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The Versatile Dynamic QR Code:

Using Dynamic QR Codes for Class Activities

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A QR (Quick Response) code is a tool to quickly disseminate information to anyone with a QR code reader on their smartphones. It can be thought of as a more powerful barcode.

With a QR code reader on a smart-phone, a person snaps a picture of a QR code and can view text or be taken to a web site. In addition to text and links, many other kinds of information can be embedded in a QR code, such as a telephone number, email address, or SNS information.

There are many creative uses for QR Codes in EFL contexts. Rivers (2009) gave the example a problem-solving scavenger hunt in which students search for QR codes placed around their campus. Each QR code contains a key word and directions to another QR code. After "collecting" all of the key words, students arrange the words to make a sentence and report the correct sentence to the teacher. A more practical application Romney (2010) describes is to embed the answers to a worksheet activity and print the QR code on the worksheet. This allows students to check their answers as they finish the activity, whether it is in class or for homework. If the answers were printed on the worksheet, students may be tempted to check the answers before finishing, or they may inadvertently glance at the answers. Also, having the extra step of a QR code may encourage students to finish the activity before checking the answers.

Both of these activities utilize a static QR code, which means the text or link embedded in the code is fixed–once the code is created, the content cannot be changed. If there is a mistake in the text embedded in the QR code after it is printed on the worksheet, the only way to correct it is to make a new QR code and reprint the worksheets. If it was an in-class activity, the new QR code could be displayed on a screen, but this takes away the convenience of the QR code.

The Dynamic QR Code

Here is where the dynamic QR code is a great alternative. While the contents of a static QR code cannot change, those of a dynamic QR code can be altered even after it is generated. Once a QR code is made dynamic, the way it looks does not change. The change is what appears on the user's smartphone depending on what is "behind-the-scenes" of the QR code. One class it could be the answers to a worksheet and the next class it could be changed to be a link to a newspaper article or YouTube video.

Dynamic QR Code Setup

I'd like to give a simple explanation of how to set up a dynamic QR code and then offer several ways to use them in a classroom setting. Many web sites offer free dynamic QR code generating. I am going to use https://www.the-qrcode-generator.com/ here because it is straightforward and allows me to use my Gmail account to sign in to keep track of my QR codes (more on that later).
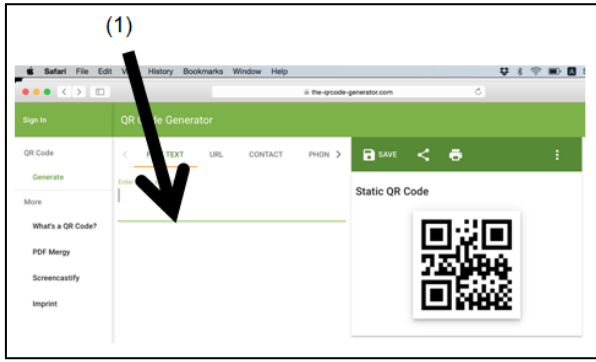
Here is the process: (A) generate the QR code, (B) make the QR code dynamic, (¥C) change the QR code to fit your needs, and (D) save the QR code image to print or display for your students.

(A) Generate the QR code

Go to https://www.the-qrcode-generator.com/. Enter your text here (labeled (1) in the image below).
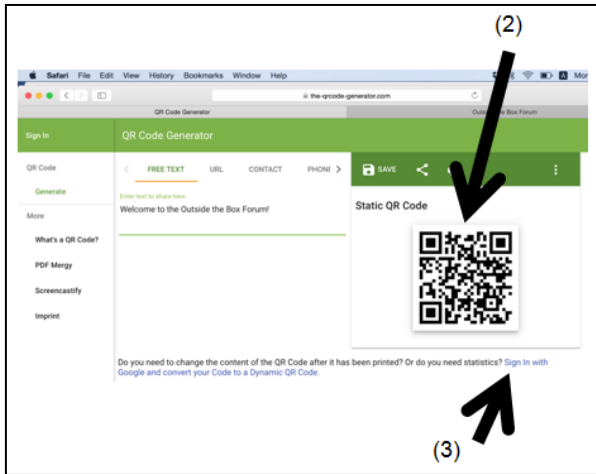
Wright, B. (2015). The versatile dynamic QR code: Using dynamic QR codes for class activities. *OTB Forum, 7*(2), 80-82.
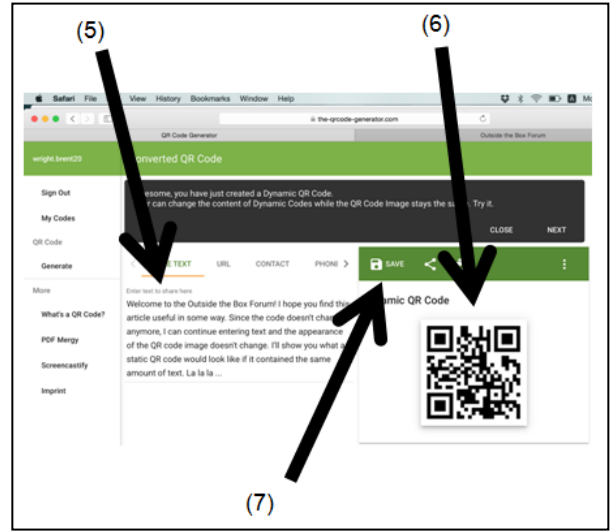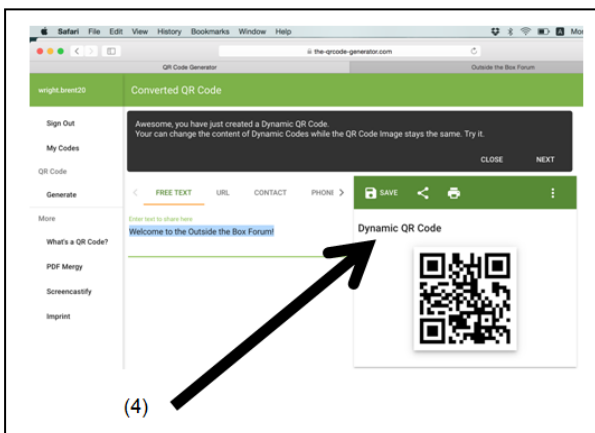
(B) Make the QR code dynamic.

Begin by clicking here (3). You'll be instructed to log into your Gmail account. This is necessary so that only the creator of the QR code can change the content. Thus, you will need to log in to make additional changes. You will see that the status has changed to "Dynamic QR code" (4).

(C) Change the QR code to fit your needs.

You'll notice that as you type (5), the QR code will not change. The "appearance" of the image remains the same (6).

The image to the left is what a static QR code containing the same text looks like.

A smartphone will sometimes have difficulty reading the QR code if there is too much information in it. By "locking in" the QR code when it is still readable, your students' smartphones will have an easier time reading it.

(D) Save the QR code.

Save the QR code by clicking "save" ((7) in the above image) to print on a worksheet or display on a slide show for your students.

What's It Good For?

Here are several ways to use the dynamic QR code for your classes, and the advantages over the static QR code.

(1) Print the QR code on your syllabus with your contact information embedded in it. Add (or delete) your Twitter or Facebook username depending on your class situation. Also, you can delete the contents of the QR code after students have the necessary information. This way your information isn't "out there" for anybody to access.

(2) Have a QR code with the link to your class website. You can change the link depending on the class. This is advantageous if you teach different courses (or at different schools) because you can print the same general syllabus and change the link to match your class.

(3) Display a QR code for students to access a class survey. If you need to have separate results for each class, you can change the link to the survey for that class just prior to having them take it.

(4) Have one QR code on the syllabus for the assignments due that week. Update this each week so students have the most current information.

(5) A daily task (text or link) for students to complete as they come into the classroom. You can keep the same image in the slide presentation and not have to generate, save and paste a new image each time.

Things To Keep In Mind

There are a few points to keep in mind when using a dynamic QR code. First, try the QR code yourself before showing it to students to make sure the embedded information is what you intend for students to see. Second, the dynamic QR code requires an internet connected device. In the rare case a student's device cannot connect to the internet he or she will need to rely on a friend's device. Third, be judicious in how QR codes are utilized. They are meant for smartphones to access information. Make sure there isn't too much text and that websites are mobile friendly before using them in your class.

The wonderful thing about QR codes is that they are free to create and there are many wonderful options for how to use them. If you have any creative ideas for how to use dynamic QR codes I'd love to hear about them. Please email me at brentwright.kit@gmail.com

References Cited

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Romney, C. (2010, December 15). How I use QR codes in the classroom [Web log post]. Retrieved from http://www.osakajalt.org/blog/2010/12/15/how-i-use-qr-codes-in-the-classroom.html

Website

QR Code Generator. Available at https://www.the-qrcode-generator.com/

About the author: Brent Wright is an English language instructor at Kanazawa Institute of Technology. Before teaching in Japan, he taught Japanese as a foreign language in the United States. His research interests include computer assisted language learning, smartphone use in the classroom, and vocabulary acquisition.