

ENHANCING TECHNOLOGY EDUCATION THROUGH TEACHER PROFESSIONAL DEVELOPMENT IN THE DIGITAL AGE.

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Abstract

This Papertitled, “enhancing Technology Education Through Teacher Professional Development In The Digital Age”, Examined Three Purposes And Answered Three Research Questions. The Study Was Descriptive Survey Which Collected Its Data From A Population Of 255 Technical Teachers From The Seven Technical Colleges In Gombe State Through A Questionnaire Titled, Professional Teacher Questionnaire (ptq) Structured On A Four Likert-type Scale From Highly Agreed To Highly Not Agreed. The Data Were Analyzed Using Mean, Standard Deviation From A Statistical Software Spss Version 20. The Result Showed That There Was Lack Of Adequate Training Hindering The Integration Of Digital Technologies Into The Curriculum And Lack Of Clear Guidelines On How To Effectively Incorporate Digital Technologies In Teaching. The Study Also Found That Innovative Use Of Digital Simulations Enhances Students' Understanding Of Complex Technical Concepts, And Provides Students With Access To Virtual Labs As Well, Allowing For Safe And Cost-effective Hands-on Experimentation. The Study Recommended That The Use Of Digital Simulations Should Be Encouraged And Virtual Labs Of Lower Cost Should Be Built In All Technical Colleges In Gombe State. The Study Also Recommended That Teachers Should Be Encouraged To Adapt To New Teaching Strategies Andto Receive Regular Training And Re-trainingso As To Be Familiar With Online Environment.

Key Words: Enhancing, Technology Education, Teacher Professional, Development, Digital Age.

Introduction

In This Information Age, Technical Teachers Are For The First Time Preparing Students For A Future They Cannot Clearly Describe And The Learners' Ability To Use Technology Exceeds The Teacher's Ability (wale, 2016). Thus, Some Teachers Fear The Use Of Technology Because They See Themselves As Digital Immigrants, Whereas Their Students Are Digital Natives (prensky, 2019). Roseline (2019) Argued That Teachers' Fear Of Change Is Not Connected To Digital Tools Only, But Also That Teachers Are Worried About The Neurological, Social, And Psychological Effects Of Students' Overuse Of Technology. Zuru And Zuru (2019) Described Teachers' Fear Of Change In The Digital Age As A Non-acceptance Of Some Teachers That The Digital Age Represents A New Era.

In His Argument About Change, Fullan (2019) Claimed That If People Were Asked What

Change Meant, They Would Use Negative And Positive Terminologies Such As Fear, Danger, Anxiety Or Excitement, Improvements, And Energizing. Fullan Defined Teacher Development As The Process “to Develop New Insights Into Pedagogy And Their Own Practice, And Explore New Or Advanced Understandings Of Content And Resources”. According To This definition, Development Is Perceived As Change. With The Deictic Changes In Information, Communication, And Technology, The Role Of Teachers Is Changing And Becoming More Important In A Way That Educators Have To Think About Teaching Students Who Are Eager About Technology Use (lizzy, Kindler & cammak, 2018). However, Some Teachers Fear Change, And So They Hold On To Traditional Teaching (peterson, 2018). Traditional Teaching Is Based On A Top-down Process, Where The Teacher Is The Knowledge Provider, And He/she Goes Into Class With A Lesson Plan That Has Been Designed By The Teacher.

The Fear Of Not Being Able To Change Because Of The Digital Divides Is Not Related To Tools Or Students, But Is Connected To Teachers Themselves (prensky, 2016; Warlick, 2018). Not All Teachers Are Digital Immigrants, And Not All Students Are Digital Natives (zuru&zuru, 2019). The Constraints Are Connected To The Relationship Students And Teachers Have With Technology And The Digital Gap Is A “human Ware” Issue, Which Means The Gap Is Related To Humans' Issue Rather Than A Software Issue (warschauer, 2017). This Conceptual Paper Aims At Exploring The Way The Digital Natives And Digital Immigrants' Dichotomy Is Connected To Attitudes, And Not To Age. The Paper Also Aims At Exploring The Way In Which Teachers Could Switch From Mindset 1 To Mindset 2 Because Their Fears Are Unjustified (dweck, 2018).

Teacher Professional Development For Digital Age In Technical Education

In The Realm Of Technical Education, The Integration Of Digital Technologies Has Become An Essential Aspect Of Preparing Students For Careers In Fields Driven By Innovation And Technology. The Convergence Of Rapid Technological Advancements, Industry Demands, And Evolving Pedagogical Approaches, According To Higgins (2019), Has Underscored The Critical Role Of Educators In Equipping Students With The Skills Needed To Excel In The Digital Age. Ugo (2019) Believes That Teacher Professional Development Tailored To The Context Of Technical Education Is Pivotal In Ensuring That Instructors Are Well-equipped To Navigate The Challenges And Opportunities Presented By Technology-driven Learning Environments.

Historically, Ahmed And Musa (2018) Opined That Technical Education Primarily Focuses On Imparting Specialized Skills And Theoretical Knowledge Relevant To Specific Industries And That Traditional Classroom Settings Often Rely On Theoretical Lectures And Hands-on Practical Sessions To Develop Technical Competencies. However, Researchers Like Kayade, Martins And Ozioma (2019) Believed That Digital Age Has Led To A Transformation In The Way Technical Concepts Are Taught And Learned. Emerging Fields Such As Robotics, Data Science, Artificial Intelligence, And Renewable Energy Have Introduced New Dimensions To Technical Education That Demand Innovative Teaching Methodologies And A Deep Understanding Of Cutting-edge Technologies.

George (2019) Also Believed That The Integration Of Digital Technologies Into Technical Education Has Led To The Emergence Of Digital Labs, Simulation Software, Online Coding Platforms, And Virtual Reality Tools, Among Others. These Tools Enable Students To Engage With Complex Technical Concepts In Interactive And Experiential Ways. They Also Facilitate Remote Learning, Collaboration, And The Exploration Of Real-world Scenarios, Making Technical Education More Accessible And Flexible (james, 2019). However, The Successful Implementation Of These Tools Requires Educators To Possess A Comprehensive Understanding Of Their Functionality, Pedagogical Value, And Practical Applications.

Andrew (2019) Also Opined That The Integration Of Digital Technologies In Technical Education Brings Forth Several Challenges. Educators May Face Resistance To Change, Technical Barriers, And Concerns About The Authenticity Of Online Learning Experiences. Additionally,

Keeping Pace With Rapidly Evolving Technologies And Identifying Their Practical Applications In Various Industries Can Be Demanding. However, These Challenges Are Accompanied By Immense Opportunities To Enhance The Effectiveness Of Technical Education, Bridge The Gap Between Academia And Industry, And Equip Students With The Skills Required To Innovate And Thrive In Tech-driven Workplaces.

Traditional Teacher Professional Development Primarily Revolved Around Workshops, Seminars, And In-service Training Sessions That Focused On Pedagogical Techniques, Subject Matter Expertise, And Classroom Management. However, As Technology Increasingly Became An Integral Part Of Modern Society, Education Witnessed A Paradigm Shift. The Widespread Availability Of Laptops, Tablets, Smartphones, And High-speed Internet Connections Presented Both Opportunities And Challenges For Educators. While These Tools Offered New Ways To Engage Students And Facilitate Learning, They Also Required Teachers To Acquire Digital Literacy Skills And Adapt Their Instructional Strategies Accordingly, Hence The Need For The Study.

Statement Of The Problem

In The Dynamic Landscape Of Technical Education, The Rapid Integration Of Digital Technologies Presents A Critical Challenge For Educators In Effectively Preparing Students For Careers In Technology-driven Industries. The Evolving Nature Of Technical Fields, Coupled With The Increasing Demand For Skills Such As Coding, Data Analysis, And Technological Innovation, Necessitates A Comprehensive And Up-to-date Approach To Teaching. However, A Significant Gap Exists In The Professional Development Of Technical Educators, Hindering Their Ability To Seamlessly Integrate Digital Tools, Adapt Pedagogical Strategies, And Provide Students With The Hands-on Experiences Necessary To Excel In The Digital Age (greenwood, 2018). This Gap Not Only Affects The Quality Of Technical Education Pedagogies But Also Raises Concerns About The Relevance Of Graduates' Skills In An Ever-evolving Job Market. Therefore, Addressing The Challenge Of Equipping Technical Educators With The Necessary Competencies To Navigate The Digital Age Becomes Paramount To Ensure That Students Are Adequately Prepared To Succeed In Technology-driven Industries And Contribute Effectively To The Innovation Landscape. Therefore, The Problem Of The Study Is Seen In The Following Broad Question: What Are The Ways For Enhancing Technology Education Through Teacher Professional Development In The Digital Age.

Purpose Of The Study

The Main Purpose Of The Study Is To Determine The Waysfor Enhancing Technology Education In Technical Colleges Through Teacher Professional Development In The Digital Age. Specifically, Thestudy Intends To Achieve The Following Objectives:

1. To Identify The Specific Challenges That Technical Educators Encounter When Integrating Digital Technologies Into Their Teaching Methods.
2. To Investigate Innovative Pedagogical Strategies That Effectively Leverage Digital Tools To Enhance Technical Instruction.
3. To Investigate The Digital Literacy Competencies Required Of Technical Educators To Effectively Utilize A Range Of Digital Tools And Resources In Their Teaching.

Research Questions

1. What Are The Specific Challenges That Technical Educators Encounter When Integrating Digital Technologies Into Their Teaching Methods?
2. What Are The Innovative Pedagogical Strategies And Approaches That Effectively Leverage Digital Tools To Enhance Technical Instruction?
3. What Are The Digital Literacy Competencies Required Of Technical Educators To Effectively Utilize A Range Of Digital Tools And Resources In Their Teaching?

Methodology

The Researcher Used A Descriptive Survey Design Because The Study Aimed To Pick Only Some Representative Sample Of The Cross-section Of The Population And Find Their Views On The Subject Matter (cromwell, 2019). The Survey Was Also Preferred Because It Allowed The Researcher Get Detailed Inspection Of The Factors Affecting Effective Delivery Of Technical Skills Practical Lessons In Technical Colleges In Gombe State (creswell, 2019).

Gombe State Is Located In The Sudan Savannah Region Of The Country At The North-east Of River Benue And East Of Yankari Game Reserve Bordering With Adamawa, Bauchi, Borno And Yobe States Covering The Total Area Of 52sq/km With A Population Of 268.000 At 2016 Census. The Approximate Altitude Of Gombe Ranges From 400-500m Above Mean Sea Level. Topography Is Mainly Mountainous, Undulating And Hilly To The Southeast And Open Plains In The Central North East, West And Northwest (bello, 2018). Gombe State Is Located Between Latitudes $10^{\circ}18'25.0''N$ And Longitude $11^{\circ}10'29.6''E$. It Shares Common Boundary With Akko Lga In The South And West; Yamaltu-deba To The East And Kwami To The North. It Is The Capital Of Gombe State And Occupies An Area Of About 45km².

The Targeted Population Were Technical Teachers Selected From Five Technical Colleges In Gombe State. These Were Government Science And Technical College, Gombe, Government Science And Technical College, Barundi, Government Science And Technical College, Kumo, Government Science And Technical College Deba, Government Science And Technical College Tula. All These Schools Share A Common Curriculum And Same Examination Body. A Total Of 785 Technical Teachers Formed The Population.

A Stratified Random Sampling Method Was Employed To Select A Total Of 255 Technical Teachers (according To Taro Yamane's Formula) From The Five Trades Within The Technical Colleges, Namely, Automobile, Building, Electricity/electronics, Welding And Fabrication And Woodwork, Through Balloting. Any Teacher Who Picked A Yes, Formed Part Of The Research While Others Who Picked No Were Politely Asked To Go. A Total Of 255 Technical Teachers Were Selected As Sample For The Study With Automobile=51 Teachers, Building=51 Teachers, Electricity/electronics=51 Teachers, Welding And Fabrication=51 Teachers And Woodwork=51 Teachers.

The Questionnaire Used For Data Collection Was Validated By Three Experts In Technical Education From Abubakar Tafawa Balewa University, Bauchi For Face And Content Validation. Experts Were Conveniently Selected To Assess The Validity Of The Items Observed And Made Necessary Corrections And Their Corrections Were Adopted. A Reliability Coefficient (α) Was Calculated To Be 0.76 Using The Cronbach's Alfa. This Is In Accordance To What Dillman (2015) Opined That "a Correlational Coefficient Of 0.75 Can Be Said To Be Suitable For Any Survey Research. Therefore, The Coefficient Gotten Is Reliable.

The Questionnaire Titled, "professional Teacher Questionnaire (pts)" Was Designed By The Researchers On A Four Point Likert Type Scale From Highly Agree To Highly Disagree. Eighteen - Item Questionnaire Was Used To Solicit Responses From The Respondents.

The Questionnaire Was Administered To The Teachers With The Help Of Two Research Assistants. Time Was Given To The Teachers To Fill In Their Choices And Assurance Was Given To Them For Utmost Secrecy Of Their Answers. At The End Of The Allotted Time, I. E. Close Of Work For That Day, Copies Of The Questionnaires Were Retrieved From The Respondents With A 94% Return Rate.

The Data Collected From The Questionnaire Were Coded And Captured Into Statistical Package For Social Sciences (spss) Version 20 For Windows After Which Analysis Was Done To Generate The Descriptive And Inferential Statistics Of The Data Gathered. Mean And Standard Deviation Were Used As The Statistical Tool For Drawing Conclusion. To Effect Decision, A Mean

Score Of 2.50 And Above Was Accepted As “agree”. Similarly, A Mean Score Of Less Than 2.50 Was Rejected And Rated “disagree”.

Results

Research Question 1; What Are The Specific Challenges That Technical Educators Encounter When Integrating Digital Technologies Into Their Teaching Methods?

Table 1: Result Showing The Specific Challenges That Technical Educators Encounter When Integrating Digital Technologies Into Their Teaching Methods

s/no	Item statement	$\bar{X}$	SD	Remark
1	The integration of digital technologies enhances the effectiveness of technical education.	2.59	1.06	Agreed
2	I am confident in my ability to effectively use a variety of digital tools in my technical instruction	2.33	0.56	Disagreed
3	The constant updates and changes in digital tools make it hard to maintain a consistent teaching approach	2.79	1.00	Agreed
4	Students' varying levels of digital literacy make it difficult to ensure equal understanding of concepts	2.78	1.03	Agreed
5	Lack of adequate training hinders my integration of digital technologies into the curriculum	2.84	0.99	Agreed
6	There is a lack of clear guidelines on how to effectively incorporate digital technologies in teaching	2.70	1.05	Agreed

Table 1 Presents The Results Of The Descriptive Analysis On The Specific Challenges That Technical Educators Encounter When Integrating Digital Technologies Into Their Teaching Methods. The Results Revealed That The Average Mean Scores Of Teacher Effectiveness Range Between 2.33 To 2.84 And Grand Mean Of 2.67 And Sd Of 0.95. Judging By The Results, Table 1 Revealed That All The Items Had Meanscores Above The Criterion Mean Of 2.5 Thereby Accepting All The Statements As Challenges, Except For Item 2 Which Stated On The Contrary That Most Of The Teachers Were Not Confident In Their Ability To Effectively Use A Variety Of Digital Tools In Their technical Instruction With A Mean Of 2.33 And Sd Of 0.56. Thus, On The Average, Most Of The Respondents Agreed That The Level Of Teachers' Effectiveness Is Fair To A High Extent. The Result Of The Study Is In Conformity With What Ajayi And Victor (2018) Suggested, That is, One Of The Fundamental Hurdles Faced By Technical Teachers Is Their Own Level Of Digital Literacy. Many Teachers May Not Have Received Comprehensive Training In Utilizing Digital Tools Effectively For Educational Purposes. This Can Result In Hesitancy Or Inefficiency When Incorporating Digital Technologies Into Their Teaching Methods. As Noted, Teachers Require Appropriate Training And Support To Harness The Full Potential Of Digital Technologies In

Education. Ajayi And Victor Further Maintained That, The Integration Of Digital Technologies Often Demands A Shift In Pedagogical Approaches, Which Can Be Met With Resistance From Both Teachers And Students.

Research Question 2; What Are The Innovative Pedagogical Strategies Effectively Leverage Digital Tools To Enhance Technical Instruction?

Table 2: Result Showing The Innovative Pedagogical Strategies Effectively Leverage Digital Tools To Enhance Technical Instruction

s/no	Item statement	$\bar{X}$	SD	Remark
1	Innovative use of digital simulations enhances students' understanding of complex technical concepts.	3.31	0.86	Agreed
2	Integrating multimedia content like videos and animations makes technical topics more engaging for students.	3.27	0.76	Agreed
3	Providing students with access to virtual labs allows for safe and cost-effective hands-on experimentation.	3.43	0.87	Agreed
4	Personalized learning paths based on student performance in digital assessments enhance individual progress.	3.18	0.85	Agreed
5	Employing real-world case studies and industry projects through digital platforms links learning to practice.	3.56	0.98	Agreed
6	Use of virtual reality (VR) enhances students' spatial understanding of concepts.	3.78	1.34	Agreed

Result From Table 2 Shows The Mean Responses Of Teachers Regarding The Innovative Pedagogical Strategies That Effectively Leverage Digital Tools To Enhance Technical Instruction. This Result Shows That The Teachers Believed That Innovative Strategies Enhance Students' Learning Of Complex Problems, Make It More Engaging For Students As They Interact With Real World Case-studies. This Was Evident From The Grand Mean Of 3.42 And Sd Of 0.94 Which Is Above The 2.50 For Acceptance. The Finding Is Supported Larmer And Mergendoller (2019) Who Said Thatin The Realm Of Education, The Integration Of Innovative Pedagogical Strategies And Digital Tools Has Emerged As A Transformative Approach To Enhancing Technical Instruction. Technical Education, Which Encompasses A Wide Array Of Practical And Skill-based Subjects, Can Greatly Benefit From The Creative Use Of Technology To Engage Learners, Simulate Real-world Scenarios, And Foster Hands-on Learning Experiences. As Educators Seek To Bridge The Gap Between Theoretical Knowledge And Practical Application, Various Pedagogical Strategies Have Been Developed To Effectively Leverage Digital Tools In The Technical Instruction Landscape.

Research Question 3: What Are The Digital Literacy Competencies Required Of Technical Educators To Effectively Utilize A Range Of Digital Tools And Resources In Their Teaching?

Table 3: Results Showing The Digital Literacy Competencies Required Of Technical Educators To Effectively Utilize A Range Of Digital Tools And Resources In Their Teaching

s/no	Item statement	$\bar{X}$	SD	Remark
1	I don't have the skills to create multimedia-rich content to enhance technical concepts during classroom instruction.	3.78	1.03	Agreed
2	I am not familiar with different online collaboration tools that facilitate interactive learning among students	3.79	0.99	Agreed
3	I cannot adapt my teaching strategies to integrate digital tools that cater to different learning styles of students.	3.67	1.03	Agreed
4	I am not capable of troubleshooting common technical issues that may arise during digital-enhanced lessons	3.68	1.03	Agreed
5	I am not familiar with different online collaboration tools that facilitate interactive learning among students.	3.33	0.54	Agreed
6	I cannot guide students in responsible and ethical use of digital platforms, promoting digital citizenship.	3.70	1.07	Agreed

Table 3 Presents The Results Of The Descriptive Analysis On The Digital Literacy Competencies Required Of Technical Educators To Effectively Utilize A Range Of Digital Tools And Resources In Their Teaching. The Results Revealed That The Mean Scores Of Technical Teachers range Between 3.33 To 3.79 And Grand Mean Of 3.66 With Sd Of 0.95. Judging By The Results, Table 3 Revealed That All The Items Had Mean Scores Above The Criterion Mean Of 2.50 Thereby Accepting All The Statements As Digital Literacy Competencies Required By Technical Teachers The Results Support The Idea Put Forth By Miller Et. Al. (2019) That In The Digital Age, The Role Of Educators Has Evolved Beyond Traditional Methods, Necessitating A Comprehensive Set Of Digital Literacy Competencies To Effectively Leverage Wide Range Of Digital Tools And Resources In Educational Settings. This Transformation Is Particularly Critical In Technical Education, Where The Integration Of Digital Technologies Can Enhance The Learning Experience And Better Prepare Students For Modern Industries. Technical Educators Must Possess A Robust Digital Skill-set To Navigate The Complexities Of Technology-enhanced Instruction.

Conclusion And Recommendations

From The Analysis Of The Data Collected, The Study Has Found That There Is Lack Of Adequate Training Hinders My Integration Of Digital Technologies Into The Curriculum And Lack Of Clear Guidelines On How To Effectively Incorporate Digital Technologies In Teaching. The Study Also Found That Innovative Use Of Digital Simulations Enhances Students' Understanding

Of Complex Technical Concepts, And Also Providing Students With Access To Virtual Labs Allows For Safe And Cost-effective Hands-on Experimentation. It Has Been Found That Teachers Cannot Adapt Teaching Strategies To Integrate Digital Tools That Cater To Different Learning Styles Of Students, That Teachers Are Not Familiar With Different Online Collaboration Tools That Facilitate Interactive Learning Among Students. Based On The Findings, The Following Recommendations Are Made:

1. There Should Be Adequate Training Of Technical Teachers On The Digital Discoveries And A Clear And Concise Guidelines Need Tobe Provided On How To Effectively Incorporate Digital Technologies In Teaching.
2. The Use Of Digital Simulations Should Be Encouraged And Virtual Labs Of Lower Cost Should Be Built In All Technical Colleges In Gombe State.
3. Teachers Should Be Encouraged To Adapt To New Teaching Strategies And Be Made To Be Familiar With Online Environment Through Regular Training And Re-training.

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TEACHER'S SOFT SKILLS AND CREATIVE TEACHING FOR EFFECTIVE LEARNING

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Absract

Teacher Education Requires Skills Acquisition For Effective Teaching And Learning. This Paper Focused On Teacher's Soft Skills And Creative Teaching For Classroom Effectiveness. In The Twenty-first Century Learning, The Teacher Should Be Equipped With Essential Soft And Creative Skills (and Not Only Hard Skills). Conceptual Clarifications Of Soft And Hard Skills And Creative Teacher Were Stated. Essential Soft Skills Proposed For Teachers' Use Included Communication, Critical Thinking, Decision-making And Emotional Intelligence. Some Techniques Of Improving Teacher Soft Skills Presented Were Identification, Practice And Feedback. Some Recommendations were made, Such As Developing Essential Soft Skills By The Teacher, Engaging In Self-evaluation, And Utilizing Creative Teaching Techniques To Enhance Learning.

Key Words: Soft Skills, Creativity, Teaching And Learning

Introduction

The Teacher Holds The Key To Sound Education And Is A Key Facilitator Of Learning (Akintunde And Eseyin, 2019). Teachers Play Vital Roles In Shaping The Future Of Children. In This Era Of Rapid Technological Advancement, The Teacher Needs To Acquire Relevant Skills And Techniques That Will Make Teaching Fun, Meaningful, Captivating, And Impactful. Oftentimes, Emphasis Is Laid On Acquisition Of Hard Skills Like Intellectual Competence, Maintenance Of Professionalism, Good Demonstration Of Pedagogical Knowledge, Among Others. However, For All-round Efficiency And Optimum Productivity, The Need To Manifest Essential Soft Skills To Complement The Hard Skills Is Vital.

Soft Skills Are Non-technical, Personal Characteristics That Can Influence The Teacher's Job. As Opposed To Hard Skills That Indicate Workers That Are Good On Paper, Soft Skills Indicate Workers That Are Good In Person. Soft Skills Help The Teacher To Really Thrive In The Work-place. Lack Of Essential Soft Skills Can Render The Teacher Ineffective In His/her Job. For Instance, A Teacher That Is Cognitively Competent But Lacks Appropriate Communication, Problem-solving And Creative Skills Will Struggle To Have Students' Attention In Class, Leading To Non-comprehension Of Concepts And Poor Academic Performance. Furthermore, Akintunde And Eseyin (2019) Posited That Lack Of Creative Teaching May Render The Teacher Ineffective In Achieving Lesson Objectives And Tackling Students' Learning Challenges.

The Statement Of The Problem Centers On The Need To Address The Challenges Facing Teaching And Learning When Utilization Of Soft Skills Is Not Given Prominence While Emphasis Is Placed On The Use Of Hard Skills. Not Addressing The Anomaly Can Lead To Poor Demonstration Of Cognitive And Creative Abilities Of Students. It Is Against This Backdrop That This Paper Is Focusing On Teacher Soft Skills And Creative Teaching For Effective Learning

Conceptual Clarifications:

Soft Skills

Soft Skills Refer To Non-technical Abilities Or Personal Characteristics And Inter-personal Skills That Can Enhance Job Performance And Harmonious Working Relationships (sinha, 2022; Kenton, 2023). They Are Also Known As People Skills, Power Skills And Core Skills. Examples Of Such Skills Are Good Communication, Work Ethics, Time Management, Problem-solving And Teamwork. Soft Skills Are The Traits That Make An Individual A Good Employee And Are Measured Qualitatively. Soft Skills Are Developed Over Time And Constant Practice Helps To Improve Such Skills. Teachers With Quality Soft Skills Stand Out As High Performers And Highly Creative Teachers.

Hard Skills

Hard Skills Are Technical Skills (herrity, 2023) Or Cognitive Abilities Or Job-related Knowledge And Abilities That An Employee Needs To Be Effective On The Job. These Include Relevant Qualification (cognitive Competence) As Shown By The Certificates Or Results. Hard Skills Are Individual's Specific Technical Knowledge And Training. Hard Skills Are Measured Quantitatively.

Creative Teacher

Teachers Should Be Creative And Engage In Creative Teaching To Enhance Learning (akintunde, 2021). A Creative Teacher Is One That Uses Imaginative, Critical Thinking And Innovative Skills In Making Teaching And Learning Effective. Creative Teachers Use Their Own Initiatives In Adopting Appropriate Teaching Techniques And Methods For Success In The Classroom (belkaddas, 2010). Teacher Soft Skills Promote Creative Teaching.

Essential Soft Skills For The Teacher

There Are Various Soft Skills That Employees Can Manifest At Work. Some Soft Skills Apply Generally To Any Job While Some Are Job-related (for Specific Jobs). Generally, Soft Skills Include Communication, Teamwork, Problem-solving, Time-management, Critical Thinking, Decision-making, Stress Management, Leadership, Adaptability, Conflict Management, Persuasion, Organization, Creativity, And Emotional Intelligence.

However, Eight (8) Essential Soft Skills For The Creative Teacher Will Be Considered Here. These Are Communication, Teamwork, Problem-solving, Adaptability, Time Management, Stress Management, Emotionalintelligence, And Creativity.

➤*Communication*

The Teacher Should Be Able To Communicate Effectively With Students In A Way That Is Engaging, Exciting, At The Right Level For Them And Easy To Comprehend (sanders, 2023). He/she Should Be Able To Explain Concepts Clearly. Teachers Should Demonstrate Ability To Listen Speak, Read And Write And Also Give Constructive Criticisms That Will Help The Child To Improve (sinha.2022).

Also, Non-verbal Communication Can Be Used, That Is, Use Of Gestures And Body Parts To Communicate, Such As Staring At A Student Misbehaving, Thumbs-up For A Correct Answer/contribution And Pointing At An Object To Stimulate Students' Thinking.

➤*Teamwork Or Collaboration*

Collaboration Is A Vital Component Of The Teaching Profession (skillsyouneed, 2023). In Collaboration, A Teacher Works With Other Teachers To Get The Job Done. Teachers Need To Collaborate In Curriculum Development, Sharing Of Resources, Partnering In Teaching Certain Lesson Topics, Working With Co-teachers On Extra-curricular Activities (or Sports), Among Others. Other Skills Are Also Involved Here Such As Emotional Intelligence,

Adaptability And Communication (futurelearn, 2022).

➤ **Problem Solving**

This Refers To The Teacher's Ability To Handle Challenges/issues Encountered During The Teaching/learning Process. It Entails The Use Of Critical Thinking Skills, That Is, To Reason, Analyze Information And Handle Conflicts From Within Or Outside The Classroom (sinha, 2022).

A Teacher Can Come Across Problems While Discharging His/her Duties. For Instance, When Students Do Not Show Understanding Of A Concept Despite Teacher's Explanations. The Teacher Needs To Seek Ways Of Overcoming The Problem.

Also, It Entails “quick Thinking” I.e The Need To Solve A Problem Instantly And Efficiently (sanders, 2023). For Instance, If A Student Asks A Question That You Do Not Know The Answer Right There, What Do You Do As A Teacher?

➤ **Adaptability**

This Is The Ability To Embrace Change. Examples Are Changes In The Curriculum; New Technological Skills And New Staff Intake. Education Undergoes Change From Time To Time (drew. 2023). Teachers Need To Keep Abreast Of New Developments. Teacher Needs To Adapt His Techniques Or Methods To Suit The Changes Or Demands Of The Society Or Global Best Practices. For Instance, Teachers Need To Adapt To Or Manage Online Teaching/learning And Creative Ways Of Lesson Delivery. Also, Adaptable Teachers Can Respond To Multiple Intelligences In The Classroom And Give Necessary Support (skillsyouneed, 2023).

Inclusivity Is Also Involved, That Is, Where Teachers Become Flexible And Adaptable To Teach Various Students With Different Learning Styles (not To Exclude The Low Achievers).

➤ **Time Management**

This Refers To The Teacher's Ability To Manage Lesson Time Well In The Classroom - To Teach Appropriately; Not To Forget Important Information; Not To Waste Time On Less Important Activities While Neglecting Vital Ones; And Not To Have Covered Only 50% Of The Term's Work At The End Of The Term. Also, It Entails The Use Of Appropriate Pace In Teaching, Specifically, Using A Controlled And Comfortable Pace (drew, 2023).

➤ **Stress Management**

Teaching Is A Noble Profession. It Is A Profession That Brings Joy And Satisfaction To The Creative Teacher (sinha, 2022). Notwithstanding, There Are Stressful Times Too, Due To The Numerous Tasks Involved In The Teaching-learning Process Such As Lesson Planning, Lesson Delivery, Classroom Management, Setting Of Exam Questions And Marking Of Scripts, Compilation And Grading Of Scores, Report Cards E.tc. A Creative Teacher Needs To Learn How To Cope With Stress To Remain Healthy, Relevant, Active And Productive In The Profession.

➤ **Emotional Intelligence**

This Refers To The Ability To Understand And Control Your Emotions And Empathize With Others (futurelearn, 2022). Teachers Need To Know When They Are Getting Upset Or Angry And Find A Way Of Controlling That To Avoid Displaced Aggression On Students Which May Lead To Negative Consequences. Need To Keep Positive In The Classroom. A Teacher With Emotional Intelligence Capability Can Meet The Emotional Requirements Of Students (skillsyouneed, 2023). For Instance, The Teacher Should Be Able To Detect Underlying Reasons For A Student's Misbehaviour And Make Efforts To Assist The Student In Overcoming Such A Challenge (sanders, 2023).

➤ **Creativity**

This Refers To The Teacher's Ability To Have Innovative Lessons. It Is The Teacher's

Responsibility To Think Of Creative Ways To Teach The Lesson Topics, A Teacher Needs To Teach In An Engaging Way To Enable Students To Acquire Knowledge At The End Of The Lesson (drew, 2023). A Creative Teacher Can Easily Adapt Teaching Methods And Techniques To Manage Diverse Classroom Conditions Posing Threats To Learning (pugliese, 2020). A Creative Teacher Is One That Is Open To New Ideas, Flexible, Imaginative, Humorous, Among Others. Creativity Ensures Active Participation Of Learners, Makes Learning Fun And Interesting, And Drives Away Boredom On The Part Of Learners. Teacher Creates A Positive Atmosphere In Class Where Students Key In And Learn Effectively (if Teacher Is Negative, Class Is Also Negative).

Improving Soft Skills And Creative Teaching

Demonstration Of Soft Skills By The Teacher Is Quite Significant. Knowledge Of And Demonstration Of Soft Skills Are As Important As The Knowledge Of The Subject A Teacher Teaches. The Soft Skills Help The Teacher To Disseminate Information To Students Appropriately And To Demonstrate Creative Ways Of Providing Solutions To Teaching Learning Problems.

Also, Soft Skills Can Be Learnt And Developed Over Time Or Improved Upon. For Instance, A Teacher Can Learn To Improve His/her Communication Skills Or Learn To Collaborate Better With Co-teachers, For Better Learning Output. Some Techniques Of Improving Soft Skills Include:

- **Identification** – The Teacher Needs To Identify Areas Of Need Or The Soft Skills Needing Improvement. Accepting One's Weaknesses Is Crucial To Seeking Ways Of Turning Such To Strengths (sanders, 2023). The Teacher Should Engage In Self-evaluation, Highlight Areas Of Need And Seek Ways Of Addressing Such.

- **Practice** – Constant Practice Helps To Improve Soft Skills. Active Use Of The Skills Enhances Perfection. The Teacher Can Also Practice Some Skills With Some Friends Or Family Members. At Times, The Teacher Can Practice Alone, In Front Of The Mirror At Home, Before Outside Presentation.

- **Counselling** – The Teacher Can Seek Advice From More Experienced Teachers Or Friends That Have Perfected Such Skills On How Best To Improve. The Teacher Can Also Make Use Of Training Opportunities That Encourage Development Of Soft Skills.

- **Feedback** – Obtaining Feedback From Colleagues And More Experienced Workers On A Particular Presentation Can Help To Identify Areas Of Strengths And Weaknesses. The Teacher Then Works On Improving On The Areas Of Weaknesses.

However, Soft Skills Promote Creativity In The Classroom. Henriksen And Mishra (2013) Posited That Creativity In The Classroom Is Crucial For The 21st Century Teacher. Use Of Appropriate Soft Skills Assists The Teacher In Creative Teaching. For Instance, To Teach Creatively, The Teacher Needs To Demonstrate Appropriate Communication, Critical Thinking And Collaboration Skills That Will Promote Academic Success.

Implications For Teaching And Learning

1. Acquisition Of Soft Skills By The Teacher Promotes Effectiveness In Lesson Presentation And Delivery. Time Management Skills Help The Teacher To Plan Lessons Appropriately And Focus On Important Aspects During Lesson Delivery.
2. Teacher's Improved Communication Skills Can Enhance Students' Comprehension And Retrieval Of Information. Students Are Able To Grasp Explanation Of Concepts Clearly And Demonstrate Interest In The Lesson.
3. Problem-solving Skills Acquired By The Teacher Can Assist In Being Sensitive To Students' Needs And Exploring Ways Of Addressing The Needs.

4. Multiple Intelligences Demonstrated By Students Are Easily Identified And Supported By An Adaptable Teacher.
5. Development Of Emotional Intelligence Skills By The Teacher Can Help In Meeting The Emotional Needs Of Students.
6. Students Learn Effectively And Actively Participate In Class, When Tutored By A Creative Teacher, Use Of Creative Teaching Techniques Make Learning Fun, Interesting And Productive.

7. Recommendations

The Following Recommendations Are Made:

- 1) Teachers Should Identify And Develop Essential Soft Skills Needed For The Job For Efficiency.
- 2) Teachers Should Constantly Put Into Practice Various Soft Skills For Improvement.
- 3) Teachers Should Engage In Self-evaluation And Get Feedback From Colleagues To Improve On The Use Of Soft Skills.
- 4) Teachers Should Utilize Creative Teaching Techniques In The Classroom To Enhance Learning.
- 5) School Management Should Organize Seminars Or Conferences On Soft Skills And Teaching Effectiveness To Enhance Learning.
- 6) School Administrators Can Institute Awards For The Outstanding Teachers That Demonstrate Appropriate Soft And Creative Skills In The School.
- 7) In Recruiting Teachers, Emphasis Should Be Placed On Both Hard And Soft Skills Qualifications.
- 8) Government Should Enhance Teacher Motivation To Be Creative In Teaching Through Adequate Funding Of Schools, Prompt Payment Of Salaries And Allowances.

Conclusion

Soft Skills For The Creative Teacher Are Vital Components Of Academic Success In Schools. The Present-day Teacher Needs To Develop And Improve On Relevant Soft Skills That Encourage Efficiency. Imbibing The Essential Soft Skills Proposed In This Paper Will Go A Long Way To Enhance Creative Teaching And Effective Learning.

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