Language through code

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Writing in code is usually done to limit communication. This article describes ways in which writing in code is used to improve communication.

In simple codes, like the ones used here, the usual symbols for letters of the alphabet are replaced by new symbols. For example, the sentence 'Try to make a code exercise' could be written in code like this:

\[ \text{S} + \text{a} \quad \text{S} \times \text{E} \quad \text{Y} \]: \text{a} + \text{S} \text{E} \text{O}.

with each letter being replaced by a symbol made on the typewriter. In order to get the message, the reader must know the system of the code or must find some way to break the code. To break the code the reader must use his knowledge of language and must give close attention to language features. This is the main reason for using code as a language teaching device. Let us look at some exercises using code and see how they require attention to language.

Clue clues
Some words in this story are written in code. Try to write these words in English. The first word in code has one letter, the next has three, and so on.

* famous OOG went S speak at a meeting. He *£% his friend, "How (+O) shall I speak?" His ?& = %O answered, "You can speak for *£ long as +1 like, TIS %1O1%&aT +) a (%1O1%£ + $* (;+£$ + O% This code exercise is similar to a cloze exercise. In a cloze exercise, every fifth word is taken out of a passage. The learners must fill in the missing words by using the context to help in guessing the missing words. In this code exercise, words are not taken out of the passage, but are written in code. These words are chosen so that they are not too difficult to guess and so that they contain many of the letters that are used in the final part of the passage. This exercise has some of the advantages of a cloze exercise. It requires the learners to make predictions and inferences, by making use of extended context.

When learners have decoded a letter or word in a code exercise, the known letters should be written above their symbols wherever they occur in the passage. This makes it easier to decode other words in the passage.

Outside clues
The following exercise requires close attention to the forms of words.

Can you read this sentence?

\[ \text{O} + \text{S} \& ? + \% \text{S} \quad \text{a} + \text{E} \quad \text{T} + \% ? + \% \text{S} + \% \text{R} \text{a} \text{S} + \% \text{a} \text{S} + \% \text{a} \text{S} \text{O} \text{O}, \quad \text{so} = +, \text{a} = +, \text{and} \text{so on.} \]

Here the first clue to help break the code comes from outside the sentence. From this clue the learners can see that the word +%S consists of a, r, and one other letter. It is easy to guess that this other letter is probably e. The word in front of are has three letters and the middle one is o. Thus it is not difficult to guess that the word is you because are is usually preceded by we, they, or you, and you is the only one of these with o as the middle letter. In this way, with close attention to the spelling patterns, sentence structure, and the meaning of the sentence, the code is broken. The sentence structure and the meaning provide clues to help guess words. The spelling patterns provide clues to help guess letters.

Frequency and language clues
This exercise uses information about the frequency of certain letters and word types as clues to help break the code. This sentence is written in code. Try to read it. There is some advice for you at the bottom of the page. Read it carefully and work carefully. The first word contains two letters, the second contains two, and the third contains one.

\[ \text{£% a + ) = %b (+* ?e! + % %a + %a & £: %b; %b %o %b} + \text{O} \& %a + T(a %1 + £) & %£%O \]

The following information will help you. It is true for almost every piece of English:

1. There are only two words in English that are written with one letter. They are 'a' and 'I'. 'I' is usually the first word in a sentence.
2. The last letter of several words is 's'. In English 's' is the most frequent consonant.
3. The most frequent vowel is 'e'.
4. There are only three words in English that are written with two letters when the last letter is 's'. They are 'as', 'is', 'us'. 'Us' is usually near the end of the sentence. 'Is' is usually near the beginning. Only a few English words have two letters. When you know one letter of a word, it is not difficult to guess the other.

The clues given here show how the learner can pay attention to the language as a system (and not just as a means of conveying messages) in order to break the code. Hopefully, this interest in the language system will develop into a more general interest in language for its own sake.

Prediction clues
An important part of reading is being able to predict what will occur next in a piece of writing. The previous code exercises have all required the learners to use this skill in a conscious and detailed way. The following exercise requires the learners to use this skill to decode a poem.

Try to read this poem. Remember the sounds at the end of the first and second lines are the same, and the sounds at the end of the third and fourth lines are the same.

As I was walking up the stairs,
1 2 3 4 5 2 5 6 7 8 9 7 5 1 0 6 4 4 8 3 1 1 3
He wasn't there again today.
1 7 1 1 0 8 4 8 5 4 8 3 7 9 1 2 1 3 1 4 1 5 9 5 7 5 1 6
Two words in the second line are the same as two words in the third line.

This exercise can be done with a reading passage by writing every second sentence in code.

Code exercises carry their own reward with them. They challenge the learners to decode the message and get the meaning. When the decoding is done successfully, the meaning is clear and the learner has the satisfaction of having broken the code.
Code exercise for vocabulary learning

Code exercises can also be used in vocabulary teaching. One of the most difficult tasks in learning new words is learning to recognize or recall the forms of the words. Code exercises require the learners to give special attention to word forms. The more active attention a learner gives to a word, the more likely he is to remember the word. In code exercises the learner must actively work at decoding words.

In the exercise opposite, the words to be learned are written in code and are placed in a defining sentence and where possible with a picture. A few of the words in code are already known to the learners. By decoding these easy words the learners can decode the unknown words. The word levels are based on L.A.Hill's Elementary Comprehension Pieces (Oxford University Press, London, 1963).

The exercise is made in this way. The teacher makes a list of words that he wants the learners to know. He then chooses twenty or more words from that list that are made from about twelve or fourteen letters of the alphabet. This means that when these words are written in code, only fourteen symbols will be needed. It is easier for the learners to break the code if there are only a few symbols. For example, the words in the sample code exercise use only the letters a, c, d, e, i, l, n, o, p, r, s, t, u, v. The teacher should check that each letter occurs at least four or five times in the words in the exercise. This will make it easier to decode the new words. Like all code exercises, this exercise is suitable for individual work without the supervision of the teacher.

A similar type of exercise can be made to revise vocabulary. The learners are given a list of words in code with their definitions next to them. The learners decode the words.

Both of the vocabulary exercises are based on the principle that knowing some of the words in the exercise will reveal the words that are unknown. Different words are known to different learners, but the use of code makes sure that the exercises will be challenging and useful for all learners. The use of code in language teaching has a different aim from the use of codes to conceal messages. For this reason code exercises should not be too difficult.

Most code exercises have all the features of good language teaching techniques. They interest the learners. They require the learners to give their attention of language. They are easy to make and easy to mark.

Paul Nation

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<table>
<thead>
<tr>
<th>English</th>
<th>Thai</th>
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<tbody>
<tr>
<td>When you eat a 10:08:00: plant or fruit, you will be sick or you will die.</td>
<td>She 10:08: a lot of money on clothes.</td>
</tr>
<tr>
<td>Swimming is a 10:08:£ and so are running and cycling. Play 10:08:£ and you will be strong.</td>
<td>This man is a policeman. The 10:08:£ can catch bad persons.</td>
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<tr>
<td>Two ducks are swimming in the 10:08:0. A 10:08:0 is always small.</td>
<td>This radio uses a0: 10:08: £ + £?</td>
</tr>
<tr>
<td>When you make 10:08:£ you boil meat, vegetables, and a lot of water together. You eat it with a spoon.</td>
<td>Ships travel through a 11:08:0. The Panama 11:08:0 is between North and South America.</td>
</tr>
<tr>
<td>They listen to the music and 01:08:£o together around the room.</td>
<td>A 10:08:£ food has a good taste. A 10:08:£ person is kind and friendly.</td>
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<tr>
<td>When it is your birthday, your friends will give you a 10:08:£a. Perhaps it will be a pen, or a watch.</td>
<td>You can buy a meal in a 10:08:£.</td>
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<tr>
<td>?0:£ means up to this time. Has he comes ?0:£. Not ?0:£</td>
<td>When you 10:08:£ you read, write and think about your lessons.</td>
</tr>
<tr>
<td>A 10:08:+1 is a short journey on land, or in an aeroplane, or in a boat.</td>
<td>When you 10:08:£ a thing, you damage it. It is not good now.</td>
</tr>
<tr>
<td>My friend is a nice 10:08:£a.</td>
<td>Ruangyuth Teerawanich drew the pictures.</td>
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