Mobile Devices – Bridging the Digital Divide of Online Education

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Online education is becoming the norm

Filling a niche for students who are far away from a regular campus, want to fit continuing education into their busy lifestyles, or to take advantage of academic resources in other parts of the state, country, or even the world (Scribner-MacLean & Miller, 2011).

University of the West Indies (UWIOC) currently serve forty-four (44) physical locations in seventeen (17) English-speaking Caribbean countries.

Some students’ experiences are compromised because of minimal participation due to technological challenges
Some students will come to realize after enrolling in online programme, the ease and flexibility anticipated are fraught with technological challenges.

Challenges are likely to include, acquiring and learning to use new technological devices, navigating in the virtual environment and just learning to communicate with instructors and peers.

Most challenging technological issue: Internet access.

Great deal of frustration for the student trying to complete course assignments (Whitehead, 2005).
Problem

• The challenges get more severe during hurricane season, as was the case in 2017 when Hurricane Irma devastated parts of the Eastern Caribbean.
• Approximately 62% of online students in Islands such as Dominica and Antigua had to defer their studies until Internet connections were restored.
• Aside from incidences, students are offline for various reasons.
• Pressured to log in, even if they would have completed assignments.
What is the digital divide?

• Separation between those who have access to digital information and communications technology (ICT) and those who do not (Dewan & Riggins, 2005).

• Not only an issue of access, but also about acceptance and usage
Aim of Research project

• Examine the extent to which the digital divide impacts students enrolled in online programmes at the University of the West Indies Open Campus (UWIOC).

• Seek to identify the effectiveness of mobile devices in bridging the divide in the eLearning process from the students’ perspectives.
Research Questions

Main question:
• Can mobile devices help UWIOC students who are affected by the digital divide, pursue learning successfully?

Sub questions
• To what degree UWI students and instructors are using mobile devices to access their educational needs?
• What percentage of students rely on mobile data to access the Internet?
<table>
<thead>
<tr>
<th>CARIBBEAN REGION</th>
<th>Population (2016 Est.)</th>
<th>% Pop. of World</th>
<th>Internet Users, 30-June-2016</th>
<th>Penetration (% Population)</th>
<th>Users % World</th>
<th>Facebook 30-Jun-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean</td>
<td>42,401,541</td>
<td>0.6 %</td>
<td>18,526,199</td>
<td>43.7 %</td>
<td>0.5 %</td>
<td>10,972,840</td>
</tr>
</tbody>
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Significance of study

• Not much evidence of research within the Region that examines the technological challenges with online teaching and learning at the tertiary level.

• Research aims to unearth information that can be useful not just for the UWIOC, but opens the possibility for future investigation as online education grows within the Caribbean.

• Could prove useful in providing additional information to inform the University’s target markets, how to position its online products, and the designing of programs to meet the growing demand for online education.
Methodology

• **Mixed method** – (qualitative and quantitative)

• **Mixed Methods Designs**
  - Convergent parallel mixed methods

• **Data source**
  - quantitative data - survey from UWIOC online students
  - qualitative data - focus groups
Sample and data collection procedure

• **Sample:**
  
  Will be drawn from students enrolled in UWIOC programmes from each of the 16 Islands that UWI OCCS are located

• **Design of questionnaires & data collection:**
  
  Survey Monkey and Google Form
Data Analysis

• Quantitative:
  Exported and analyzed in Excel sheet & Google Spreadsheet

• Both sets of data will be further analyzed using the constant comparative method to identify common themes and patterns on the topic under investigation