

# Section 2

## Developmental Record

Exploiting Technology in the Classroom

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# PART I

## Introduction

A little over a year ago, I held an informal focus group to find out what kind of Life Club topics caught learners' interest. When the subject of animals and biology was brought up, the students reacted with such enthusiasm that I started to plan a life club on animal taxonomy later that day.

I prepared a class about vertebrates; the main task of the Life Club was to take a random group of vertebrates, look them up online, then classify them (e.g. a blue whale is a mammal). In his essay titled *Developing Language-Learning Materials with Technology*, G. Motteram describes how 'The Internet provides a useful resource for all kinds of authentic texts, by which I mean texts not produced specifically for learning languages.'<sup>1</sup> Bearing this idea in mind, I directed learners to go online to do the research; however, their enthusiasm was quickly dampened by the quantity of text that they couldn't understand. The Life Club had been a failure because the students had no idea how to find the information they needed to complete the task. I needed a new method to help them research.

## Rationale

Traditionally, this information might have come from a textbook or a printed handout. The text would be graded and would come directly from the teacher, which somewhat compromises the authenticity. Gower, Phillips and Walter note that

*Authentic materials, because they are 'real', are intrinsically more interesting and motivating and they give students confidence when they understand them. [...]  
Authentic materials can be effectively linked with ways of helping students be more independent learners.<sup>2</sup>*

To paraphrase from Richards and Rogers, in Content-Based Instruction, learners ought to access materials that a native speaker might be using to learn about the same topic.<sup>3</sup> Not only does providing the students with a teacher-prepared booklet compromise the authenticity of the text, it also uses a lot of paper on something that might never be looked at again.

In that first Life Club, students had accessed ungraded materials that they weren't prepared for in any way. Gower, Phillips and Walter insist that a prerequisite for students' interactions with ungraded language is the process of building their confidence, perhaps by starting with easy tasks to engage them with the text, or by giving them glossaries of words they'll encounter<sup>4</sup>. Unfortunately, if they're simply sitting down in front of a computer, it's fairly

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<sup>1</sup> p.306; Motteram, G. *Developing Language Learning Materials with Technology* pp.303-328; *Materials Development in Language Teaching* (2<sup>nd</sup> ed. by Tomlinson, B.); Cambridge University Press.

<sup>2</sup> p.83; Gower, R., Phillips, D. and Walters. S. *Teaching Practice Handbook*; Macmillan; 2005

<sup>3</sup> Pp.204-222; Richards, J. and Rodgers, T. *Approaches and Methods in Language Teaching*; Cambridge University Press; 2001

<sup>4</sup> p.83; Gower, R., Phillips, D. and Walters. S. *Teaching Practice Handbook*; Macmillan; 2005

difficult to predict what they'll be reading, what important but unfamiliar lexis they'll encounter, etc. They need to be directed to more manageable texts.

## Objectives and Approaches

My objectives in this project are to explore ways of providing students access to authentic material that's not overly difficult for them to engage with. Beginning this project, I hoped to enhance the students' experience of Content-Based Instruction by directing them to specific online texts. If they are able to take information from ungraded materials to complete a task, learners will feel a sense of accomplishment, have their independent learning skills boosted and acquire new language to discuss unusual areas of interest.

During my classes, I will experiment with ways of directing students to suitable material and using strategies to boost their confidence before the task. I shall measure the appropriacy of the materials by looking at the students' ability to complete the set task. Are they able to do it within the time limit? Are they able to explain their answers in their own words? Do they have further questions? Their confidence levels can be gauged by observing their behaviour – are they smiling, discussing the information, connecting with their peers?

## Learner Profiles

I'm teaching in an adult language school based in Guangzhou, China. Most of my learners are between the ages of 18 and 50. The vast majority have Mandarin or Cantonese as their L1. Learners are generally well-educated and have at least a middling income. All our students have smart phones that they use to look up words and photograph boardwork and PowerPoint slides. Class composition is difficult to predict as students may join any class that is at their assigned level. I'll be focusing this Developmental Record on High Life Clubs, which broadly follow a task-based learning approach. These Life Clubs offer both opportunities and drawbacks.

As they sign up for classes, I'll be working with self-selecting groups of learners. It's fairly safe to assume that, if they've read the description (only available in English) and have still chosen to sign up, they have some awareness of and interest in the Life Club topic. A key part of CBI is 'that it seeks to build on students' knowledge and previous experience. Students [...] are treated as bringing important knowledge and understanding to the classroom'.

As the High Life Club is for stronger levels, *any learner above A2 on the CEF may join*. A very broad range of abilities and language proficiency can be challenging for a teacher when preparing materials for the class; the difficulty lies in pushing the stronger students while supporting the less able. Over the course of this Developmental Record, I hope to advance some strategies for improving materials for learners, both in terms of their English proficiency and their specific interests.

## PART II

<b>Lesson 1</b>	<b>10/12/2014</b>
<b>1 hour</b>	<b>19 learners</b>

A second Life Club on vertebrate taxonomy. Students must complete a research task – read about their group’s animals online, then classify them.

### ***Approach***

The task is the same before, but this time I directed students to make their searches on [www.simple.wikipedia.org](http://www.simple.wikipedia.org), a website with simplified language for native speakers.

### ***Observable Results***

Two out of six of the groups visited the website directly and were able to complete their tasks, with the majority of the classifications being correct (I had to help all the groups with the difference between warm and cold blood). Three groups accessed the website and had partially completed the task within the time limit. The sixth group went to [www.wikipedia.org](http://www.wikipedia.org) instead, and were pasting whole chunks of text into an online translator. They were unable to complete the task.

### ***Setting goals***

Some groups spent as long as 10 minutes settling down at a computer, ordering their handouts and finding the relevant pages on Simplepedia. Next time, I think it might be best to give direct links to pages – this would increase efficiency somewhat and give the students more time to read and classify. I will give the links out in their handouts.

<b>Lesson 2</b>	<b>20/12/2014</b>
<b>1 hour</b>	<b>25 learners</b>

A Life Club on ancient Egypt. Students must read about a variety of topics and then choose one topic to present to another group.

### ***Approach***

The focus in this Life Club was on presentation skills as well as Egyptian history. I instructed every group to select two topics to read on <http://egypt.mrdonn.org/index.html>, and then choose one of those to present to the group. I gave them the URL on slips of paper. They worked in the computer area.

### ***Observable Results***

All the groups spent too long on their research, so not everyone was able to present, which means that the lesson aims were not fulfilled. The website language was well-graded; students were not using their dictionaries frequently, and I was able to deal with unusual lexis during circulation. The research stage took too long because students were unable to choose topics, and were reading too many pages (a sign of interest).

### **Setting goals**

Although every student was involved with the research, and were demonstrating their interest by asking questions and discussing ideas with one another, we didn't have enough time to complete the task in the 30 minutes allotted to the research and planning phase. Next time, I'll try to streamline this process of selection by allotting students topics to research.

<b>Lesson 3</b>	<b>05/01/2015</b>
<b>1 hour</b>	<b>25 learners</b>

A Life Club on Roman history. The task was the same as in lesson 3 – research and present.

### **Approach**

The students were divided into groups and given a topic and a URL on a slip of paper. I sent them to <http://rome.mrdonn.org/index.html>. They worked in the computer area.

### **Observable Results**

Most groups demonstrated interest in their topics, asking me questions about unusual words they couldn't find in their dictionaries. All the groups had finished researching their topics within 15-20 minutes, and were able to spend the remainder of the time planning their presentations. Not every student spoke during their group's presentations. We had 5 minutes at the end of class to evaluate their presentations.

### **Setting goals**

As I said, most students demonstrated interest in their topics. Some students didn't talk during the presentations; I theorise that they were lacking interest, or were feeling overwhelmed by the stronger members of the group. I think one-on-one presentations might encourage shy students to share what they've learned.

<b>Lesson 4</b>	<b>10/01/2014</b>
<b>1 hour</b>	<b>24 learners</b>

The same class on ancient Egyptian history, as the first had been very popular.

### **Approach**

I created 8 flyers with tear-away tabs. Each flyer was related to a topic on <http://egypt.mrdonn.org/index.html>, and each tab on the flyer has the same URL on it. Learners stood next to a topic that interested them, and that's how they were grouped. They were then able to take a tab and do research, discussing the topic with their group. Finally, they would find a partner from a different group and share their new knowledge with them.



Example flyer downloaded from  
[http://www.printableflyertemplates.net/preview/Flyer\\_Template\\_With\\_Tear\\_off\\_Tabs](http://www.printableflyertemplates.net/preview/Flyer_Template_With_Tear_off_Tabs)

**Observable Results**

Learners were highly engaged; they demonstrated this by discussing the topic, asking questions, and finding extra pictures on their phones which they could use in their presentations. Not only were learners happy about being able to choose their own topic, learner talk time was maximised during the research and individual presentation stages. Accurate pronunciation of the historical lexis continued to be an issue.

**Setting goals**

Allowing learners to choose their own sub-topic of research motivated them all to participate. The language was not too complex for learners to get key information from, as the website is for young native speakers. I'd like to work on refining this model of resource sharing; giving controlled choices.

<b>Lesson 5</b>	<b>17/02/2015</b>
<b>2 hours</b>	<b>15 learners</b>

A two hour reading club; students may choose a short story from a selection of genres [romance, drama, horror, weird, comedy]. The last 40 minutes of the class are spent in group discussion.

**Approach**

I chose five stories online; the stipulation was that they would be between 1000 and 2000 words and be written in the 20<sup>th</sup> or 21<sup>st</sup> century.

Vocabulary for each story was presented on a flyer under the title and author. Learners were asked to predict what the story was about, based on the vocabulary. They then scanned the QR code on the flyer using their phone, which would link them to the story. I discouraged

dictionary use: learners were only allowed to use non-electronic dictionaries, which they could request from me while reading.



QR code: students scan with their phone cameras to access

<http://shortstoryarchive.com/b/caterpillars.html>

### ***Observable Results***

Learners resented the dictionary ban, and I observed plenty of them looking up words on their phone during the reading stage. As the stories were not graded, and I hadn't indicated their difficulty in the initial scan, a lot of students seemed overwhelmed by the language. We were able to have some discussion, but I spent a lot of time explaining passages to individual learners.

### ***Setting goals***

I think I was right to restrict dictionary use because students would have spent too long fixating on individual words rather than trying to guess the meaning in context. I think it would be beneficial to cut down on the genre choices I offer, and instead give them a choice to read either the original story or a simplified version of it.

<b>Lesson 6</b>	<b>26/02/2015</b>
<b>2 hours</b>	<b>10 learners</b>

Another reading class where students could choose genre and difficulty. Due to the time involved in grading down a text, I restricted the students to two genres.

### ***Approach***

The approach is almost identical, but now the flyers displayed two QR codes each. They were clearly labelled – one took learners to the original story, one took learners to a version that I'd graded and then temporarily posted on my blog.

### ***Observable Results***

Learners were focused on their texts and, although some still used their phone dictionaries, the less confident learners who'd been able to choose a graded-down text seemed more comfortable, participating in discussions on their stories in the second half of the class. They showed more confidence by asking questions individually and during class discussion. I spent far less time in one-on-one explanations.

### ***Setting goals***

Allowing students the chance to select a genre of interest and a level of difficulty brings a good level of differentiation to the class. The students demonstrated more motivation and

engagement with the class materials, through peer chat, questions directed at me, and involvement in the discussion of the texts. I will apply a similar approach, allowing learners to choose difficulty and access to a restricted range of topics, in my next class.

<b>Lesson 7</b>	<b>12/03/2015</b>
<b>2 hours</b>	<b>21 learners</b>

I returned to the topic of animal taxonomy, expanding the class with some work on endangered species in China. This class was 2 hours, and the learner task remained the same: research the animals, classify them and then present their findings.

### ***Approach***

I prepared handouts with photos and names of the animals (with pronunciation annotated) and a QR code that took the learners to either [www.simple.wikipedia.org](http://www.simple.wikipedia.org) page or [www.wikipedia.com](http://www.wikipedia.com) – the difference was clearly marked. Every group had a different handout. Individual learners didn't have their own copy, as they could save the pages on their phone if they wanted to read more later.

### ***Observable Results***

Learners were highly engaged with their own materials. I observed learners laughing at some of their animals, and I was asked lots of additional questions. Learners were also confident enough to ask other groups questions about their work, and answer peer questions without my assistance.

### ***Setting goals***

Compared to the first and second versions of this class, this particular lesson plan was a success. Everyone used Simplepedia because they were in mixed-level groups. Separating learners by level and giving them links to either Simplepedia or Wikipedia might be a further opportunity for differentiation.

## PART III

### Conclusions: Summary of Pros and Cons of Different Presentational Approaches

Approach	Pros	Cons
Giving students a URL to a website and asking them to do research on a computer.	Short planning time. Encourages teamwork – learners clustered around one computer – boosts discussion. Learners feel like they are accessing authentic materials, but the materials have been pre-vetted by the teacher. Saves paper. Appeals to visual learners.	Uses a lot of the school's computers, particularly if the class is large. Group size must be limited or some learners won't be able to read the screens. Learners likely won't take the resources away with them, so won't retain the information.
Giving students a QR code to a website and asking them to do research on their phones.	Short planning time. Learners are impressed by the novelty of using QR codes in the classroom. Learners are able to bookmark all the information available to everyone if they're interested. Saves paper. Appeals to visual and kinaesthetic learners.	Very individual-focused group work. Relies on EF WiFi or learners' phone connections (can be really slow). Relies on learners having smart phones (there were less than 5 learners who didn't have a smart phone with them in class).
Giving students a choice of topics and having them scan QR codes.	All of the pros above. Increases learner engagement by offering them personal choices.	All of the cons above. Students can feel overwhelmed by the choices, so presentation of the materials needs to limit that in some way.
Giving students a choice of difficulties and having them scan QR codes.	All of the pros above. Increases learner confidence by giving them access to materials that don't overwhelm them, or that fail to challenge them. Learners don't need to 'lose face' by asking for an easier version – scanning a QR code is a fairly private way to make a choice.	All of the cons above.

## Evaluation

Motteram outlines an assessment tool created by A. Bates, an Open University lecturer. This tool is called the ACTIONS model, and it's designed to evaluate how feasible a technology might be. With that in mind, I'm going to evaluate the use of QR codes as a method for sharing differentiated, graded materials in the classroom.<sup>5</sup>

**Access:** *How accessible and flexible the technology is for your learners.*

As 99% of the learners are equipped with smart phones or tablets, the QR code is an ideal method of paperless communication in the classroom. Students in other EFEC schools will be in the same situation, and other teachers will find that most teen learners in affluent schools will have smart phones. As the technology proliferates, the more widely this approach can be adopted.

**Costs:** *How much it costs in total, and what the cost is per head.*

This method assumes that learners will have purchased a smart phone for general communication purposes, and that the teacher has access to a computer with an Internet connection. To make this really feasible, the school should provide WiFi so that the learners aren't using their own bandwidth.

**Teaching and learning:** *What kind of learning is taking place, and how teachers can use the technology to support it.*

Learners are taking part in Content-Based Instruction, so the focus is less on language and more on the sharing of information as a native speaker would receive it. Using QR codes to send links means that students are getting directed to pre-approved sources of information in a context that seems authentic (even if the material has been graded by the teacher and posted online). This authenticity leads to increased engagement.

**Interactivity and user-friendliness:** *How easy the technology is to use, and whether it provides opportunities for interaction.*

As learners will be operating their own phones, it won't be difficult for them to access the information. They will quite likely have had experience of scanning QR codes, and will at least know what a QR code is. Using QR Codes to share information is an activity that focuses on individual engagement rather than group learning.

**Organisational issues:** *What the teacher needs to do before learners can use this technology successfully.*

The teacher needs to ensure that all learners have their phones, have access to the school WiFi and are able to scan QR Codes with their phones. In the future, I'd advocate having the links written down as a back-up if the learners don't want to use their phones.

**Novelty:** *Whether the technology seems new to learners.*

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<sup>5</sup> p.310; Motteram, G. *Developing Language Learning Materials with Technology* pp.303-328; *Materials Development in Language Teaching* (2<sup>nd</sup> ed. by Tomlinson, B.); Cambridge University Press.

QR Codes are proliferating in marketing and advertising campaigns. Learners usually scan individual QR Codes to add each other on WeChat, one of the main social networking services in China. However, QR Codes are rarely used in the classroom... At the moment.

**Speed:** *How quickly the materials can be modified or removed, and how quickly the teachers can prepare the materials.*

Although it takes time to locate suitable materials, prepare glossaries and grade texts if necessary, the actual creation of a QR Code is instantaneous, particularly now that [www.bing.com](http://www.bing.com) has an automatic generator on its main page.

It's clear that QR Codes have a variety of potential applications in the classroom, and this research project has given me plenty of arguments for their use in Life Clubs. Further research might be put into how they can be integrated into other class types to enhance student experience and learning.

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