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Research Article

Web Accessibility Assessment and Ranking of State Universities and Colleges in the Philippines

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ABSTRACT

The accessibility of State universities and colleges (SUCs) websites is crucial for ensuring inclusivity and equal access to educational resources for all individuals, regardless of their abilities. This study evaluated the accessibility of SUCs in the Philippines websites using automated testing tools like WAVE and TAW, which analyzed web pages based on predefined accessibility criteria such as the Web Content Accessibility Guidelines (WCAG) 2.0.

The evaluation process involved scanning and analyzing the websites to identify potential accessibility barriers or issues. The results of the accessibility evaluation reveal significant challenges in meeting WCAG guidelines across various aspects, such as Perceivable and Operable guidelines. Common issues include missing alternative text for images, unclear link descriptions, color contrast combinations, and inadequate form labeling. These findings emphasize the need for SUCs to prioritize web accessibility to ensure equal access to educational resources. Furthermore, it includes ranking SUCs' websites based on their accessibility scores, highlighting institutions that have demonstrated a strong commitment to accessibility, and identifying areas for improvement. MPSPC leads with a minimal mean error rate of 0.33, setting a benchmark for other institutions. PRMSU and GSU follow closely, demonstrating a commitment to enhancing web accessibility.

The findings highlight the importance of adhering to accessibility guidelines to create an inclusive online learning environment for all users.

Keywords: SUCS, WAVE, WCAG, Web Accessibility, TAW.

INTRODUCTION

Information technology, especially in the realm of the World Wide Web, is becoming increasingly crucial for providing higher education administrative, academic, and student services. This reality serves as a compelling factor for every higher education to become more inclusive with the services they provide. However, individuals with disabilities often face challenges in accessing many of these services due to the way they are delivered. Given the growing importance of online resources for college education and the increasing number of postsecondary institutions serving individuals with disabilities, it is essential to ensure that school websites are accessible [1].

In the Philippines, the government has significantly promoted web accessibility for people with disabilities. The Department of Information and Communications Technology (DICT) has issued a Memorandum Circular No. 4, adopting the Web Content Accessibility Guideline 2.0 (WCAG 2.0) as the Philippine standard for making web content more accessible to a broader range of people with disabilities [2]. This initiative aligns with the United Nations Convention on the Rights of Persons with Disabilities, which the Philippines ratified in 2008 [3]. The Philippine Web Accessibility Group (PWAG) has actively promoted web accessibility and has published guidelines and resources to support this cause (Philippine Laws on Accessibility – Philippine Web Accessibility Group, n.d.). The WCAG 2.0 is an international standard, and adoption by the Philippines reflects a commitment to ensuring that people with disabilities have equal access to online information and services [4]. Hence, it pushes for the inclusive usability of digital content to the whole spectrum of the community.

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The study: "Evaluation of State University and College Institutional Websites in the Philippines" provides insights into the current state of website accessibility in Philippine public universities. The study evaluated the web addresses of 114 State Universities and Colleges (SUCs) in the Philippines based on accessibility, experience, marketing, and technology. It was revealed in the study that websites are non-compliant with accessibility standards, have outdated design, and poor website usability. Hence, the findings of the study suggest that there is a need for improvement in the accessibility of SUC websites in the Philippines [5].

Flores and Palaoag used automated tools including the Web Accessibility Evaluation Tool (WAVE), to evaluate the accessibility of higher education institution websites in Region III, Philippines. WAVE, a widely used tool for detecting accessibility issues based on WCAG guidelines, helped identify key barriers such as missing alternative text, low color contrast, and improper heading structures. The study's findings showed that many university websites failed to meet accessibility standards, indicating a need for improvements in design and compliance.[6]

Moreover, the global system of interconnected computers, known as the Internet, encompasses public and private, academic, business, and government clients. Its purpose is to minimize workloads and maximize productivity. Developers and designers strive for technological advancements to enhance the quality of life. Recent progress includes the evolution of web services from Web 1.0 to the updated web platform and the migration of storage to the cloud for improved security and productivity. Consequently, web services are in high demand, and their ranking influences their popularity in search results [7].

Assessing web accessibility for state universities and colleges in the Philippines is crucial to ensure inclusive access to digital resources for all individuals, including those with disabilities. Web accessibility, or eAccessibility, ensures that websites are designed and developed to be usable by people of all abilities, including those with visual, auditory, motor, or cognitive disabilities [8]. As of 2020, there were 1,975 Higher Education Institutions (HEIs) in the Philippines, excluding satellite campuses of state universities and colleges. Of this number, 246 were public HEIs, including 112 state universities and colleges (SUCs), while 1,729 were private institutions [9].

The importance of accessibility in academic websites is emphasized by the study conducted by May & Zhu (2010) who forwarded that web accessibility is crucial so that everyone can comprehend the presented information or data. They also emphasized that an accessible website allows people with disabilities to use, understand, navigate, and engage with its content, enabling them to contribute effectively [10]. Furthermore, accessibility holds an additional advantage for elderly individuals who may have experienced a decline in their abilities. Additionally, Website accessibility continues to be a challenge for numerous top universities worldwide. Like physical structures, websites should be designed to cater to the needs of all users, including individuals with disabilities. However, many websites often need to pay more attention to the requirements of their users, which can negatively impact user interest [11]. To evaluate the website accessibility of SUCs in the Philippines and their adherence to the WCAG, the assessment of their websites was proposed.

The study focused on evaluating the website accessibility of State Universities and Colleges (SUCs) in the Philippines, aligning with international accessibility standards. It aimed to address key questions regarding the level of accessibility of SUCs' websites, the findings from accessibility evaluations, and the criteria for ranking university websites based on accessibility.

The objectives included assessing and ranking the web accessibility of SUCs in the Philippines according to international standards. Specifically, the study aimed to evaluate SUC websites' accessibility, analyze evaluation results, and rank the state universities and colleges' websites based on established accessibility guidelines

METHODS AND METHODOLOGY

The research design described for evaluating the accessibility of SUCs in the Philippines presented a structured and systematic approach to assessing web accessibility standards. By employing automated tools like TAW and WAVE, the study ensured a comprehensive evaluation of SUCs' websites in alignment with international accessibility guidelines.

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The methodology's emphasis on data analysis and documentation of accessibility evaluation results reflected a meticulous process of identifying non-compliance areas and prioritizing improvements. Through the quantitative analysis of automated testing data, the research aimed to provide a clear understanding of the current accessibility status of SUCs' websites for targeted enhancements to enhance inclusivity.

Furthermore, the ranking methodology, which involved normalization, aggregation, and statistical calculations, offered a structured approach to objectively compare and rank the web accessibility of SUCs' websites. By utilizing both TAW and WAVE tools and integrating their results, the research design ensured a reliable assessment of accessibility issues for enhancing web accessibility in HEIs.

Data Gathering Procedure

The data-gathering procedure encompassed the identification of non-compliance areas and the documentation of analysis findings.

In the identification of non-compliance areas, during this initial step, automated testing results were thoroughly examined to determine specific instances where the websites deviated from established accessibility standards. The subsequent categorization and documentation of areas where accessibility fell short or required improvement provided a detailed overview of the existing challenges.

Regarding the documentation of analysis findings, the results of the accessibility analysis were documented clearly and concisely. Visual representations, such as charts or graphs, were included to enhance the accessibility analysis presentation. This provided a visually accessible summary of the identified non-compliance areas and their prioritization.

Data Analysis Procedure

The accessibility evaluations were conducted using the SUC websites' URLs, which were sourced from the CHED's website. To retrieve a list of URLs of SUCs from the website https://ched.gov.ph/list-of-higher-education-institutions-2 [9], access the website, identify the higher education institutions section, and examine the content to extract the URLs associated with each SUC. It is possible to extract all URLs into a CSV file for further analysis or reference. The websites listed in Appendix G were not evaluated using the WAVE and TAW tools.

After completing accessibility evaluations, the data obtained from automated testing underwent a methodical data analysis process. The main goal of this analysis was to find areas where the websites did not meet the accessibility rules and decide which issues to fix first. This was crucial for understanding how accessible the websites were overall and was an essential guide for future improvement.

The method for ranking web accessibility of state universities and colleges in the Philippines involves two key processes: normalization and aggregation.

The results from both TAW and WAVE are normalized to ensure that the contributions from each tool are comparable. This involves aligning and comparing the accessibility evaluation results obtained from both the wave and tools based on the criteria for ranking. After aligning the results, the errors detected by each tool are then compared. The tool that has a higher score or detects more errors per guideline is given precedence. By utilizing the advantages of both TAW and WAVE, this approach guarantees a more comprehensive and accurate assessment of web accessibility. This alignment and comparison of results from TAW and WAVE enhance the reliability and effectiveness of the evaluation process, as it combines the strengths of both tools to provide a more thorough analysis of accessibility issues on websites.

Once the higher score was determined, the subsequent step involved computing the mean of guidelines under perceivable, operable, understandable, and robust. This process is focused only on the guidelines where errors were found across all websites. If a guideline was not found for all websites, it was eliminated in the computation of the mean. This approach ensured that the mean calculation was based on consistent and comparable data. By computing the mean for each category, the methodology facilitated the ranking of websites based on their performance in terms of web accessibility. The mean values provided a foundational basis for further analysis and comparison.

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After getting the mean, the sum of all means was also calculated, considering the categories of perceivable, operable, understandable, and robust. This sum represented the overall accessibility score for each website. The websites were then ranked accordingly, with the website with the lowest sum being ranked as the most accessible. In ranking the websites, the RANK function in Excel was utilized. This function assigned a rank to each website based on its accessibility mean score. The website with the lowest mean score was assigned the highest rank, indicating its superior performance in terms of web accessibility. This ranking process allowed for a clear and objective comparison of websites.

Conceptual Framework

Figure 1 shows the research paradigm for this study encompasses a comprehensive approach to evaluating and enhancing the accessibility of SUCs in the Philippines. The input phase involves access to SUCs' official websites and information on internationally recognized guidelines such as WCAG 2.0.

The process involves automated evaluation, utilizing tools like the Wave and TAW, result analysis, and developing a robust set of criteria for ranking university websites.

The output phase includes evaluating SUC websites' accessibility and establishing transparent criteria for ranking based on accessibility. This structured framework aimed to provide a systematic and standardized approach to improving web accessibility in higher education.

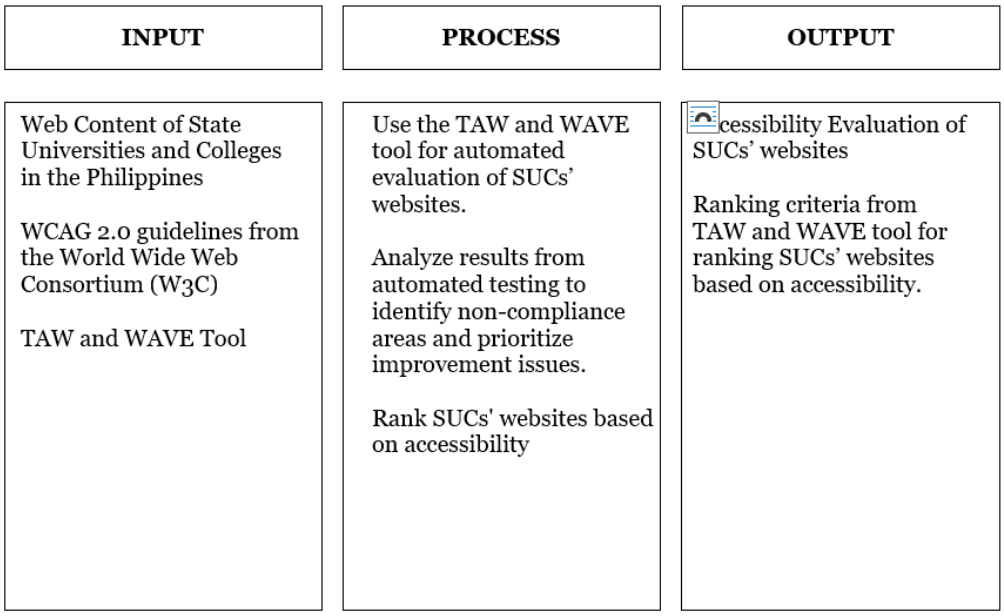

Figure 1. Research Paradigm

RESULTS AND DISCUSSIONS

This chapter comprehensively evaluates the web accessibility of State Universities and Colleges (SUCs) in the Philippines. This chapter aims to provide a detailed assessment and analysis of the current state of web accessibility in SUCs and their ranking. Evaluation of the Accessibility of SUCs' Websites (1). Analysis Of the Accessibility Evaluation Results (2) and Ranking of the Web Accessibility of SUCs' Websites (3).

Analysis of the Accessibility Evaluation Results

The analysis of the accessibility evaluation results provided valuable insights into the web accessibility of SUCs' websites in the Philippines. Through the use of bar charts, the findings from the evaluation conducted using the WAVE and TAW tool were visually represented and interpreted. These charts offered a clear and concise overview of the accessibility issues identified. This also highlights the areas for improvement needed to enhance the overall accessibility of SUCs websites.

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Accessibility of SUCs' Website Using TAW Tool

The 114 SUCs in the Philippines were analyzed using the TAW web accessibility tool with four WCAG guidelines which are: Perceivable, Operable, Understandable, and Robust. The TAW Tool encountered an error message, Error in analysis, when attempted to evaluate certain websites, rendering them unassessed by the tool. As a result, the accessibility status of the following websites remains unknown: nlpsc.edu.ph, psau.edu.ph, pmma.edu.ph, cvsu.edu.ph, slsu.edu.ph, debesmscat.edu.ph, bisu.edu.ph, siquijorstate.edu.ph, cmu.edu.ph, spamast.edu.ph, usm.edu.ph and snsu.edu.ph.

Figure 2 shows the evaluation revealed that in the perceivable guideline, 93% of the websites (90 out of 97) had errors for the 1.1.1 criterion, indicating issues with providing alternative text for images. Similarly, 99% of the websites (96 out of 1) had errors for the 1.3.1 criterion, suggesting challenges in structuring content for easy comprehension by screen readers and other assistive technologies. These high error rates emphasize the need for improvements in ensuring accessibility and inclusivity on these websites.

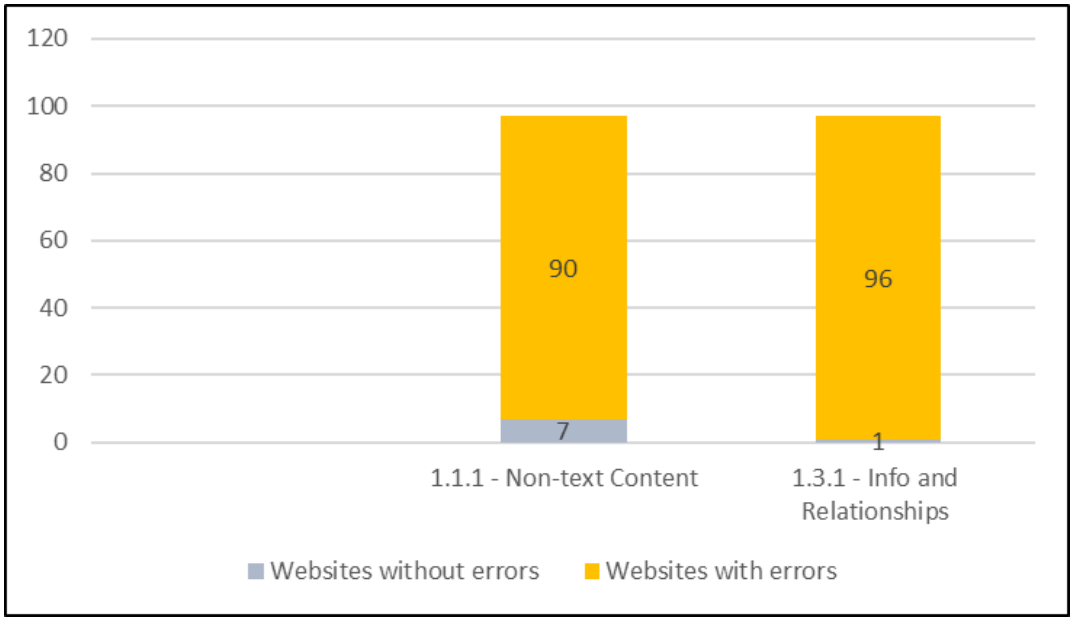

Figure 2. Perceivable Guideline Result of TAW

Figure 3 shows the assessment of website accessibility guidelines. It was observed that for the Operable guideline, specifically the 2.4.4 (Link Purpose) criterion, errors were prevalent among 98% of the websites (95 out of 97). These errors highlight potential issues with providing clear and descriptive link text, which could hinder users in understanding the purpose of each link. Furthermore, out of the 101 websites evaluated, only three websites managed to achieve a flawless score with no error. These websites are: trac.edu.ph, claveria.ustp.edu.ph and mpspc.edu.ph.

The said findings indicate that these websites have effectively implemented the necessary measures to ensure clear and purposeful link text for improved user experience and accessibility. The findings underscore the importance of providing informative link descriptions to enhance the operability and usability of websites for all users.

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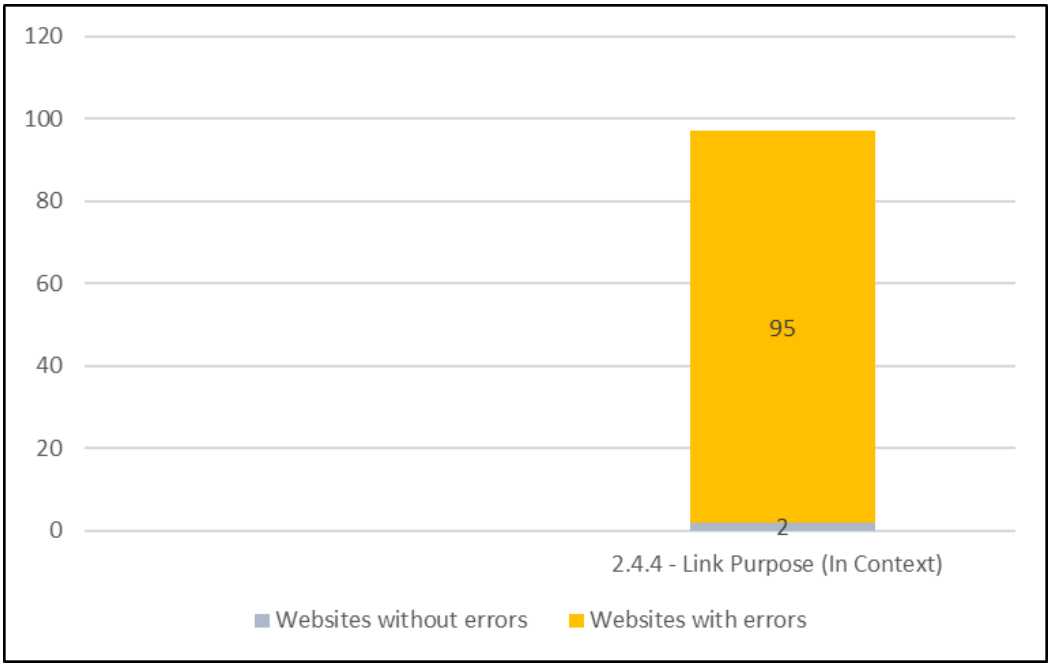

Figure 3. Operable Guideline Result of TAW

Figure 4 shows the Understandable guideline, the results show that 8% (eight out of 97) of the websites had errors for the 3.1.1 or Language of Page criterion, with a maximum of one error only. For the 3.2.2 (On Input) criterion, 43% of the websites (42 out of 97) had errors, with a maximum of 3 errors only. For the 3.3.2 (Labels or Instructions) criterion, 55% of the websites (53 out of 97) had errors, with a maximum of 15 errors. The relatively lower error rates in the Understandable guideline suggest that the websites are generally more successful in providing content that is easy to read and understand, with only a small percentage of websites having issues with language, input, and error prevention.

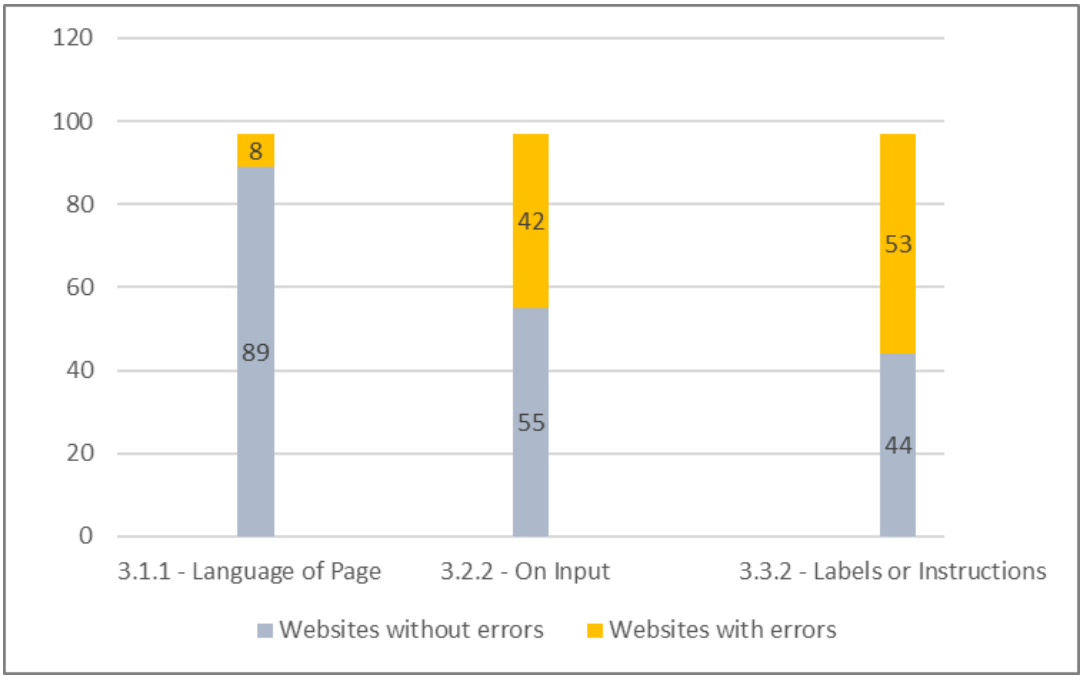

Figure 4. Understandable Guideline Result of TAW

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Figure 5 shows the Robust guideline, 69% of the websites (67 out of 97) had errors for the 4.1.2 (Name, Role, Value) criterion. The errors found suggest that the websites may not be properly identifying and labeling the various elements on the page, which could impact the ability of assistive technologies to accurately interpret and interact with the content.

The results indicate that the majority of the SUC websites have significant accessibility issues, with the highest number of errors found in the Perceivable and Operable guidelines. This suggests that these websites may not be fully accessible to users with disabilities, as they fail to provide adequate non-text content, information and relationship cues, and clear navigation. The results highlight the need for the SUCs to prioritize web accessibility and ensure that their websites are designed and developed in a way that is inclusive and accessible to all users, regardless of their abilities or the assistive technologies they may be using.

Figure 5. Robust Guideline Result of TAW

Figure 6 reveals the number of websites with errors using the TAW tool evaluation on the accessibility of State Universities and Colleges (SUCs) websites in the Philippines reveal a significant number of errors across various guidelines. The most common errors include info and relationships, link purpose (in context), non-text content, name role, value and labels or instructions. These findings suggest that the SUCs websites in the Philippines have significant accessibility issues, particularly in the areas of image descriptions and link functionality. These findings are consistent with the results of a study by Acosta et al. (2018) that evaluated the accessibility of e-government services in Latin America. The study found that many of these services lacked accessibility features, making it difficult for people with disabilities to use them.

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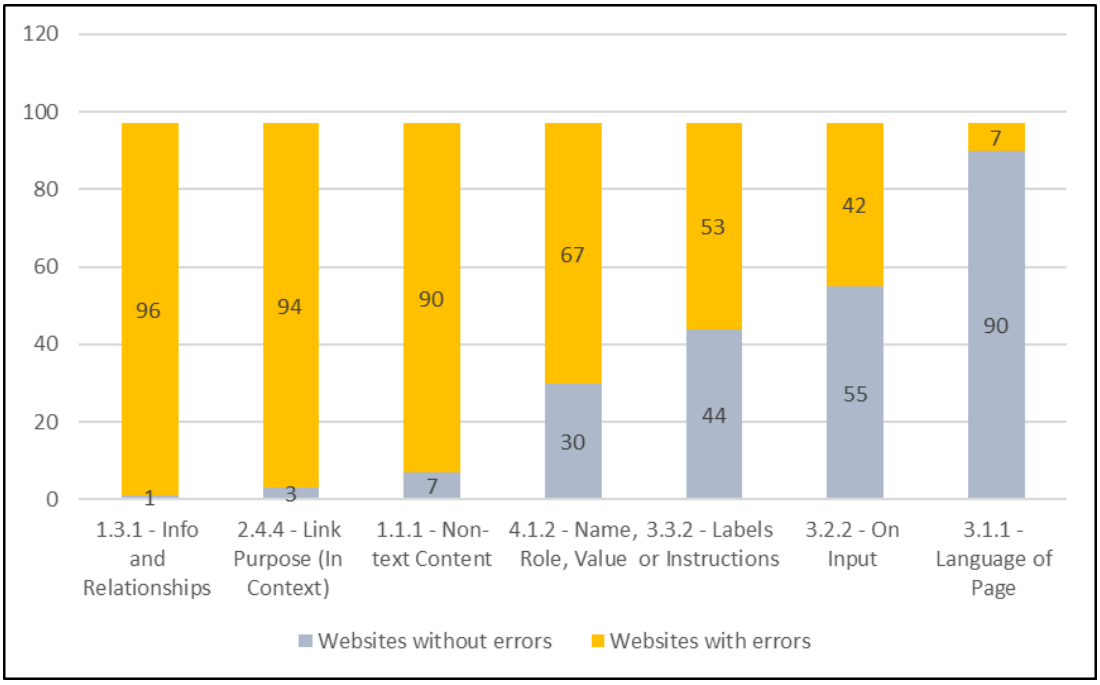

Figure 6. Total Number of Websites with Errors Using TAW

Accessibility of SUCs' Websites Using WAVE Tool

The 114 SUCs in the Philippines were analyzed using the WAVE web accessibility tool with four WCAG guidelines which are: Perceivable, Operable, Understandable, and Robust. The WAVE Tool encountered an error message, Error in analysis, when attempted to evaluate certain websites, rendering them unassessed by the tool. As a result, the accessibility status of the following websites remains unknown: nlpsc.edu.ph, psau.edu.ph, pmma.edu.ph, cvsu.edu.ph, slsu.edu.ph, debesmscat.edu.ph, bisu.edu.ph, siquijorstate.edu.ph, cmu.edu.ph, spamast.edu.ph, usm.edu.ph and snsu.edu.ph.

Figure 7 shows the results of the WAVE tool evaluation of the accessibility of SUCs in the Philippines, particularly in terms of perceivability, indicate significant challenges in providing accessible content to students with disabilities.

Regarding the guideline for missing alternative text, 41% of the websites (40 out of 97) had errors, with the highest number of 102 errors. This indicates that a significant portion of the websites lack proper text descriptions for images, which is crucial for users with visual impairments to understand the content.

For the guideline on linked images missing alternative text, 80% of the websites (78 out of 97) had errors, with the highest number of 125 errors. This suggests that a large majority of websites fail to provide alternative text for linked images, making it difficult for users with visual impairments to navigate and understand the content.

The guideline on spacer images missing alternative text showed that 5% of the websites (five out of 97) had errors, with the highest number of 12 errors. While the overall percentage is lower compared to the previous guidelines, the presence of errors indicates that some websites still need to improve their handling of spacer images.

Regarding the guideline on empty headings, 33% of the websites (32 out of 97) had errors, with the highest number of 10 errors. One of the prevalent errors is empty headings, which can create confusion and make it harder for users, especially those with cognitive or screen reader disabilities, to understand the structure and hierarchy of the content. The evaluation of contrast errors showed that 89% of the websites (86 out of 97) had errors, with the highest number of 102. Poor color contrast can make the text difficult to read, particularly for users with visual impairments or in low-light conditions.

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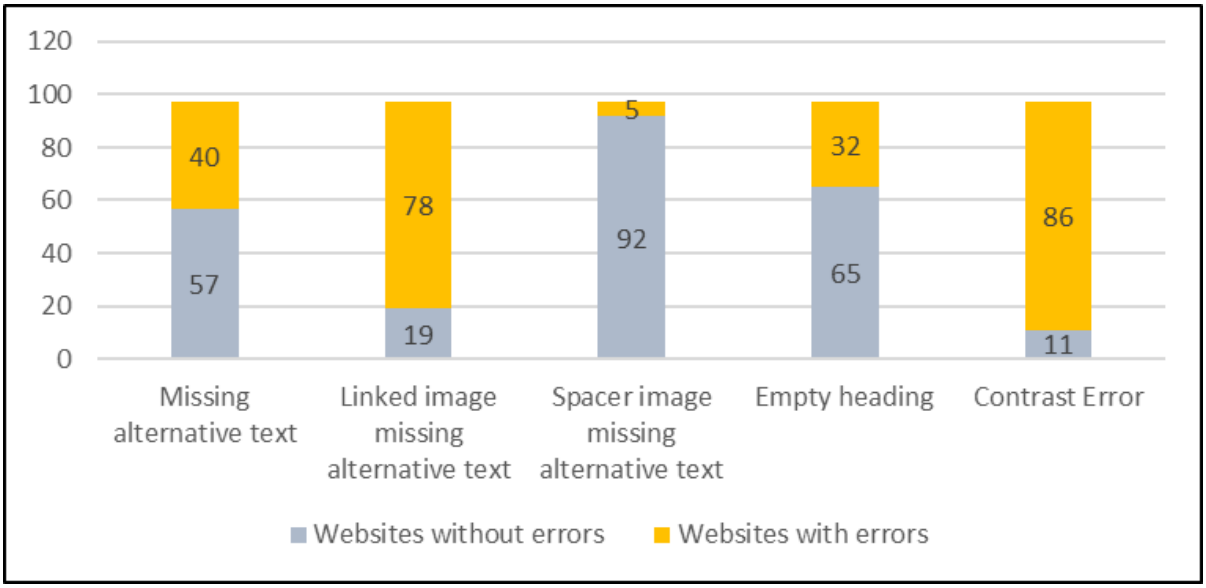

Figure 7. Perceivable Guideline Result of WAVE.

Figure 8 shows the evaluation of SUCs websites in the Philippines using the WAVE tool highlighted several key accessibility issues, particularly in the operable aspect. In terms of broken ARIA menus, 8% of the websites (eight out of 97) had errors, with the highest number of errors being only two. This indicates that while some websites had issues with ARIA menus, the overall impact was relatively low.

Regarding broken skip links, 5% of the websites (5 out of 97) had errors, with the highest number of errors being five. Broken skip links can hinder navigation for users, especially those using screen readers, and the presence of errors in this area indicates a need for improvement in facilitating easier navigation within the websites.

In terms of the guideline for empty buttons, 35% of the websites (34 out of 97) had errors, with the highest number of 15. Empty buttons can create confusion for users, especially those relying on assistive technologies, as they may not provide clear functionality or information. The significant number of errors in this area indicates a need for SUCs to ensure that all interactive elements on their websites are properly labeled and functional.

In terms of empty links, a significant 75% of the websites (73 out of 104) had errors, with the highest number of errors being 83. Additionally, 21 websites had only 1 error.

These results indicate a mixed level of accessibility across different guidelines for SUCs websites in the Philippines. While some areas like broken ARIA menus and page refreshes showed relatively low error rates, issues with broken skip links, empty links, and missing page titles suggest a need for enhancements to improve the overall accessibility and user experience of these websites for individuals with disabilities.

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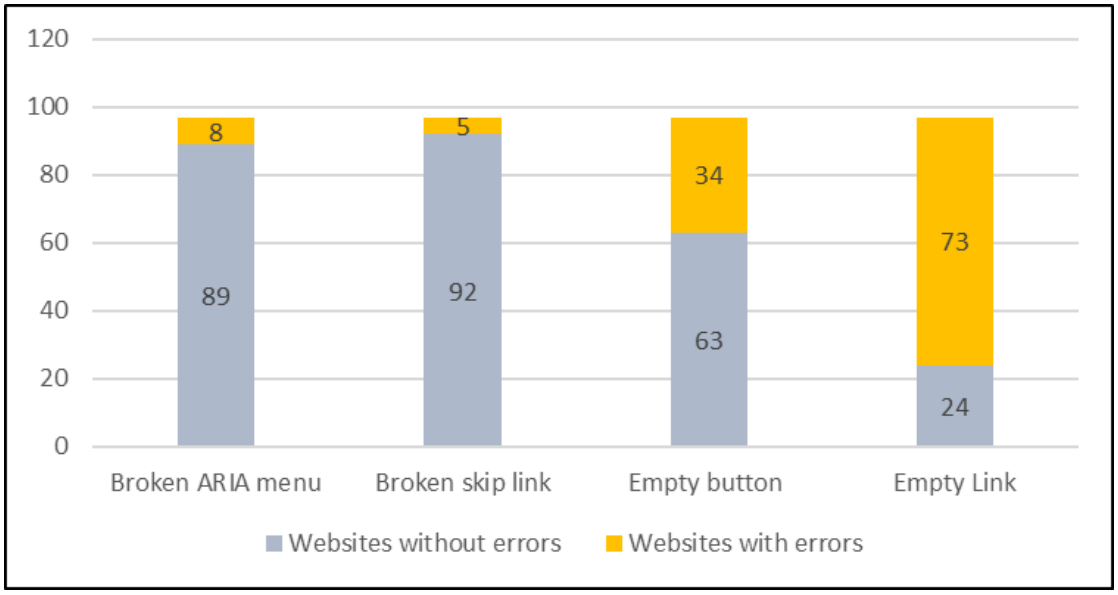

Figure 8. Operable Guideline Result of WAVE.

Figure 9 shows the evaluation of the accessibility of SUCs' websites in the Philippines using the WAVE tool revealed several issues in the Understandable aspect of the Web Content Accessibility Guidelines (WCAG).

For the guideline on missing or invalid language, 4% of the websites (four out of 97) had errors, with 21 of the websites having only 1 error. Proper language identification is crucial for screen readers and other assistive technologies to provide accurate translations and pronunciations, ensuring that the content is understandable for users with various language preferences.

The evaluation also revealed that 3% of the websites (three out of 97) had errors related to multiple form labels. Proper labeling of form elements is essential for users, especially those with cognitive or screen reader disabilities, to understand the purpose and context of each form field.

Regarding the guideline on empty form labels, 3% of the websites (three out of 97) had errors. Empty form labels can make it difficult for users to understand the purpose of form fields, hindering their ability to provide accurate information.

In contrast to the above guidelines, the evaluation of the Missing form label guideline showed a higher error rate, with 43% of the websites (42 out of 97) having errors, and the highest number of 11 errors. Missing form labels can significantly impact the understandability of forms, making it challenging for users with disabilities to navigate and complete them effectively.

The results indicate that while the SUCs websites in the Philippines generally performed better in the Understandable aspect compared to the Perceivable aspect, there is still room for improvement. The high error rates in certain guidelines such as missing form labels indicate that the websites may not be fully meeting the WCAG standards for understandability. Addressing these issues should be a priority for the SUCs to ensure that their online presence is accessible and comprehensible to all users, including those with disabilities.

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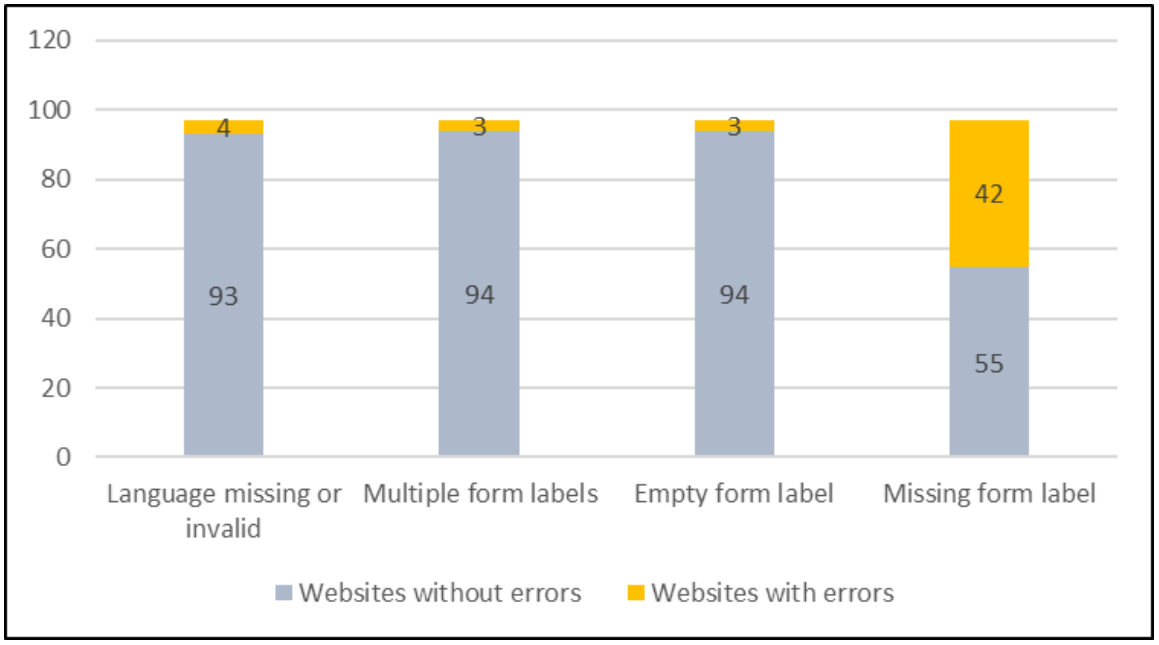

Figure 9. Understandable Guideline Result of WAVE.

Figure 10 shows the evaluation of SUCs websites in the Philippines using the WAVE tool highlighted accessibility issues in the Robust aspect of the WCAG.

Regarding the guideline on broken ARIA references, 6% of the websites (6 out of 97) had errors, with the highest number of 20 errors. Broken ARIA references can impact the functionality and interactivity of web content for users with disabilities, highlighting the importance of maintaining proper ARIA attributes to enhance the accessibility and usability of websites.

The outcomes reveal that while some SUCs websites in the Philippines performed relatively well in the Robust aspect of accessibility, there are still notable areas that require improvement. The presence of errors in empty buttons and broken ARIA references underscores the need for SUCs to prioritize robustness in their websites to ensure that all users, including those with disabilities, can interact with and navigate the content effectively. Addressing these accessibility issues is crucial to enhance the overall user experience and inclusivity of SUCs websites in the Philippines.

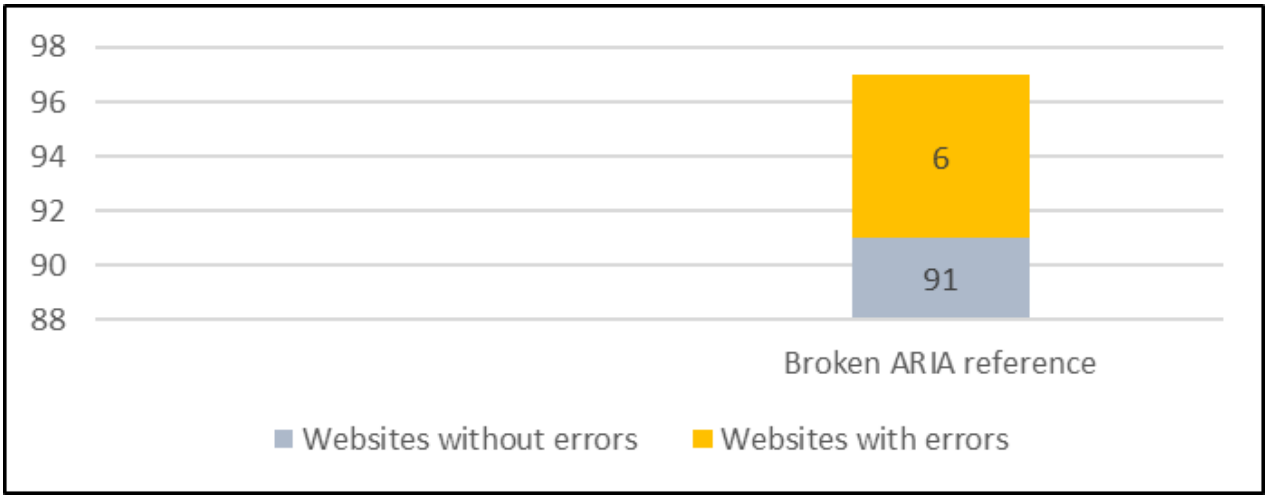

Figure 10. Robust Guideline Result of WAVE.

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Figure 11 shows the results of the WAVE tool evaluation on the accessibility of SUCs' websites in the Philippines reveal a significant number of errors across various guidelines. The most common errors include missing contrast error, linked image missing, empty link, missing form label and missing alternative text. These findings suggest that the SUCs websites in the Philippines have significant accessibility issues, particularly in the areas of image descriptions, color contrast, and link functionality.

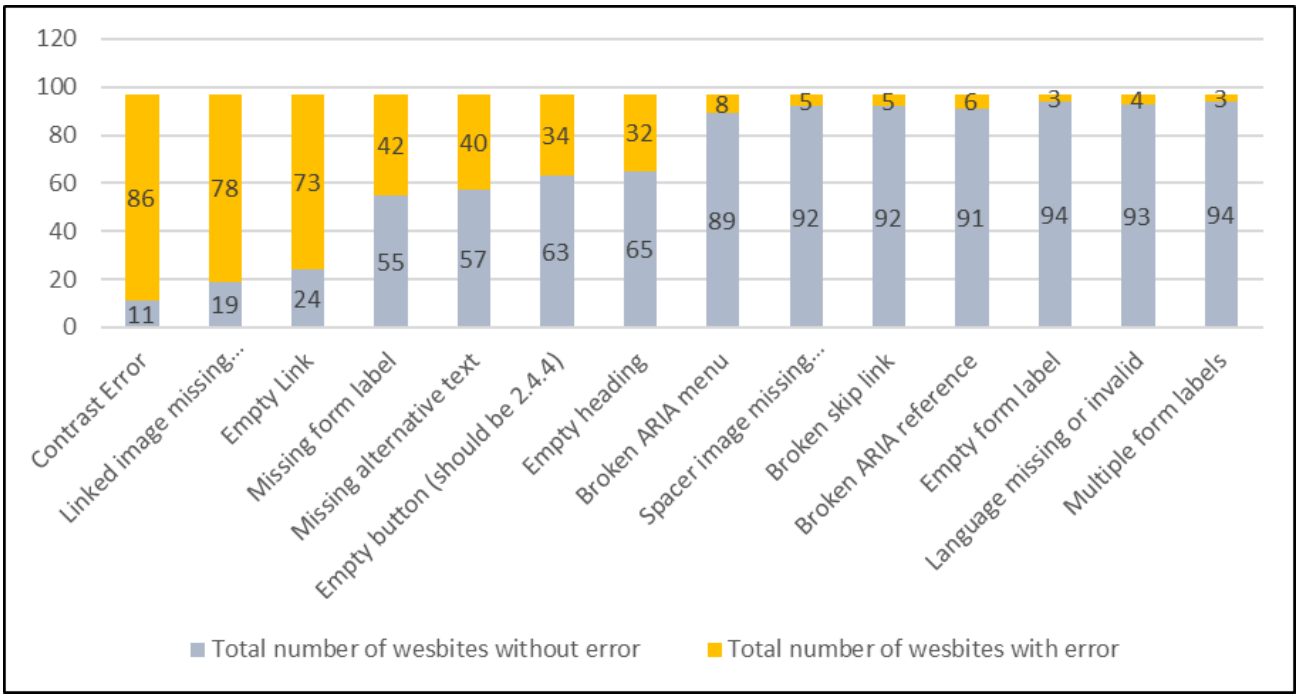

Figure 11. WAVE Tool Total Number of Errors per Guideline

Table 1 shows the guidelines for evaluating the accessibility and ranking of SUCs. These guidelines, sourced from both TAW and WAVE, include 1.1.1 Non-text Content, 1.3.1 Info and Relationships, 2.4.4 Link Purpose (In Context), 3.1.1 Language of Page, 3.2.2 On Input, 3.3.2 Labels or Instructions, and 4.1.2 Name, Role, Value. The following guidelines came from WAVE only: 1.4.3 Contrast (Minimum), 2.1.1 Keyboard, 2.4.1 Bypass Blocks, and 2.4.2 Page Titled.

Table I: Established web accessibility guidelines for evaluating SUCs' websites.

Guideline	Code	Specific Guideline
Perceivable	1.1.1	Non-text Content
	1.3.1	Info and Relationships
	1.4.3	Contrast
Operable	2.1.1	Keyboard
	2.4.1	Bypass Blocks
	2.4.2	Page Titled
	2.4.4	Link Purpose
Understandable	3.1.1	Language of Page
	3.2.2	On Input
	3.3.2	Labels or Instructions
Robust	4.1.2	Name, Role, Value

Ranking of the Top 50 SUCs in Web Accessibility

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Figure 12 shows the evaluation of website robustness based on WCAG guidelines has highlighted the success of educational institutions in prioritizing accessibility and compatibility for a wide range of user agents, including those with disabilities and those using older or less common devices. Fisheries with a score of 2.92 and GSU - Guimaras State University with a score of 4.33. The remaining institutions in the top 10 are PRMSU - President Ramon Magsaysay State University (6.75), AMSC- Adiong Memorial PolytechnicState College (6.83), MPC - Marikina Polytechnic College (7.42), CTU - Cebu Technological University (8.08), RSU - Romblon State University (9.58), EARIST - Eulogio “Amang” Rodriguez Institute of Science and Technology (9.92) and ASU - Aklan State University (10.42).

These results reflect the institutions' efforts to adhere to accessibility standards and guidelines, such as the Web Content Accessibility Guidelines (WCAG), This also ensures that their websites are usable by individuals with disabilities. By implementing features like alternative text for images, keyboard navigation, color contrast adjustments, and other accessibility enhancements, these institutions have made significant strides in creating a more inclusive online environment for all users.

The top-ranked institutions, such as MPSPC, ISUFST, and GSU, have set a high standard for accessibility in web design, demonstrating a commitment to providing equal access to educational content. Their efforts in achieving low overall mean scores indicate a strong focus on user experience and inclusivity.

As educational institutions continue to prioritize accessibility in their web design practices, they not only enhance the user experience for individuals with disabilities but also create a more welcoming and user-friendly online environment for all users. By maintaining a commitment to accessibility and continuously improving their websites based on best practices, these institutions are fostering a culture of inclusivity and equal access to education for everyone.

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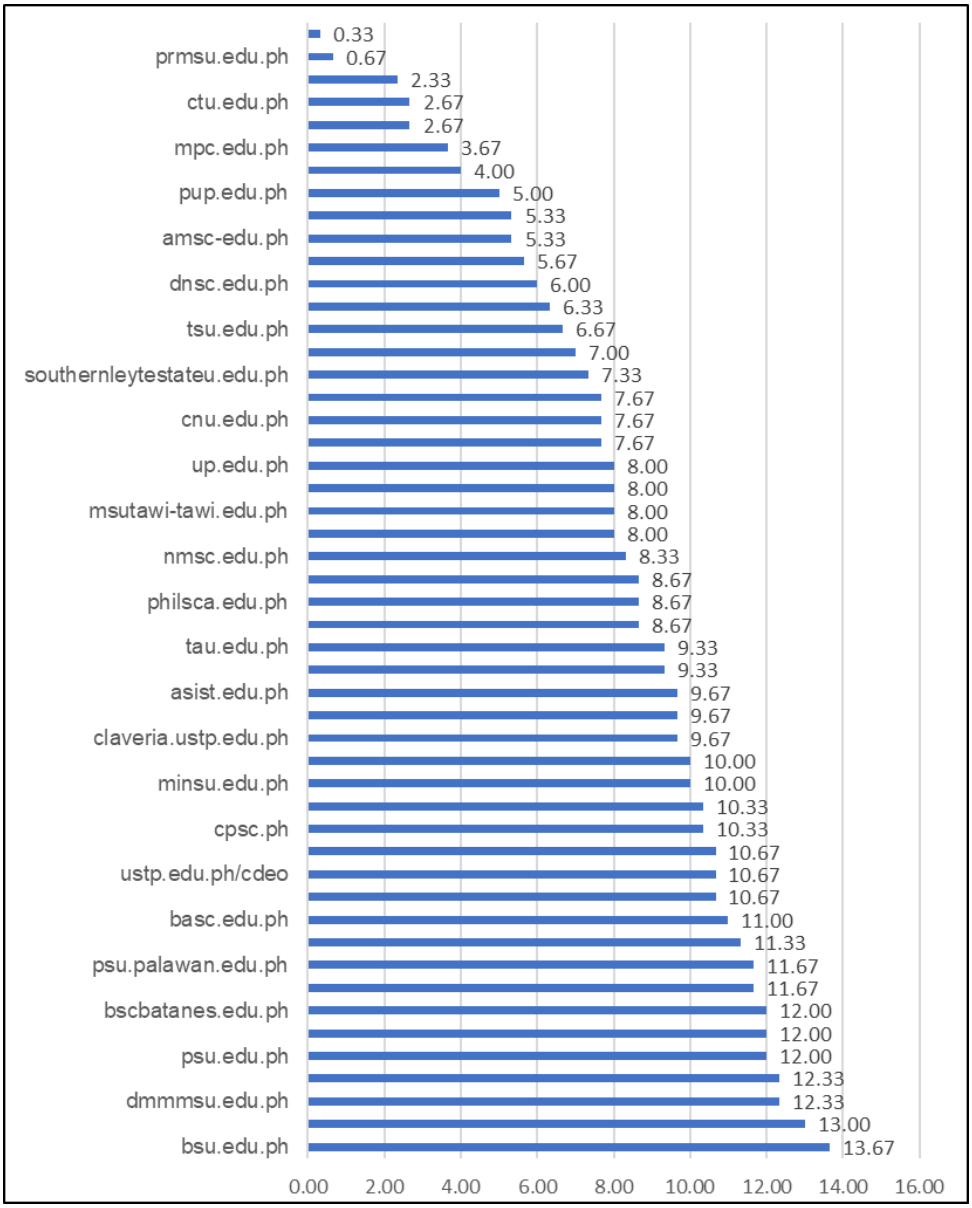

Figure 12. Overall Ranking of SUCs

CONCLUSION

The evaluation using the TAW and WAVE tools has revealed a need for SUCs in the Philippines to prioritize website accessibility. The widespread lack of basic accessibility features, particularly in providing alternative text for images and clear descriptions for links, significantly hinders users with disabilities from accessing information. Simple adjustments can overcome these barriers to enhance website usability and inclusivity.

On a more positive note, the analysis of the top 10 most accessible educational institution websites in the Philippines showcases a promising trend towards creating inclusive online learning environments. Institutions like MPSPC, ISUFST, and GSU have demonstrated a strong commitment to accessibility by adhering to guidelines like WCAG, incorporating features such as image descriptions, keyboard navigation, and adjustable color contrast. These efforts have resulted in a more welcoming and user-friendly online environment, ensuring equal educational opportunities for all learners, regardless of their abilities. The success of these top-ranked institutions sets a high standard for web accessibility in education, encouraging more institutions to follow suit. As accessibility becomes a priority, the overall user experience will continue to improve, cultivating a culture of inclusivity that benefits everyone. By recognizing

the importance of accessibility, SUCs in the Philippines can take an essential step towards creating a more equitable and accessible online environment, ultimately enhancing the educational experience for all.

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Data Availability:

The data supporting the findings of this study are available from the author upon reasonable request. Due to limitations in the accessibility of SUC websites, the data are not publicly available.

Conflict of interest

This research was conducted as part of my Master's degree requirements in the MIT program at MMSU Graduate School. However, publication was not a requirement. The author declares no conflict of interest.

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