps students not only remember these expressions, but also learn the English stress-timed rhythm and intonation. It is worth noting that Junior Sunshine has four types of recordings: slow recording with expressions and music, slow recording with music only, faster recording with expressions and music, and faster recording with music only. Naturally, the faster version is more challenging to students, which may raise their motivation to study English.

When stress in words and phrases is practiced in Junior Sunshine, there is a useful note in the teacher's book which states that stressed syllables should be pronounced longer rather than strongly. Many Japanese learners of English believe that strength is the most important factor in English stress. In reality, however, duration is more important than strength. At least, teachers should know this fact. They should also know that pitch is the most important factor in stress.

## 4-4. Phrases vs. compounds

In English, proper word stress is essential in effective communication, and proper stress placement in phrases and compounds is also important. English has a general rule that the main stress falls on the first word in compounds and on a noun in noun phrases. In Unit 1 of New Horizon, compounds such as 'English teacher', 'English books' and 'library card' have the main stress on the first word. In Unit 2, a noun phrase 'a yellow T-shirt' has the main stress on the second word, which is a noun, and ' T -shirt' has the main stress on ' T '
as a compound. Immediately after this noun phrase, an utterance 'It's a summer color' is heard. This is a compound, but unlike the general rule, 'color' attracts the main stress. ${ }^{13}$ Students should learn to pronounce one word more strongly than the other in phrases and compounds to make themselves familiar with the stress-timed rhythm of English. Teachers need to know the fundamental rules controlling stress placement in phrases and compounds, including well-known exceptions, though they do not necessarily have to teach them to beginners accurately.

In an utterance, such as 'a red pen and a blue pen', the main stresses fall on 'red' and 'blue' for the sake of contrast, not 'pen' as expected from the general rule. Contrast overrides the general rule. There are many such examples in both textbooks. Emphasis can also be a trigger to change the position of the main stress. However, in Unit 7 of New Horizon, the phrase 'New Year's Day' is pronounced differently by two speakers in different dialogues, both of which do not include contrast or emphasis: one with the main stress placed on 'Day', which is the standard pattern, and the other placed on 'New'. This may be because of each speaker's idiosyncratic features, but since this different realisation of the same phrase in this case makes beginners puzzled, it should be avoided by attentive monitoring during recording.

## 4-5. Connected speech

Words are not always pronounced in the same way as found in a citation form. In Unit 2 of New Horizon, there is an utterance 'Come to my house at about three', where the /t/ of 'at' is pronounced differently from the /t/ of 'about'. In the former, it is pronounced as the voiced $/ \mathrm{t} /$, which is one of the major features in General American, but in the latter, it is unreleased. Teachers may not have to explain this different realisation of the voiceless alveolar plosive to beginners, but they need to know this and to be prepared to explain this when students become aware of it. In this example, linking also occurs between 'at' and 'about'. This feature is used frequently when a word ends in a consonant and the next word begins
with a vowel. It is one of the important features that The Course of Study points out for 5th and 6th graders.

Stress-shift is also an important feature in connected speech. In Unit 5 of New Horizon, when a phrase 'Japanese map' in 'I only have a Japanese map' is pronounced, 'Japanese' has the primary stress on the first syllable, not on the third syllable as found in its citation form. This change of stress placement occurs to avoid a sequence of stressed syllables in English. Without stress-shift, two primarily-stressed syllables 'nese' and 'map' come next to each other, but it is not rhythmically good in English. ${ }^{14}$ Therefore, the general tendency is to change the stress pattern of 'Japanese', and thereby the third syllable is downgraded to the secondary stress. As a phrase, the noun 'map' receives the primary stress and the adjective 'Japanese' receives the secondary stress, as in 'Japanese 'map', Immediately after this utterance, there is an utterance ‘But I can’t read Japanese’, where 'Japanese' has a stress pattern of its citation form. Some students may be aware of this difference in stress placement and be puzzled, and teachers need to be prepared to explain this when they are asked.
In Units 3 and 6 of New Horizon, there is an utterance 'How about you?', but it is pronounced differently in terms of assimilation. In Unit 3, coalescent assimilation is not applied, but in Unit 6, it is applied and the $/ \mathrm{t} /$ / is used between 'about' and 'you'. The /tj/ is used in 'Tell me about your school' (Unit 3), 'Don't forget your recorder' (Unit 3), 'Tell me about your town' (Unit 4). In Unit 1, when 'Nice to meet you' is heard, this assimilation is used. At some time of learning, teachers should make students aware of both realisations of the sequence of two phonemes $/ \mathrm{t} /$ and $/ \mathrm{j} /$. Otherwise, some students may be puzzled to find the difference in pronunciation between the citation form of each word and the combination of these two words. Since the speech rate is slow in both textbooks, assimilation of place is rare. One example found in New Horizon is 'card game' (Unit 7), where $/ \mathrm{d} /$ is realised as $/ \mathrm{g} /$. This does not have to be taught in class, but teachers should be aware of this fact.

Word-final plosives pose a difficult problem in
connected speech. They can be released or unreleased, especially when they are followed by a word whose initial phoneme is a consonant. When 'hundred' and 'thousand' are introduced in Lesson 9 of Junior Sunshine, the word-final /d/ before a word-initial consonant is released in one case and unreleased in another. There should be some explanation about this free variation in the teacher's book. In Unit 5 of New Horizon, the phrase 'the first corner' appears twice. It is pronounced with the final /t/ of 'first' released in both cases. In normal speech, this word-final /t/ is likely to be elided. However, when the speech rate is low, it will not be elided. Teachers should get ready to explain this free variation when students are puzzled about the different realisations of word-final plosives.

In Unit 6 of New Horizon, three phrases are cited as examples of connected speech. They are 'stand up', 'sit down' and 'meet you', and the two words in each example are linked with the same symbol. It looks as if they showed the same feature. In reality, however, this is not the case. 'Stand up' is spoken with linking. 'Sit down' is spoken with the /t/ either released or unreleased. 'Meet you' is spoken with or without assimilation (i.e. $/ \mathrm{t} / /$ or $/ \mathrm{tj} /$ ). Careful explanation should be added here, and teachers need to have accurate knowledge of these differences. Among the three examples, 'sit down’ should be treated carefully. Many textbooks published in Japan explain that this /t/ is elided, but this is misleading. Even when it is inaudible, it is there and spoken as an unreleased stop. Elision is completely different from an unreleased stop, but such textbooks do not distinguish between the two. An interesting pair can be shown here: 'paint colour' and 'pain colour'. When the $/ \mathrm{t} /$ in 'paint colour' is pronounced as an unreleased stop, these two phrases may sound the same to many Japanese, but there is an important difference: the vowel /eI/ of 'paint' is shorter than that of 'pain'. Not only do teachers need to know this fact, which is known as pre-fortis clipping, but also they need to be able to perceive the difference.

## 4-6. Intonation

Intonation is also an essential factor in learning

English. Good intonation helps a speaker make himself/herself better understood in English. Tonality, tonicity and tone are three major important elements in English. In the case of tone, a fall and a rise are most frequently used, followed by a fall-rise. Learning these three tones is good enough in Japanese elementary school, and at an early stage of learning, learning the two most frequent tones is adequate. Junior Sunshine uses these two basic tones extensively in every lesson, and a fall-rise is not heard in earlier lessons.

Practice of intonation should be introduced systematically by using two or three pages of a textbook at an early stage of learning, with an illustration of pitch directions. Adding such a page after some lessons in textbooks for Grade 5 two or three times is practical and beneficial. However, the two textbooks do not have such pages, except for a single page in Junior Sunshine near its end under the title 'Pronunciation Clinic'. It introduces a fall and a rise, and explains two intonation patterns: a statement spoken with a fall, and a listing spoken with a rise for each item before the final item, which is spoken with a fall. Here, it should include a fall-rise as it is used in this textbook. As for the intonation pattern for listing, there are examples which deviate from this pattern. Two examples found in Lesson 3 are: 'I have moral education, Japanese, math, English, social studies, and PE.' and 'I have moral education, Japanese, math, English, social studies, and PE.' They are spoken by different speakers and recorded on different tracks of an accompanying CD. In the first example, the first item ('education') is spoken with a fall, and in the second, all items are spoken with a fall. It is true that this pattern is not observed all the time, but at least in Grade 5, where English is learned as a subject for the first time in school, it should be strictly observed.

An intentional highlighting should also be learned with many examples. This is an issue of tonicity. In Unit 2 of New Horizon, an expression 'When is your birthday?' is a target sentence. It is natural that 'birthday' should be highlighted when it is uttered for the first time, but when this question is asked to another person for the second time or after, the
highlighted word is changed to 'your' because of the change in important information. The same feature is found in a question 'When is your sports day?' (Unit 3). When this is asked for the first time, the highlighted word (more preciously, the highlighted compound) is 'sports day', but for the second time, it becomes 'your' for contrast. Other examples are 'Let me try' (Lesson 4 of the listening sheet in Junior Sunshine) and 'a big lunch' (Lesson 8 of the listening sheet). In 'Let me try', the first speaker highlights 'try' as a default stress pattern, but the second highlights 'me'. In 'a big lunch', 'lunch' is highlighted as a default pattern for the first time, but 'big' is highlighted as emphasis for the second time. Teachers should make students aware of this use of tonicity whenever such examples appear in textbooks.

Many textbooks begin their lesson with greetings. Both Junior Sunshine and New Horizon adopt this approach. In Unit 1 of New Horizon, 'Good morning' is pronounced with a fall when it is followed by a vocative, which is spoken with a rise, as in 'Good $\searrow$ morning, $\left.\right|^{16} \nearrow$ class'. When students respond to their teacher's greeting, however, they say 'Good $\rightarrow$ morning' without any vocative and use a level tone. This may reflect that this response is a routine activity to them. However, it is not suitable to use this relatively minor tone at the very beginning of this textbook. If the teacher's name is used in responding, such as 'Good $\searrow$ morning, $\mid \mathrm{Mr} \mathrm{Ta} \nearrow$ naka', the same intonation pattern can be used, and students will find it easy to follow this model intonation pattern. At an early stage of learning, the same intonation patterns should be used as often as possible for sets of expressions like greetings. Teachers should also be aware that in the case of 'hello', both this greeting word and the following vocative are more likely to be spoken with a rise, as in 'He $\nearrow$ llo, $\mid \nearrow$ John'.

In addition to this use of a level tone, a fall-rise is also introduced in early units of New Horizon. In Unit 1, an utterance 'You can get a library card here' is recorded by dividing it into two tone-units (i.e. 'You can get a library card' and 'here'), with 'a library card' spoken with a fall-rise and with 'here' spoken with a
fall: 'You can get a $\downarrow \lambda$ library card $\mid \searrow$ here'. In Unit 2, 'And a special present from Grandma and Grandpa’ is spoken as 'And a special $\searrow \nearrow$ present $\mid$ from $\nearrow$ Grandma $\mid$ and $\searrow$ Grandpa'. The use of a fall-rise sounds natural, but for the sake of students' learning process, it is advisable to stick to the two basic tones in these early units. 'You can get a library card here' can be spoken as 'You can get a library card $\searrow$ here', where 'library card' is spoken as non-tonic because this phrase is used immediately before by another speaker, as in 'I want a library card'. In addition, 'And a special present from Grandma and Grandpa' can be spoken as 'And a special $\nearrow$ present $\mid$ from $\nearrow$ Grandma $\mid$ and $\searrow$ Grandpa'.

## 4-7. Others

Elision is a natural process in English especially when the speech rate is high and/or the speech style is informal and casual. In a phrase like 'next week', the word-final /t/ of 'next' can be elided to make the pronunciation easier. A sequence of many consonants disrupts smooth pronunciation. Elision occurs between neighbouring words when the following conditions are met: (1) when there are three or more consonants between them; (2) when the final consonant of the first word is $/ \mathrm{t} /$ or $/ \mathrm{d} /$; and (3) there is at least one consonant before this $/ \mathrm{t} /$ or $/ \mathrm{d} /$. The /t/ in 'next week' meets these conditions. Elision also occurs wordinternally. For example, 'facts' has a sequence of three consonants $/ \mathrm{kts} /$, and it can be pronounced /fæks/ by eliding the middle $/ \mathrm{t} /$. At the very beginning of New Horizon, 'picture' is pronounced/pik $\check{\partial}$, with the middle $/ \mathrm{t} / \mathrm{of} / \mathrm{kt} \mathrm{f} /$ elided. It is understandable that this is also a standard pronunciation together with / pikt $\int \%$, but it is not desirable to use this pronunciation at this place in the textbook. It should only be used at least in later units if it is used at all. A pronunciation that is more acceptable to foreign learners should be used particularly at an initial stage of learning. Careful monitoring during the recording is highly required. Moreover, there should be a special note about elision for Japanese learners because they are more likely to use epenthetic vowels to pronounce all consonants
there.
There are some errors in the transcription of phonemic symbols in Junior Sunshine. In Review Lesson 7, the STRUT vowel is transcribed as /u/, but it should be $/ \Lambda /$. In Review Lesson 9, the TRAP vowel is transcribed as $/ \mathrm{a} /$, but it should be $/ \mathfrak{x} /$. It appears that in both cases, the letters of the alphabet are simply used there.

In transcribing phonemes, slant brackets should be used, not square brackets. The use of square brackets is noticed in Project 1 of Junior Sunshine and in the teacher's book of New Horizon, for example. In the latter, slant brackets are used for spelling. Some reference books published in Japan still use square brackets to transcribe phonemes, which is misleading, though this usage is becoming less common. Square brackets should be used for the transcription of allophones.

It is known that some American speakers pronounce the TRAP vowel with their tongue placed higher than the standard pronunciation, which makes this phoneme sound more like /e/. In Review Lesson 9 of Junior Sunshine, this pronunciation is used. This is not recommendable for practice for beginners. In Review Lesson 5, an orthodox type of pronunciation is used for the vowel of 'cap'. The use of varieties is understandable, but a pronunciation that is educationally more advisable to foreign learners should be used particularly for beginners like Japanese elementary school students.

In Pronunciation Clinic of Junior Sunshine, dark /1/ is explained by using 'ball' as an example. It explains this allophone as an ambiguously pronounced /1/, but this is misleading. This allophone of the $/ 1 /$ is pronounced by raising the back of the tongue toward the soft palate. Ambiguity is not the difference between clear $/ 1 /$ and dark $/ 1 /$. The writer of this section may have tried to explain the $/ 1 /$ vocalisation in simple terms, where the dark /l/ can be replaced with the $/ \mathrm{w} /$, but this way of writing may confuse teachers especially when they are not familiar with this fact.

The final point is weak forms. It is widely known that some English words, such as 'that', 'can', 'are'
and 'of', have two different realisations: a strong form and a weak form. For example, 'are' in 'You are right' is pronounced differently from 'are' in 'Yes, you are': the former is pronounced as a weak form and the latter is pronounced as a strong form. Even an utterance like 'I think that that that that that student wrote should be deleted', which has five successive occurrences of 'that', can be understood well when these two forms are properly used. In Unit 1 of New Horizon, 'from' is pronounced in two different ways by using these two forms appropriately: in 'I'm from America', the vowel of 'from' is spoken as a weak form, while in 'Where are you from?', it is pronounced as a strong form. Students may not be aware of this difference, but teachers should have the knowledge of it and be careful not to pronounce these two prepositions identically. It is worth noting, however, that in the utterance 'I'm from Mexico', the vowel of this preposition is pronounced as a strong form. This is probably because of a pause made between 'from' and 'Mexico' to pronounce this sentence slowly for beginners. Slow speech rate is likely to make native speakers sound unnatural and artificial. A similar case of fluctuation of pronunciation is noticed in Lesson 4 of Junior Sunshine, where a model auxiliary verb 'can' is introduced. In the same phonological environment in which no special contrast or emphasis is expected, some speakers use a strong form in utterances, such as 'I can walk', 'I can run', while others use a weak form. Since the difference between weak forms and strong forms is important to make polarity clear, it should be realised carefully in recording, especially in General American, not only because this accent uses the same vowel /æ/ for both 'can't' and a strong form of 'can', but also because the word-final /t/ in 'can't' can be unreleased when the following word begins with a consonant, as in 'I can't read English well' (Unit 4 of New Horizon). An important aspect of the wordfinal /t/ when it is unreleased is that it is inaudible. In a case like this, students may mistake 'can't' for 'can' if they do not know the fact that a weak form is used in a positive statement unless a contrast or emphasis is involved. ${ }^{17}$ Knowledge of weak forms and
strong forms is important to avoid this unnecessary misunderstanding.

## 5. Conclusion

Japan started teaching English as a subject from Grade 5 in 2021. To analyse how it is going, it is important to examine MEXT-authorised textbooks because they play a major role in teaching. Seven publishing companies published English textbooks for 5th and 6th graders. In this paper, as a first attempt of this analysis, two textbooks for 5th graders were selected (i.e. Junior Sunshine and New Horizon) and major features related to teaching English pronunciation were analysed. It was found that neither of them deals with English sounds exhaustively and systematically. By making use of music and chants, however, it is inferred that the writers of these textbooks tried to help students get interested in English including its sounds.

This paper discussed the following major features of teaching English pronunciation: (1) overall process of teaching pronunciation, (2) phonemes and allophones, (3) words and expressions, (4) phrases vs. compounds, (5) connected speech, (6) intonation and (7) others. The overall process of teaching pronunciation is different between the two textbooks: one uses a stylised approach, focusing on a letter-sound relation, and the other offers a variety of exercises. Both textbooks use the ABC song to teach the pronunciation of the letters of the alphabet and their typical sounds in words. This is useful to learn the English phonemes, but it cannot encompass all of them. The introduction of the phonemic symbols is not relevant for elementary school students, but Wells's idea of a lexical set can be utilised with some modification, such as the one devised by Yuzawa (2014). Some English phonemes which are unfamiliar to Japanese should be taught carefully and attention must be paid to major differences between a phoneme and its allophones. Model pronunciation of words and expressions are presented with music and chants in the two textbooks. This helps students not only remember them but also learn the stress-timed rhythm of English. Presenting
models with both slow and fast reading is an effective way. Fast reading may raise students' motivation to study English further. Phrases and compounds have different stress patterns, and students should learn at least the fact that one word in each of them is spoken more prominently. Sound changes in connected speech need some consideration. Since the speech rate is relatively low in these two textbooks, examples of assimilation of place are quite rare. However, coalescent assimilation is more frequently used. Stress shift is noticed frequently in these two textbooks. Sometime later in their study, students should learn the difference in stress placement between a citation form and a phrase. There are various forms of intonation, but two basic forms (i.e. falls and rises) should be presented and taught in the initial stage of learning. Students should also be aware of differences in tonicity and their intended meanings in communication. A little more attention should be paid to recordings in the studio, such as pronunciation of segments, the stress pattern of phrases, the intonation pattern, and the use of weak and strong forms. To make better recordings, speakers should have common understanding about these items beforehand, and monitoring during the recording should be conducted very carefully. In addition, teachers should have enough knowledge about English pronunciation so that they can answer all questions asked by their students at any time. They also need to observe their students' progress attentively and decide properly when certain learning points should be taught. The two textbooks are well written with colourful drawings and pictures, but some corrections should be made in the next edition concerning some explanations and the use of some symbols.

This paper analysed two textbooks for 5th graders, but there are five other textbooks published by different publishing companies which are also used. A comparative analysis of these textbooks will be conducted shortly to find major similarities and differences among them. The same analysis will also be conducted for seven textbooks for 6th graders. After all fourteen textbooks have been analysed,
major features found among them will be presented and suggestions for the next edition will be made. It is hoped that what was found in this paper and what will be found in these next studies will be beneficial in improving English textbooks for elementary school in Japan.

1 This research is supported by the Japan Society for the Promotion of Scientific Grants-in-Aid for Scientific Research (C) 21 K 00672.

2 This example is irrelevant. The /d/can be inaudible, but it is not deleted. This can be an example of assimilation of place or assimilation of manner.
${ }^{3}$ There are some different ideas in the classification of American English vowels. Some regard vowels found in 'hear', 'fair', 'sure' as diphthongs, but in this paper, they are counted as a short vowel followed by the $/ \mathrm{r} /$. Therefore, they are not regarded as phonemes. The r-coloured schwa can also be analysed phonologically as schwa followed by the /r/. However, it is interpreted as a phoneme, following the idea of Jones et al. (2011).
${ }^{4}$ The $/ \mathrm{k} /$ appears twice and the $/ \mathrm{ks} /$ is a combination of two phonemes.
5 This representation of a word in all capitals focuses only on a vowel that is included in this word. This is a useful way to explore what quality of a vowel each person uses for a given word, but the present paper does not go into this topic much further, as this is not related to the present topic.
${ }^{6}$ Instead of LION, SKY, for example, may be better because it is monosyllabic.
7 If A is too soft to be identified easily, THE can be used instead. Since THE includes an initial consonant, it is identified as schwa more easily. In the lexical set for Japanese elementary school students, the /r/-coloured schwa is not included because once the quality of schwa is recognised, all they need to do is to add $/ \mathrm{r} /$ to it.
8 Some say 'to bite' instead, but this is misleading.
9 In a case like this, the BBC accent or RP is more straightforward.
${ }^{10}$ In Junior Sunshine, when numbers are taught, no music accompanies.
${ }^{11}$ The exceptional case is ' $w$ ', which is trisyllabic.
${ }^{12}$ The consonant phonemes that are included here are $/ \mathrm{b}, \mathrm{s}, \mathrm{d}, \mathrm{f}$, $\mathrm{d}_{3}, \mathrm{t}, \mathrm{k}, \mathrm{l}, \mathrm{m}, \mathrm{n}, \mathrm{p}, \mathrm{j}, \mathrm{r}, \mathrm{s}, \mathrm{t}, \mathrm{v}, \mathrm{w}, \mathrm{z} /$ and the vowel phonemes are /ei, is, e, ai, ov, u:, a:, $\Lambda /$. Naturally, they do not include all of the phonemes in General American.
${ }^{13}$ Wells (2006) explains five cases of double-stressed compounds, and one of them corresponds to compounds in which the first element names the place or time.
${ }^{14}$ It is also a fact that there are native speakers of English who do not use stress-shift.
${ }^{15}$ Then, the third syllable of 'Japanese' receives the tertiary stress, but the use of this stress is not utilised as it presents unnecessarily complexity.
${ }^{16}$ This vertical line indicates a tone-unit boundary, which is related to tonality.
${ }^{17}$ Another useful clue to differentiate 'can't' whose /t/ is unreleased from a strong form of 'can' is that the rhyme in the former is shortened because of the word-final /t/ but this does not occur in the latter. Also, when a strong form of 'can' is used in this case, the pitch of this word becomes higher.

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# An Analysis of Two English Textbooks for Elementary School in Japan：Focusing on Teaching Pronunciation 

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#### Abstract

Japan started teaching English as a subject from Grade 5 in the academic year of 2021．Since all school subjects are taught with textbooks authorised by the MEXT in Japan，the role that these textbooks play is significant． Therefore，it is worth examining how they are compiled and what ideas are in them to teach English in elementary school of Japan．Seven publishing companies published English textbooks for 5th and 6th graders．In this paper，two textbooks for 5th graders were selected and major features related to teaching English pronunciation were analysed． It was found that neither of them deals with English sounds exhaustively and systematically，but they use music and chants extensively．This paper discusses these features in seven points：（1）overall process of teaching pronunciation， （2）phonemes and allophones，（3）words and expressions，（4）phrases vs．compounds，（5）connected speech，（6） intonation and（7）others．The two textbooks are well written with colourful drawings and pictures，but they could be improved by incorporating ideas mentioned in these points into the next edition．


