

The Growth of Caribbean Integration

Justification Paper

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EDTECH 506
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Introduction

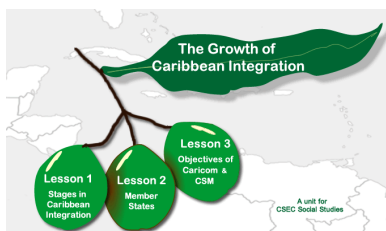
Regional Integration is a required component of the Caribbean Examinations Council (CXC) Social Studies syllabus at the Caribbean Secondary Examination Certificate (CSEC) level. CXC is the examining and certifications body for secondary students, and also for advanced certification for tertiary level matriculation. Students traditionally have difficulty with the unit in general and the history and objectives of the integration movement in particular. While the ultimate aim is to design materials for all topics in this section of the syllabus, this package presents three of the topics.

User Assumptions

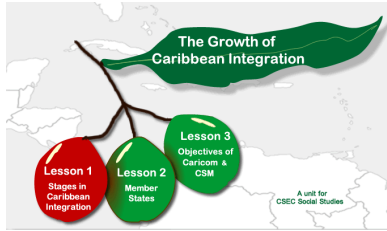
Users are secondary students of Social Studies between 15 and 17 years in their final year of the CSEC program. Especially during the final two years, they frequently examine and interpret stimulus materials such as cartoons, diagrams, graphs, and tables. As an abstract concept, regional integration presents a greater challenge to interpret, since it is not usually part of their day-to-day experience. For some students, integration is seen as bad for our country due to the negatives articulated by many people in the society. The average reading level is that of upper secondary school, and the learners generally have satisfactory writing and comprehension skills. About 90% already have certification in English Language at the secondary level. There are no known challenges related to visual perception among the students. Learners are willing to help each other, but tend to protest about group work where the final mark is based on the group effort. Students are familiar with computer based activities such as navigating, using hyperlinked content, and creating content using applications.

Graphic Description

Unit and Lesson Overview



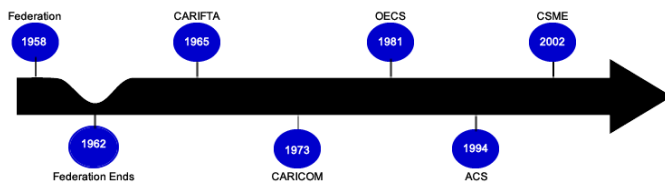
To orient the user at the start of the unit and each lesson, I used a graphic of a bunch of three fruit with each one describing a lesson in the unit. Learners therefore “perceive the ‘big picture’ and the relationship of the parts to the whole” from getting an overview of topics and the order of study (Lohr, 2008, p. 80). On subsequent lesson pages, a red fruit indicates the current lesson. The bunch of



fruit is symbolic of the individual territories joined by a unifying objective, that if not properly nurtured, the fruit will wither and fall away from the group. Lohr (2008) justifies using the color green because it represents growth, freshness, and the hope of regionalism. It also calls to mind the relative youth of the movement. I borrowed the red color from nature to suggest ripe fruit that is

ready for use.

Integration Timeline







Timeline of Caribbean Integration

A timeline is a familiar graphic for events over a period of time, therefore it reduces the cognitive load for students who can focus on the content rather than interpreting the visual (Clarke & Mayer, 2011; Lohr, 2008). This is an important consideration in a unit with many abstract concepts. Western reading conventions support an arrow running from left to right to indicate start and end points. Additional text is not necessary. The breakup of the Federation is communicated by a dip in the timeline which also leads the eye down to the second date on the timeline, then upwards to the third. The user is now oriented to read the timeline correctly.

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Logos of Regional Integration

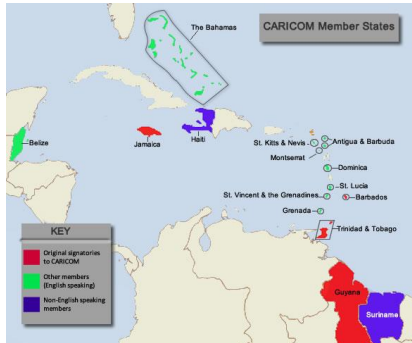
Logos of Regional Integration

	West Indies Federation
	CARICOM Standard
	OECS Flag
	ACS Flag

WI Federation, CARICOM images: courtesy Wikimedia Commons
 OECS, ACS images: courtesy <http://www.crviflags.com/foiw/flags/index.html>

A visual that is concentrated, concise and concrete helps learners focus on essential content instead of competing stimuli (Lohr, 2008; Smith & Ragan, 2005). Grey header and footer bars, sans serif fonts, and an off-white background reduce distractions, allowing the learners to concentrate cognitive efforts on processing the features of the quite colorful logos. The table layout, by its familiarity, is an efficient way to access content even from a first glance.

CARICOM Members Map



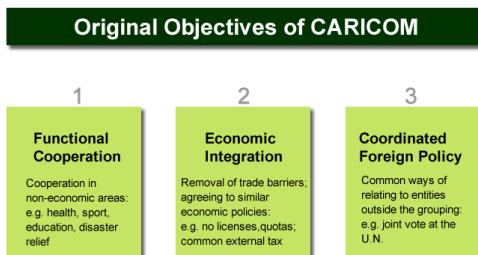
A scale map showing all CARICOM member states is a challenge because of variations in distance and size of the territories. Alessi & Trollop (2001) advise that color should be used selectively to attract attention to important information. In this graphic, strong colors (red, purple and green) label and differentiate members from non-members as well as among group members themselves. In contrast, neutrals (black, grey, and white) applied to non-member states, text, and labels let them be seen but do not compete for attention. Since the title and key boxes are critical for successful interpretation, they were given drop shadows to suggest depth and direct user attention. The emboss filter on the line separating the word “Key” from the details also works the same way.

CARICOM Members Chart

CARICOM MEMBERS AND STATUS			
Full Members	Barbados	1 Aug 1973	
	Guyana	1 Aug 1973	
	Jamaica	1 Aug 1973	
	Trinidad & Tobago	1 Aug 1973	
	By join date		
	Belize	1 May 1974	
	Dominica	1 May 1974	
	Grenada	1 May 1974	
	Montserrat	1 May 1974	
	St. Lucia	1 May 1974	
	St. Vincent & the Grenadines	1 May 1974	
	Antigua & Barbuda	4 Jul 1974	
	St. Kitts & Nevis	26 Jul 1974	
The Bahamas	4 Jul 1983		
Suriname	4 Jul 1995		
Haiti	2 Jul 2002		
Associate Members	British Virgin Islands	2 Jul 1991	
	Turks & Caicos	2 Jul 1991	
	Anguilla	4 Jul 1999	
	Cayman Islands	15 May 2002	
	Bermuda	2 Jul 2003	
Observer Status	Aruba		
	Colombia		
	Curaçao		
	Dominican Republic		
	Mexico		
	Puerto Rico		
Sint Maarten			
Venezuela			

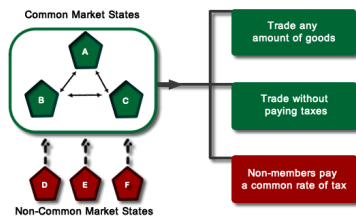
Although tables can be difficult to read, they can successfully organize a lot of information in an easily scanned format. This graphic uses vertical alignment and color-shading to indicate the hierarchy within CARICOM with Full Members placed higher and on a stronger color background than Associate Members and Observer countries respectively. Separating countries according to year of entry into the group (chunking) and aligning words and dates (proximity) help users “think about the information in a meaningful or an efficient way” (Lohr, 2008, p. 125). Relationships among the data are more apparent.

Original Objectives of CARICOM



In an effort to reduce cognitive load, this graphic uses space to separate and chunk information and to make essential content stand out (Lohr, 2008). The user can sense the overall structure more easily because there is not much to pull the eye in competing directions. By breaking up the body of text into three blocks, the user has time to assimilate each before proceeding to the next. Additionally, with a familiar symmetrical layout, the learner’s attention is devoted to making sense of content, rather than interpreting the visual as well.

Common Market Principles



This graphic helps users understand three main common market principles and relationships that exist. Lohr (2008) suggests that relationships are perceived through reusing colors and fonts. Therefore, green was repeated on member countries and two text boxes to show how members relate to each other. Red, used on non-member states and on one text box, signaled a difference when interacting with non-members. Contrast also signals

differences. Therefore I used solid and dashed arrows to indicate the differences in how members and non-members interact with each other. To make essential information stand out, I contrasted colors with white background and text. Connected elements were either aligned along a side or distributed within their space to satisfy both alignment and proximity to help users see those relationships (Lohr 2008). Additionally, placing the red elements together in a line separated from the green highlights the differences between the groups. The proximity of the green countries to each other and their distance from the red ones is further reinforced by the box that contains them.

Free Movement of Capital



Clark & Mayer (2011) and Lohr (2008) suggest that graphics can be used to make the content more concrete, thereby facilitating interpretation. This graphic uses color, depth, and white space to draw attention immediately to the essential content (Lohr, 2008). Shades of green were therefore applied to the title, money, and building in the thought bubble of the character in the visual. Drop shadows were applied to the cart of money to give the illusion of

depth, to help it stand out. No color was applied to the immigration sign. Placement at the character's eye level directs the learner to see where he is looking, for another essential element needed to interpret the graphic.

Free Movement of Labor



In this graphic, I centrally grouped three persons facing in different directions with arrows suggesting the direction they may go. The curved arrows emphasize the idea of movement. Repeating color in the arrows and the title box unites the graphic by leading the eye back and forth between the elements. Adjusting the opacity of the map reduced competition of figure and ground elements, while still allowing the users to place the persons in the context

of the Caribbean region. If there is figure and ground conflict, Lohr (2008) warns that will detract from rather than enhance learning.

Free Movement of Goods

CSM Objective: Free Movement of Goods



What will you create?

An effective design can be created by just the use of common shapes and typography. By limiting the elements to a question mark and two lines of text, the mind realizes that they should stand out as the white background recedes (Lohr, 2008). The simplicity of this design also works because the learners readily recognize from the question mark that they have to think even without the text that informs what they must think about. Color

and white space focus attention on the title and the learner's task. However, this graphic can only work in conjunction with the two previous visuals in this lesson. Its intention is to encourage learner imagination, rather than support understanding of the concept. I believe this can work because the previous visuals provide examples, and this objective is an easier one for learners to understand.

Design Process

Designs for the graphics were created using Fireworks CS5.5. The two regional maps and the Federation and CARICOM logos were public domain images from Wikimedia Commons and while the logos of OECS and ACS were free to use courtesy <http://www.crwflags.com/fotw/flags/index.html>. The final website was created on the Weebly platform. This was done to reduce problems migrating content after leaving the BSU program. To continue the idea of growth, the color scheme for the site is green and black. A white background allows text and graphics to stand out.

In analyzing the requirements for this website, I wanted materials that would complement a face-to-face class. An asynchronous format would be demotivational for the learners of this lesson. Interaction with peers, teacher, and resource persons allows them to discuss content and hone their understanding. All participants draw on their experiences as they share in the construction of meaning. Further, since regional integration is an abstract concept for many of them, graphics needed to be representative, organizational, and interpretive for the most part to reduce the cognitive burden for my learners.

According to cognitive theories of information processing, well designed graphics can do this by helping them select, organize, and integrate the content presented (Alessi & Trollop, 2001; Lohr, 2008; Clark & Mayer, 2011).

The website uses a horizontal navigation at the top. There is a Home page and a Start page for each of the three lessons. The Start page gives a brief introduction to the lesson and the content. The user can navigate to the sub-page for each lesson by using the drop-down menu under the Lesson tab or go to the next page from a link at the bottom of the page. On the Teacher's Page, there are links to access the

Lesson Plans, Unit Outline and the Justification Paper. These open as PDFs online and can be downloaded if desired.

Lesson 1 introduces learners to the history of the six stages of regional integration. They use a visual to orient them to the content and they work through the resource links in small groups to complete the research. In Lesson 2, they find out about membership in each grouping through resource links and visuals. To simplify the design, when large visuals are used, the lesson content is broken over two pages. This happens in both Lessons 2 and 3. Lesson 3 discusses the objectives of the main integration movement. Visuals are used to promote discussion with all participants, including a resource person who will also present additional information. At the end of the lesson page(s) is a list of the main tasks to be completed in the face-to-face part of the class. Although the lesson design is fully exploited as part of a blended classroom, prompting questions are placed next to visuals to encourage deeper processing of the content. Therefore, the website also provides stand alone instructional support. All lessons encourage forms of collaboration through group work and discussion based on the cognitive principle that activating prior knowledge by sharing perspectives and experiences will promote learning (Davidson-Shivers & Rasmussen, 2006).

References:

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