



Activity No. 14.1 Build a Narrative on a Storyboard	
Course Code: CPE 311	Program: CpE
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Name: Adrian Justin Bulambao, Sean Edrick Lim	Instructor: Engr. Roman Richard
1. Discussion	
<p style="text-align: center;">Introduction:</p> <p>ASEAN countries have been vulnerable to climate change, experiencing more intense weather events such as typhoons, floods, droughts, and heatwaves. These problems not only affect the public safety of the people but also affect educational environments. Rising temperatures and extreme weather leads to class suspension and unhealthy learning environments.</p> <p style="text-align: center;">Problem:</p> <p style="text-align: center;">Extreme heat as a factor to overall academic performance</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;">  <p>Target 13.1</p> <p>Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> </div> <div style="margin-right: 20px;">  <p>Target 13.3</p> <p>Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p> </div> <div> <p>Indicators -</p> <div style="background-color: #f2f2f2; padding: 10px; margin-top: 10px;"> <p>13.3.1</p> <p>Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment</p> </div> </div> </div> <p>From an article written by Chi, C. On 2024 Some regions experienced more severe heat-related class suspensions than others. On April 24, 2024, around 50% of schools in the National Capital Region (NCR) and 46% in Region 3 suspended in-person classes. In Region 6, at least 25% of schools canceled classes during the recorded period, peaking at 43%. The data, provided by DepEd, covers only select dates in April and May, and further information has been requested to capture the full scope.</p> <p>This tells us that climate-related disruptions, specifically heat-induced class suspensions, have a significant regional impact in the Philippines, with some areas experiencing more frequent school closures, and that they need adaptation strategies to ensure educational continuity and minimize disruptions.</p> <p>Another article regarding this issue:</p>	

Southeast Asia, including Cambodia, the Philippines, and Thailand, is facing extreme heat, with temperatures reaching up to 45°C. Schools have adjusted schedules or closed to protect students, especially those traveling long distances who have suffered from heat-related illnesses. UNICEF warns that by 2050, nearly 2.2 billion children will face frequent heat waves, with Cambodia being highly affected. The situation highlights the growing impact of climate change on education and children's health. (Yalirozy, T., 2024)

From this another article it also supports that intense heat is a problem that leads to class disruptions, especially in regions like Cambodia, the Philippines, and Thailand, are forcing schools to adjust schedules or close, as to prevent suffering from heat-related illnesses

2. Materials and Equipment

1. SAP analytics tool - used to create visuals using a dataset that is given
2. Canva - used to create a presentation
3. Power BI - used to create a visual using a dataset, same as SAP

3. Procedure

What are the procedures that you performed?

- We gathered data sources and articles regarding our topic to further support it. This includes collecting datasets regarding school suspensions, climate related disruption. Also including articles that further supports this topic.

4. Output

Climate change is an ongoing global issue that continues to be a serious environmental challenge, It has contributed to many deaths directly and indirectly.

Step 1: Clearly answer for the problem.

We need to find out whether or how excessive heat impacts student academics in order to understand its effect on education access, learning outcomes.

Step 2: Statement Question

- How is heat a factor that disrupts education and creates barriers to consistent learning?
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Step 3: Find Data

- <https://zenodo.org/records/14540645>
- <https://www.fao.org/faostat/en/#data/ET>

Step 4: Visualize

Average of Temperature Increase by Country

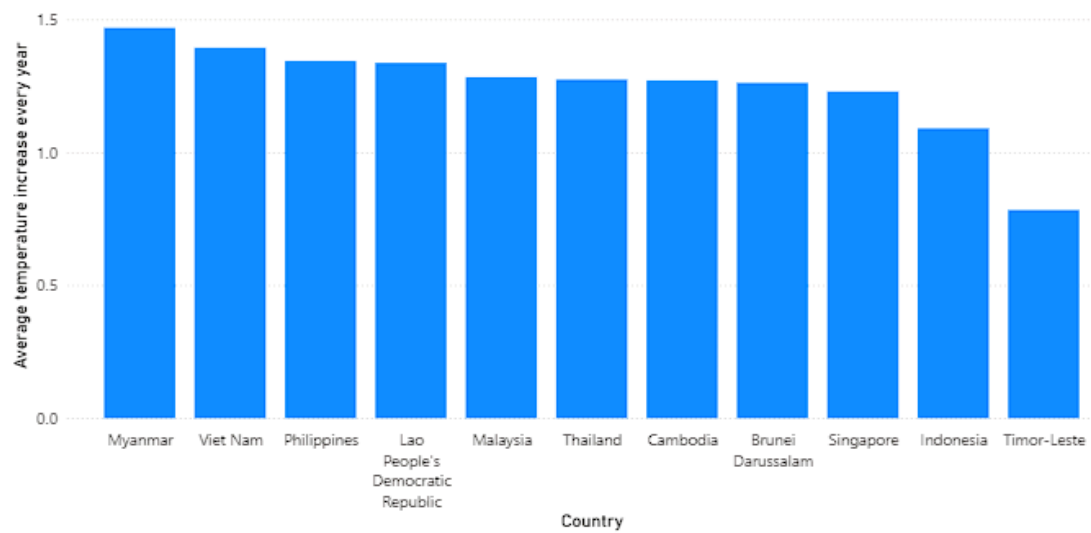


Figure 1. Due to the increasing temperature of the countries, educational systems are being disrupted, due to climate change, classrooms have

Projected 2050 Heat Levels in SEA Countries per Emission Levels

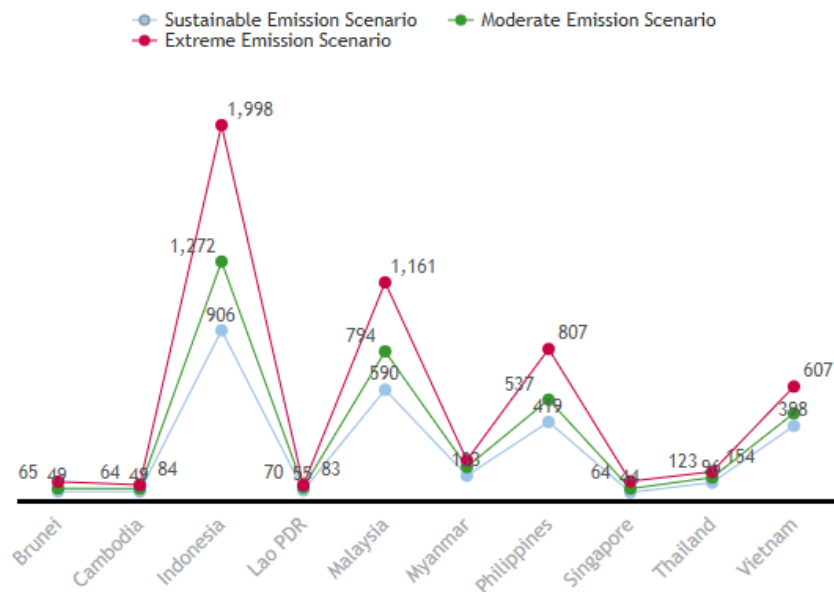


Figure 2: Heat increase per different scenarios in Southeast Asian countries by 2050

Projected Increase in Heat Intensity: 2050 vs 2090

Top 10 - All Dimensions (intensity-2050)

intensity-2050 intensity-2090

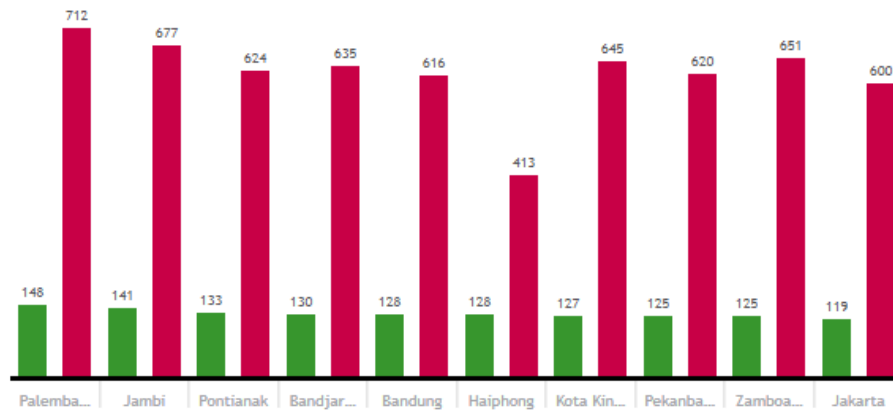


Figure 3: Emphasized climate progression in key Southeast Asian cities

5. Supplementary Activity

Include here screenshots of the module completion test.

- Map out your datasets to your described objective.
 - Show data regarding the increasing temperature of each countries
 - FAO ORG
 - Provide an insight about the possible heat intensity in the future years.
 - Zenedo Org
 - Provide visualizations about the suspension rates due to extreme weather.
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- Link and cite all your data.
 - <https://zenodo.org/records/14540645>
 - <https://www.fao.org/faostat/en/#data/ET>
- What do you aim to prove with your dataset and visualization?
 - We aim to prove that temperature is a huge factor that hinders educational progress by causing disruptions to the learning environment that leads to class suspensions, and unsafe learning conditions due to extreme weather events and rising temperatures."
- What is the narrative you want to write based on your data?
 - Due to the increasing heat-index some educational institutions have been suspending classes due to minimize the health and safety complications of students and staff, as prolonged exposure to extreme heat can lead to heat-related illnesses,

Canva link:

<https://www.canva.com/design/DAGnUZ7WqCo/I08yUA4GGSeDImJA4clJHg/edit>

Conclusion:

Bulambao:

- After doing this activity, I realized that creating a storyboard is very hard, because it requires information that could be presented linking more than one data to another. And in regards to our topic, we need more data to present.

Lim:

- This activity taught me how a storyboard is more about the story to be told rather than just being numbers. It's more important to communicate effectively the message and bridge learning gaps to make your message come across clearly to everyone, which makes this activity challenging.

