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ADOPTION AND UTILISATION OF MODERN STAGE LIGHTING EQUIPMENT IN THEATRE PRODUCTIONS: A CASE STUDYOFDEPARTMENT OF THEATRE ARTS, COLLEGE OF EDUCATION, AKWANGA.

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ABSTRACT

Stage lighting evolved from basic illumination into a sophisticated technological system that played a central role in contemporary theatrical storytelling. This study examined the adoption and utilisation of modern stage lighting equipment within the Theatre Arts Department of the College of Education, Akwanga, focusing on availability, level of use, and factors influencing effective application. The study was anchored on Technological Determinism Theory and Experiential Learning Theory, which provided a framework for understanding how technological advancements influence theatrical practice and how students acquire practical skills through hands-on engagement. A qualitative case study design was employed, and data were collected through semi-structured interviews, direct observation of theatre productions, and analysis of departmental documents. Findings revealed that although some modern lighting technologies such as LED fixtures and digital control systems were present, their utilisation remained inconsistent and largely under-optimised. Key challenges identified included inadequate funding, limited technical expertise, insufficient training opportunities, and infrastructural constraints, particularly unstable power supply. The study further showed that effective utilisation of available lighting equipment significantly enhanced production quality, audience engagement, and students' practical learning experience. The paper concluded that strategic investment in training, infrastructure, and maintenance was essential for maximising the benefits of modern stage lighting in theatre education at the College of Education, Akwanga.

Keywords: Stage lighting, Theatre production, Lighting technology, technical theatre, Utilisation

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Introduction

Stage lighting within the Theatre Arts Department of the College of Education, Akwanga has undergone a gradual transition from conventional methods to more modern technological applications, reflecting broader shifts in theatre practice. Established in **2007**, the Theatre Arts Department was created to provide professional training in theatre practice, performance, technical theatre, and arts education. Since its establishment, the department has contributed to the training of theatre practitioners and educators through both theoretical instruction and practical productions. However, like many emerging theatre institutions in Nigeria, the department has faced challenges in developing and maintaining modern technical theatre facilities, particularly in the area of stage lighting.

In its conventional form, stage lighting within the department was primarily utilitarian, relying on basic floodlights, incandescent bulbs, and improvised electrical arrangements. These systems offered limited control over brightness and virtually no flexibility in colour, direction, or movement. Lighting setups were often static, manually operated, and constrained by inconsistent power supply, making it difficult to achieve nuanced visual effects. As a result, lighting functioned mainly to ensure that performers were visible, with little contribution to mood creation, atmosphere, or symbolic expression.

The limitations of conventional lighting significantly shaped the nature of theatrical productions in the department. Scene transitions were abrupt due to the absence of programmable controls, and designers had minimal capacity to guide audience focus or create visual depth. Creative intentions were often compromised, as lighting could not effectively respond to the emotional or narrative demands of a performance. In this context, lighting remained a secondary technical necessity rather than an integral artistic component of theatre production.

However, the emergence of modern stage lighting technologies has introduced new possibilities that challenge this traditional approach. The gradual incorporation of LED fixtures, intelligent lighting systems, and digital control consoles marks a shift toward a more sophisticated and expressive lighting culture within the department. Unlike conventional systems, these technologies allow for precise manipulation of intensity, colour mixing, beam shaping, and movement. Through digital consoles, lighting cues can be pre-programmed and executed with accuracy, enabling smooth transitions and synchronization with performance elements such as sound and action.

This transition from conventional to modern lighting represents more than a technological upgrade; it signifies a conceptual shift in how lighting is perceived and utilised. Lighting is no longer viewed solely as a means of illumination but as a dynamic storytelling tool that enhances narrative structure, emotional tone, and visual composition. Contemporary lighting technologies enable designers to simulate changes in time, create atmospheric effects, emphasize dramatic moments, and direct audience attention with greater precision, thereby enriching the overall theatrical experience and improving the artistic quality of stage productions.

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Despite these developments, the transition remains incomplete within the College of Education, Akwanga. The availability of modern lighting equipment is still limited, and where such equipment exists, its utilisation is often constrained by inadequate funding, poor maintenance culture, irregular power supply, insufficient technical expertise, and limited opportunities for practical training. Consequently, conventional and modern lighting practices coexist, with many productions still relying heavily on traditional lighting methods due to resource constraints.

It is against this background that this research is undertaken. The study seeks to assess the transition from conventional to modern stage lighting technologies within the Theatre Arts Department of the College of Education, Akwanga, with a view to determining the extent of technological advancement achieved since the department's establishment in 2007. Specifically, the study examines the characteristics and limitations of conventional stage lighting methods previously used in the department; investigates the extent to which modern stage lighting technologies have been introduced and utilised; analyses their impact on the artistic quality, visual aesthetics, and technical execution of theatrical productions; identifies the challenges hindering their effective adoption, including issues of equipment availability, funding, maintenance, and technical expertise; evaluates the level of training, technical competence, and practical exposure of students and staff in the use of contemporary lighting technologies; and finally, proffers practical recommendations for improving the acquisition, integration, and effective utilisation of modern stage lighting technologies in teaching, learning, and theatrical productions within the department.

The significance of this research lies in its potential to provide empirical information on the current state of stage lighting facilities and practices in the department. The findings are expected to assist the management of the College of Education, Akwanga, policymakers, theatre educators, and relevant stakeholders in making informed decisions regarding investment in modern lighting infrastructure, curriculum development, staff training, and technical capacity building. Ultimately, the study aims to contribute to the advancement of technical theatre education and to support the department's efforts to align its teaching and production practices with contemporary global standards while responding to the realities of the Nigerian theatre environment.

Conceptual Review

Stage Lighting

Stage lighting is a fundamental element of theatre production that extends beyond visibility to include mood creation, focus direction, spatial composition, and storytelling enhancement. It is a critical design component that shapes audience perception and interpretation of dramatic action on stage.

McCandless (1932) argues that lighting should be treated as an artistic language rather than a purely technical requirement. He explains that modern stage lighting is designed not only to illuminate actors but also to sculpt stage space through controlled intensity, direction, colour, and distribution of light. His concept of "visibility, realism, and mood" established a systematic approach to lighting design that ensures the audience sees the action clearly while

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also experiencing the intended dramatic atmosphere. He further emphasizes that effective lighting must balance visibility with emotional storytelling in theatre production.

In a similar perspective, Appia (1960) transformed stage aesthetics by placing light at the centre of theatrical expression. He rejected flat scenic painting and instead promoted the use of light and space as dynamic elements of performance. According to Appia, lighting is essential for creating depth, realism, and emotional impact on stage because it interacts directly with movement and performance space. He further argues that light is not merely a supportive tool but a creative force that shapes the entire visual structure of a performance.

Together, McCandless and Appia establish that stage lighting is both a technical and artistic element in theatre production. Their ideas demonstrate that lighting plays a dual role by providing visibility while simultaneously shaping meaning, mood, and dramatic interpretation in performance.

Theatre Production

Theatre production refers to the complete process through which a dramatic work is conceived, planned, rehearsed, designed, and presented before an audience. It encompasses both the artistic and technical activities that contribute to the successful realization of a theatrical performance. Theatre production involves collaboration among directors, actors, designers, stage managers, technicians, and other production personnel who work collectively to translate a dramatic script into a live performance.

Brockett and Hildy (2014) define theatre production as an integrated creative process involving acting, directing, scenery, costume, lighting, sound, makeup, and stage management. They argue that every production element contributes to the overall artistic unity of a performance and that the absence or weakness of one element can diminish the effectiveness of the entire production. They further emphasize that technical components, particularly stage lighting, are indispensable because they support dramatic action, establish atmosphere, and guide audience attention throughout the performance.

Similarly, Wilson and Goldfarb (2018) describe theatre production as a collaborative enterprise that combines creative imagination with technical expertise. According to them, successful productions depend on the harmonious integration of performance and production technologies to communicate dramatic meaning effectively. They maintain that technological innovations have significantly improved production quality by providing designers with greater flexibility, precision, and creative possibilities.

The concept of theatre production therefore extends beyond performance alone to include all artistic and technical processes that contribute to creating a meaningful theatrical experience.

Lighting Technology

Lighting technology refers to the equipment, systems, and digital innovations employed in producing, controlling, and manipulating stage lighting during theatrical performances. It encompasses lighting instruments, control consoles, dimmers, intelligent lighting fixtures,

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LED technology, computer software, and related accessories used to achieve artistic and technical objectives.

Pilbrow (2004) explains:

> that lighting technology has evolved from simple incandescent lighting systems to sophisticated computer-controlled digital equipment capable of producing numerous visual effects. Modern lighting technologies provide designers with greater control over colour, beam angle, movement, intensity, timing, and special effects, thereby expanding the creative possibilities available in theatrical productions.

According to Gillette (2013), contemporary lighting technologies improve efficiency, flexibility, and precision in theatre production. The introduction of LED fixtures, automated moving lights, digital dimming systems, and programmable lighting consoles has transformed stage lighting from a manual operation into a highly sophisticated artistic discipline. These technologies reduce energy consumption, simplify maintenance, and enable designers to execute complex lighting cues with accuracy and consistency.

This means that the advancement of lighting technology has therefore enhanced both the technical and artistic dimensions of theatre production, making lighting an indispensable tool for modern stage performance.

Technical Theatre

Technical theatre refers to the practical and technological aspects of theatre production that support live performance behind the scenes. It includes lighting, scenery, sound, costume, makeup, stage management, properties, rigging, and other production activities that contribute to the successful presentation of a theatrical event.

Gillette (2013) defines technical theatre as the application of artistic creativity and technical skills to the design, construction, operation, and management of production elements. He argues that technical theatre requires both theoretical knowledge and practical competence because practitioners must combine artistic vision with technological proficiency to achieve effective stage presentations.

Similarly, Brockett and Hildy (2014) emphasize that technical theatre has become increasingly important as technological innovations continue to reshape contemporary theatrical practice. They contend that technical personnel are no longer merely support staff but active collaborators in the artistic process, contributing significantly to the visual and emotional impact of theatrical productions.

Technical theatre therefore represents the intersection of technology and creativity, ensuring that every technical element functions effectively to support the artistic objectives of a performance.

Utilisation

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Utilisation refers to the effective application, operation, and integration of available resources, equipment, skills, and technologies to achieve desired objectives. Within theatre practice, utilisation involves the extent to which modern stage lighting technologies are employed in teaching, rehearsals, performances, and technical training.

Rogers (2003) explains that the value of any technological innovation depends largely on its adoption and effective utilisation by users. He argues that technology can only improve organizational performance when individuals possess the necessary knowledge, skills, and opportunities to apply it appropriately. In educational institutions, effective utilisation requires adequate infrastructure, continuous training, technical support, and institutional commitment.

In the context of theatre education, utilisation extends beyond the mere acquisition of modern lighting equipment to include its consistent use during classroom instruction, practical demonstrations, rehearsals, laboratory exercises, and stage productions. Effective utilisation enables students to develop practical competence, enhances production quality, and prepares graduates for contemporary professional theatre practice.

Therefore, the utilisation of modern stage lighting technologies is a critical determinant of both educational effectiveness and artistic excellence within theatre training institutions.

Theoretical Framework

Technological Determinism Theory (1964)

Technological Determinism Theory by Marshall McLuhan in (1964) posits that technological advancement is a primary force shaping human activities, including cultural and artistic practices. In theatre production, this perspective suggests that the nature, quality, and style of performances are largely influenced by the level of technological development available within a given environment. Applied to the Theatre Arts Department of the College of Education, Akwanga, this theory helps explain how the availability or absence of modern stage lighting equipment directly affects production outcomes.

In situations where lighting technology is limited to conventional tools such as floodlights and manually operated systems, theatrical productions tend to be visually basic, with minimal variation in mood, atmosphere, or dramatic emphasis. The lack of advanced equipment restricts the designer's ability to manipulate key lighting elements such as colour, intensity, and movement, thereby shaping the overall aesthetic of the performance. Conversely, the introduction of modern lighting technologies such as LED fixtures and digital control systems creates opportunities for more dynamic and visually engaging productions. These technologies enable precise cue programming, smooth transitions, and creative effects that enhance storytelling.

Thus, within the Akwanga context, technological determinism highlights the extent to which theatre practice is conditioned by available resources. It underscores the idea that

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improvements in lighting technology can lead to corresponding advancements in production quality, artistic expression, and audience experience. At the same time, it reveals how technological limitations can constrain creativity, not necessarily due to a lack of artistic vision, but because of restricted technical capacity.

Experimental Theory (1984)

The experimental theory as propounded by David Kolb in (1984) discusses thecontinuous process in which knowledge is created through experience and reflection. The theory proposes a four-stage cycle consisting of concrete experience, reflective observation, abstract conceptualisation, and active experimentation. In theatre arts education, especially in stage lighting, this theory is highly relevant because it emphasizes "learning by doing" rather than relying solely on theoretical instruction. Students gain concrete experience when they handle lighting equipment during rehearsals and live productions. They then engage in reflective observation by assessing what worked well or poorly in terms of brightness, colour balance, timing, and mood creation during performances. Through abstract conceptualisation, they develop an understanding of lighting principles such as focus, intensity, and atmospheric effects, which helps them connect practice with technical knowledge. Finally, in active experimentation, they apply these insights in subsequent productions, improving their lighting design and technical execution.

This theory directly relates to the discussion in this study on the Theatre Arts Department of the College of Education, Akwanga, where stage lighting training is largely practical in nature. The gradual shift from conventional to modern lighting technologies makes experiential learning even more significant, as students must physically engage with both basic and advanced equipment such as floodlights, LED fixtures, and digital lighting consoles. However, the study also reveals that limited availability of modern equipment and inadequate technical training sometimes restrict the effectiveness of this learning cycle. Despite these challenges, Experiential Learning Theory helps explain how students still develop lighting skills through direct involvement in productions, observation of outcomes, and repeated practice, thereby linking classroom instruction with real theatrical experience.

Evolution of Stage Lighting in College of Education, Akwanga Theatre Arts

Stage lighting has undergone significant transformation from reliance on natural light and primitive sources such as candles and oil lamps to advanced digital lighting systems. Early theatrical practices in Africa, including Nigeria, were largely dependent on environmental lighting conditions, which limited creative flexibility.

The introduction of electric lighting marked a turning point, enabling greater control over illumination and enhancing theatrical aesthetics. In contemporary practice, digital lighting systems, LED fixtures, and intelligent lighting technologies have further revolutionised stage design, allowing precise control over colour, intensity, and movement.

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The evolution of stage lighting within the Theatre Arts Department of the College of Education, Akwanga can be clearly understood as a transition from conventional practices to modern technological systems. This shift reflects not only changes in equipment but also a transformation in the artistic and pedagogical role of lighting in theatre production.

In its conventional phase, stage lighting in the department was largely dependent on simple and improvised tools such as floodlights, tungsten lamps, and basic electrical setups. These systems provided general illumination but offered very limited control over essential lighting variables like intensity, colour, direction, and focus. Operation was mostly manual, requiring physical switching and adjustment during performances, which often resulted in abrupt transitions and inconsistent visual output. Combined with unstable power supply, these limitations meant that lighting could rarely move beyond its basic function of making performers visible. Consequently, creative expression through lighting such as mood creation, symbolic representation, or visual storytelling was minimal.

As theatre practice evolved globally, the concept of lighting also shifted from mere visibility to expressive design. This transformation gradually began to influence practices within the College of Education, Akwanga. The introduction of modern lighting technologies marked the beginning of this transition. Equipment such as LED fixtures, intelligent (moving-head) lighting systems, and digital lighting consoles brought new levels of flexibility and control. Unlike conventional systems, these technologies allow designers to manipulate multiple parameters simultaneously, including colour mixing, beam shape, intensity gradients, and automated movement.

Modern lighting systems also introduced digital control through programmed cues. This means that lighting changes can now be pre-designed, timed, and executed with precision during performances. Smooth fades, colour transitions, and synchronized lighting effects can be achieved in ways that were impossible with conventional methods. As a result, lighting becomes integrated into the rhythm and structure of the performance rather than functioning as a separate or reactive element.

This shift represents a fundamental conceptual change. Lighting is no longer treated as a background technical requirement but as a central component of theatrical storytelling. It now contributes actively to establishing mood, defining space, indicating time, and guiding audience focus. For example, a gradual dimming of light can signal the passage of time, while contrasting colours can reflect emotional conflict or thematic tension within a scene.

However, within the Theatre Arts Department of the College of Education, Akwanga, this transition remains partial and uneven. While some modern equipment may be available, its use is often limited by a lack of technical expertise, insufficient training opportunities, and inadequate infrastructure. As a result, conventional and modern systems frequently coexist, with productions relying on a hybrid approach that does not fully exploit the capabilities of newer technologies.

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This incomplete transition highlights an important issue: technological advancement alone is not enough. The effective movement from conventional to modern lighting depends equally on human capacity and institutional support. Without proper training, maintenance, and consistent usage, modern equipment cannot achieve its intended impact.

In essence, the progression from conventional to modern stage lighting within the department reflects an ongoing developmental process. It illustrates a shift from limitation to possibility, from functionality to creativity, and from manual operation to digital precision. Fully realising this transition will require deliberate investment in both technology and technical education, ensuring that lighting can function not only as illumination but as a powerful medium of artistic expression and professional training.

Stage Lighting in Educational Theatre Contexts

In Nigerian educational institutions, the development of stage lighting has been largely uneven, shaped by persistent financial and infrastructural constraints. While a few well-funded universities have made significant progress in adopting modern lighting technologies such as LED fixtures, digital consoles, and automated systems, many institutions continue to depend on outdated equipment, including tungsten lamps and manually operated lighting setups (Ododo, 2015; Utoh-Ezeajugh, 2018). This imbalance creates a noticeable disparity in both production standards and the quality of technical training available to students.

The implications of this disparity are far-reaching. Institutions with access to modern lighting technologies are better positioned to produce visually dynamic and professionally executed performances. They also provide students with hands-on experience in contemporary lighting design practices, including cue programming, digital control, and integrated stage management systems. In contrast, institutions that rely on older systems are limited in their creative output, often producing performances with minimal visual variation and reduced aesthetic impact (Osofisan, 2001). For students in such environments, the lack of exposure to current technologies restricts their technical competence and places them at a disadvantage in the professional theatre industry, where modern lighting skills are increasingly essential (Dunham, 2018).

Within the Theatre Arts Department of the College of Education, Akwanga, lighting practice reflects these broader national challenges. The department largely depends on basic lighting systems that are primarily functional rather than expressive. The limited availability of modern lighting equipment means that productions often lack the visual sophistication associated with contemporary theatre practice. Furthermore, the integration of newer technologies into teaching and performance remains minimal, which affects both the quality of productions and the depth of students' practical training.

This situation underscores a critical gap between educational objectives and practical realities. While the curriculum may emphasize the importance of modern stagecraft, the

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absence of adequate resources and infrastructure makes it difficult to achieve these goals in practice. As a result, students may graduate with theoretical knowledge of advanced lighting techniques but without the hands-on experience necessary to apply them effectively.

Addressing this imbalance requires a deliberate and sustained effort to improve funding, upgrade infrastructure, and invest in technical training. Without such interventions, the gap between institutions with advanced lighting capabilities and those without will continue to widen, reinforcing inequalities in theatre education and limiting the overall growth of technical theatre practice in Nigeria (Ododo, 2015).

Methodology

This study adopts a qualitative case study design focusing on the Theatre Arts Department of the College of Education, Akwanga. The approach enables an in-depth examination of stage lighting practices, particularly the transition from conventional to modern technologies from 2007 to 2026, their level of utilisation, and the challenges affecting their effective application in teaching and production. The qualitative method allows for the collection of detailed insights into participants' experiences and perceptions.

Data were collected through semi-structured interviews, direct observation, and document analysis. Interviews were conducted with students to explore their experiences with lighting instruction, equipment use, and practical challenges. Rehearsals and stage performances were observed to assess the application of lighting in production, while relevant documents such as course outlines, lighting plots, and equipment records were reviewed to support the findings. The use of these methods ensured triangulation and enhanced the validity of the study.

Purposive sampling was employed to select participants with relevant knowledge and experience. A total of 50 Theatre Arts students involved in production-based courses participated in the study, as they represent the primary recipients of practical training and are directly engaged in stage lighting activities.

Data were analyzed using thematic analysis, involving familiarisation with the data, coding of recurring ideas, development of themes, and interpretation. Key themes included the level of adoption of modern lighting technologies, patterns of utilisation, infrastructural limitations, skill gaps, and the impact on student learning and production quality.

Discussion of Findings

Level of Adoption

The study reveals a generally moderate to low level of adoption of modern stage lighting equipment within productions at the College of Education, Akwanga. Although some contemporary lighting technologies are available, their presence does not translate into full or consistent integration in stage performances. In most cases, the equipment exists but is

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underutilised, and productions continue to rely heavily on traditional lighting approaches. This limited adoption suggests that the transition from conventional to modern stage lighting practices is still at an early stage and has not been fully embraced within the institution's theatre practice.

Utilisation Patterns

Findings indicate that lighting equipment is largely used at a basic and functional level, primarily for general illumination of the stage rather than for creative or expressive purposes. Advanced lighting functions such as cue programming, colour mixing, dimming control, and dynamic lighting effects are rarely employed. This underutilisation is largely attributed to insufficient technical expertise among users, as well as a lack of continuous hands-on training. Consequently, lighting design is often treated as a secondary technical requirement rather than an integral artistic component of theatre production.

In addition, it was observed that many productions are executed in a noticeably novice manner, particularly in relation to lighting design and execution. Operators often rely on trial-and-error approaches, with minimal pre-programming or coordination between lighting design and other production elements such as set design, costume, and acting. This results in lighting arrangements that appear simplistic and unrefined, further reinforcing the impression of amateurish execution in many stage performances.

Impact on Theatre Production in College of Education Akwanga

Where lighting is effectively and intentionally applied, there is a clear improvement in the overall quality of productions. Such instances demonstrate enhanced visual appeal, better mood creation, and stronger audience engagement. Proper lighting usage contributes significantly to scene transitions, emotional emphasis, and the overall storytelling process. However, these positive outcomes are not consistent across productions. Instead, they occur sporadically, depending on the availability of skilled personnel or specific efforts by individual technicians or students.

The inconsistency in lighting quality means that while some performances achieve a relatively professional standard, many others remain visually weak and fail to fully support the dramatic intentions of the production. This unevenness further highlights the gap in technical competence and systematic application of lighting design principles.

Challenges to Adoption and Utilisation

Several key challenges were identified as limiting the effective adoption and utilisation of modern stage lighting equipment in theatre Arts Department, College of Education Akwanga. These include:

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i. Inadequate funding: Inadequate funding: Limited financial resources restrict the acquisition, maintenance, and upgrading of lighting equipment. As a result, the available lighting facilities are often insufficient for effective theatre production and training. Therefore, adequate funds should be provided to ensure that the existing lighting equipment is properly installed, maintained, and upgraded within the theatre, so as to improve both teaching and practical performance outcomes.

ii. Limited technical training: There is a shortage of structured training opportunities for students and technical staff on modern lighting systems and programming techniques.

iii. Poor infrastructure: The existing stage and technical facilities are not fully optimized to support advanced lighting setups.

iv. unreliable power supply: Frequent power fluctuations and outages disrupt lighting operations and discourage the use of sensitive modern equipment.

Technological Gap

A significant technological gap exists between global best practices in stage lighting and what is currently obtainable at the College of Education, Akwanga. International theatre productions increasingly rely on automated lighting systems, digital consoles, and sophisticated cue-based programming to achieve precise artistic effects. In contrast, the college's productions remain largely manual and rudimentary in execution.

This gap is primarily driven by resource constraints, inadequate technical capacity, and limited exposure to modern industry standards. As a result, most productions continue to reflect a novice level of practice, where lighting is applied in a simplistic and uncoordinated manner rather than as a deliberate artistic tool. This not only affects the aesthetic quality of performances but also limits students' preparedness for professional theatre environments where advanced lighting competence is required.

Recommendations

Based on the findings of the study, the following recommendations are made to improve the adoption and utilisation of modern stage lighting within the Theatre Arts Department of the College of Education, Akwanga:

i. Increased Institutional Funding; The institution should allocate more financial resources for the procurement and upgrading of modern stage lighting equipment.
ii. Curriculum Integration of Practical Lighting Training; Practical stage lighting training should be fully integrated into the Theatre Arts curriculum.
iii. Workshops, Seminars, and Technical Capacity Building; Regular workshops and seminars should be organised to enhance the technical skills of both students and staff.

iv. Collaboration with Theatre Professionals; The department should establish partnerships with professional theatre practitioners and lighting designers.

v. Improvement of Infrastructure and Maintenance Culture; The institution should improve infrastructural support, particularly ensuring a more stable power supply through alternative energy sources where necessary. In addition, a consistent maintenance culture should be established to ensure that lighting equipment remains functional.

Conclusion

Modern stage lighting holds considerable potential to enhance both theatre production quality and the educational experience within the Theatre Arts Department of the College of Education, Akwanga. When effectively adopted, such technologies can improve visual storytelling, strengthen mood and atmosphere, and contribute to more professional and engaging stage performances. In addition, exposure to modern lighting systems equips students with relevant industry skills, thereby improving their competence and employability in contemporary theatre practice.

Despite these advantages, the realisation of this potential remains limited due to a combination of financial, technical, and infrastructural constraints. Inadequate funding restricts the acquisition and maintenance of modern lighting equipment, while insufficient technical training limits the ability of staff and students to operate and programme advanced lighting systems effectively. Furthermore, poor infrastructural support and unstable power supply continue to undermine the consistent use of available equipment, making it difficult to sustain sophisticated lighting designs during productions.

Bridging this gap therefore requires a balanced and deliberate approach that integrates investment in modern lighting technology with sustained capacity building for users. This includes providing regular technical training, improving infrastructure, and ensuring reliable power supply alongside equipment upgrades. Without such an integrated strategy, stage lighting will continue to be underutilised, and its full artistic and educational potential will remain largely unrealised within the department's theatre productions.

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