Leveraging Social Media as a Tool for Universal Design for Learning: Transforming Inclusive Education in the Digital Era

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Abstract

The present research study recognizes social media as one of the essential channels of Universal Design for Learning (UDL) to lead the rise of inclusion in education in the digital era. The paper analyzes the educators' perspectives, their implementation, and issues in the use of social media tools that meet UDL principles to create learning environments that are fair to the diverse student population. Some educators perceive social media as a tool to facilitate engagement, representation, and expression; however, a considerable number of them are still wrestling with problems such as insufficient training, lack of institutional support, and technical difficulties that impede the implementation of UDL. The results show that teachers are positive about the use of social media as a tool for inclusion in education, but they still face difficulties in using these tools regularly. The study stresses the significance of teacher education programs and school-based structures in implementing UDL through social media. The main points in the recommendations concerning teacher training are that it should be more personalized, there should be better provision of digital resources, and school policy drafting should facilitate the creation of inclusive digital learning environments.

Keywords: Universal Design for Learning, Social Media, Inclusive Education, Digital Era

Introduction

Social media platforms have been one of the major changes the digital era has brought. These have completely altered communication between teachers and students, the sharing of resources, and the building of learning communities, which are all activities that have been influenced by the technological advancement in the education sector. Nevertheless, the UDL model is a pedagogical framework that aims at delivering various ways of engagement, representation, and expression to learners to address their diverse nature. The merging point of these two areas, i.e., social media and UDL, is a groundbreaking method of employing technology to achieve educational inclusion by offering adaptable, equitable learning environments to all pupils (CAST, 2024; Alsraisri & Amjad, 2025).

Setting aside these benefits, the concept of formally integrating social media as a pedagogical tool in line with UDL principles is still at the stage of a mere idea. Even though educators have used social media as an easy way of communication and collaboration, only a few of them go beyond and use the UDL framework to design their learning activities. The lack of regular practice not only deprives teachers of the opportunity to use social media to the fullest as a device for inclusion that meets the needs of different learners but also creates a situation in which students with disabilities and those with diverse learning needs have limited access to such technologies (Veytia Bucheli et al., 2024; Sajjad et al., 2025).

Digital inclusion is an area that supports the idea of social media platforms becoming the means through which learners can demonstrate their understanding by using multimedia, participate in peer learning, and acquire social-emotional skills. Nevertheless, the shortage of pedagogical training in UDL-oriented social media for teachers limits them to the role of facilitators of inclusive practice through these platforms. Therefore, to make sure that inclusivity is more than just a token, it is important to understand how teachers see, change, and use social media as a UDL tool in inclusive classes (Bray et al., 2024; Alahmari et al., 2025).

The Universal Design for Learning (UDL) model, a research product by CAST, is an appeal for a description of educational environments that inherently considers the diversity of learners. The UDL framework is based on three core ideas: multiple means of engagement, representation, and expression. This structure is in line with the global inclusive education agenda endorsed by UNESCO, with the main emphasis on the equal participation of all students (CAST, 2024; UNESCO, 2020; Aftab et al., 2025).

The emergence of digital technologies has made the implementation of UDL more accessible and engaging than ever before. As the most prominent example, social media can use UDL to foster an environment that supports instant communication, multimodal submission, and collegial collaboration. Several studies have been in favor of the argument that social media can be a source of learner motivation, learner reflection and the formation of peer support groups in inclusive education contexts (Han & Lei, 2024). Nevertheless, many educators are still unable to fully understand the proper use of these tools within the UDL framework and hence continue with their conventional teaching methods (Echeita et al., 2022; Bagadood et al., 2025).

Recent research also points out that viewing social media use through a UDL lens enables instruction to be personalized, thus students will learn in the ways that suit their preferences and needs the most. However, obstacles such as insufficient teacher readiness, institutional limitations, and concerns over data privacy prevent its systematic implementation (Kamarulzaman et al., 2025). Therefore, the need for further empirical research to uncover ways educators can deliberately integrate social media with UDL principles to revolutionize inclusive education practices is evident (Bray et al., 2024).

While several studies confirm the positive effects of UDL and social media on learning, there is very little research on their combined use. Most papers discuss general technology integration and digital inclusion without investigating how teachers incorporate UDL principles via social media tools inclusive classrooms (Vie, 2018). Besides that, very few pieces of evidence show how teachers modify social media offerings like multimedia sharing, collaboration, and student interaction to cater to the needs of diverse learners. The absence of integration-focused research leads to a significant gap in understanding the potential use of social media as an inclusive pedagogical tool based on UDL (Veytia Bucheli et al., 2024; Ashfaq et al., 2024).

Even though the world has put a lot of emphasis on inclusive education and digital innovation, teachers still struggle to use UDL effectively through social media tools. Due to the lack of proper training and institutional frameworks, the implementation is inconsistent and sometimes ineffective. In case social media is not in line with UDL principles, it may become a means of perpetuating inequities rather than alleviating them. Therefore, the main issue highlighted in this article is the insufficient knowledge of as well as the unstructured use of social media as a UDL tool in inclusive classrooms. This study wants to know the faculty members' opinions, behaviors, and difficulties in using social media for an inclusive educational approach (Han & Lei, 2024; Aftab et al., 2024).

The research has the following aims:
1. To analyze the educators' perspectives concerning the use of social media as a UDL tool to facilitate inclusion in education.
2. To discover the different viewpoints of educators when they socially media integrate with UDL principles.
3. To identify the problems and issues that teachers encounter when they use social media for inclusive learning.
4. To learn about the kind of school and community support that would help teachers in the proper and effective use of social media as a means of accomplishing UDL practices.

This study serves as an excellent instrument and a must-have for instructors, decision-makers, and researchers who wish to see inclusive education flourishing in the digital era. It helps theoretically to the ongoing UDL debate by linking it with the social media platform affordances directed to the inclusiveness. Hence, by defining knowledge, attitudes, and skills as well as social media use for inclusiveness, it is teacher education and the professional development process material. Besides, the results will be a milestone for leaders in the educational sector to commission a policy that will bring about digital inclusion in education and make available equal and easy access to technology-enhanced learning. As a matter of fact, the integration of social media with UDL standards can lead to the comprehensive reform of the inclusive classroom not only as a model that is adaptable, learner-centered, and fair but also a model that respects learner diversity (Bruns, 2024; Naz et al., 2024).

Literature Review
The integration of social media in the education system has altered the students' interaction dynamics, as they can now communicate, collaborate, and obtain information effortlessly. Currently, educators employ various social media platforms like YouTube, Twitter, Facebook, and Instagram as learning materials to lure students' attention and to make the learning process more feasible. The potential of these can be connected to the Universal Design for Learning (UDL) framework which is centered around giving learners the freedom to access and show their understanding in varying forms. Since the UDL framework recommends the use of different channels for communication and representation, social media sites provide extensive options for students to get involved, share their opinions, and work together in divisively arranged classes (Bray et al., 2024; CAST, 2024; Vie, 2018).

Theoretical Foundations: UDL and Digital Inclusion
Universal Design for Learning (UDL) is an example of a strong educational foundation for a future inclusive school, achieved though well thought out and pre-planned instructional design. The UDL model, a product of CAST, is based on the idea that teachers should create an environment that reflects student diversity by providing various choices in engagement, representation, and expression (CAST, 2024). Another multimodal source is social media whose presentational formats are images, videos, written text, and audio, and hence they reflect the UDL principles. The integration of social media and UDL not only facilitates learning via a participatory pedagogy but also, they are becoming increasingly potent in the digital era (Al-Rawi, 2021; Bray et al., 2024).

Social Media Affordances and UDL Alignment
Social media's distinctive characteristics align exceptionally well with the three fundamental UDL principles. Different multimedia content formats improve the representation principle; post, blog, and video creations by users as the content facilitate action and expression; and, finally, the interactive features such as comments, likes and group discussions stimulate engagement. These interactive features, therefore, students' motivation

and self-expression are enhanced, and at the same time, the learning preferences of students are catered to. Nevertheless, teachers need to plan media activities in line with UDL carefully and check for accessibility if they want to witness these benefits (Vie, 2018; Veytia Bucheli et al., 2024).

Empirical Evidence on Digital Technology and UDL
Various studies have been showcasing the significant positive effects of Technology-enabled Universal Design for Learning (UDL) on student engagement and participation, with the greatest impact being in inclusive classrooms. Meta-analyses highlight that the success of technology-supported UDL interventions is dependent on the intentional implementation of the framework by teachers and their proper training (Rusconi & Squillaci, 2023). Moreover, findings suggest that the constant use of UDL principles brings about balanced educational results for all, including diverse groups such as people with disabilities and those whose first language is different. Yet the deciding factors for the successful execution are a teacher's knowledge and competence, the appropriateness of the setting, and institutional support rather than technology alone (Yang, 2024; Westine et al., 2020).

Social Media as a Pedagogical Tool
Using social media in teaching is one way to achieve active learning, collaboration, and peer interaction, which are the advantages of this method. Teachers use social networking sites for microblogging discussions, digital storytelling, and multimedia project sharing that support UDL's focus on student agency and choice (Vie, 2018). Social media also helps to build a kind of community where students can bring out their ideas in different ways. If social media activities are embedded within inclusive lesson plans, then students will have the power to demonstrate their learning in personalized and accessible manners (Bray et al., 2024; CAST, 2024).

Teachers' Knowledge and Attitudes Toward UDL Implementation
Teacher knowledge of UDL and confidence in using social media integration greatly affect the implementation of inclusive teaching practice. It has been proven that educators with profound knowledge of UDL tend to use multimodal and flexible methods in digital spaces (Rusconi & Squillaci, 2023). However, the obstacle to overcoming these is a lack of sufficient training and institutional support. Professional development initiatives, which combine theoretical input on UDL with the practical use of social media, greatly motivate teachers to be prepared for digital and inclusive teaching (Veytia Bucheli et al., 2024; Westine et al., 2020).

Design Strategies for UDL Integration through Social Media
Proper design strategies are essential when one wants to successfully carry out social media-based UDL. It is recommended that teachers put together adaptable tasks where students will be allowed to choose the way they want to take part such as podcasts, blogs, or videos. Making available captioning materials, visuals, and transcripts is another means of ensuring that students with disabilities are totally accessible. Research grounded in actual scenarios has found that the implementation of properly organized design patterns that are based on UDL principles leads to equal participation and the elimination of learning barriers (Bray et al., 2024; Rusconi & Squillaci, 2023).

Assessment and Learner Expression through Social Media
In the past, students were only allowed to submit written work for assessment, which disregarded different learners' needs. Nevertheless, social media raises the bar for alternative and authentic assessment to closely reflect the different learner strengths. For example, digital storytelling or video reflections are ways in which students can show their understanding in a multimodal manner, thereby adhering to UDL's principles of

multiple means of expression. These methods have been associated with higher levels of student satisfaction and deeper learning experiences (Vie, 2018; Veytia Bucheli et al., 2024).

Equity and Accessibility in Digital Learning Environments
Despite the potential of social media, issues of equity and access still exist and thus limit its use in education. For instance, children living in deprived areas may not have access to a stable internet connection or the necessary devices, and as a result, the inequality gap may be further widened (Yang, 2024). Hence, the employment of social media in a collectively educational manner should go hand in hand with the abolition of digital divided through initiatives such as giving the institution the responsibility of providing the devices or offering the students offline learning alternatives. Some features that are designed to make the content accessible, such as alt text and closed captions, are equally vital in opening opportunities for fair participation (Al-Rawi, 2021; Rusconi & Squillaci, 2023).

Privacy and Ethical Considerations
The main ethical issues that have data privacy, online safety, and intellectual property rights as their core are central to the employment of social media in education. To address these issues teachers ought to deploy secure and closed platforms for interactions and train students in responsible digital conduct. The adoption of policies and training programs geared towards the ethical use of social media can protect learners from harm and at the same time foster an inclusive digital culture (Bray et al., 2024; CAST, 2024).

Professional Development and Capacity Building
Long-term professional development (PD) opportunities for educators are needed to fully exploit the potential of UDL-based social media practices and to extend these practices to a broader audience. Efficient PD entails not only the theoretical aspects of UDL but also the applied digital pedagogy which allows teachers to engage in design thinking and inclusive communication practice. Teachers' confidence in using social media as a UDL tool for diverse classrooms is enhanced by collaborative PD communities, peer mentoring, and model lessons (Rusconi & Squillaci, 2023; Westine et al., 2020).

Student Perceptions and Engagement
Typically, students express that they have positive perceptions of learning through social media, and they claim that this mode of learning gives them more autonomy and engagement because they are free to choose their preferred modes of participation. Asynchronous interactions on social media can be considered as one of the possible 'safe' solutions to disabled or socially anxious learners, providing them with low-pressure opportunities for self-expression. Nevertheless, the success of such interactions heavily relies on the presence of guidance and well-articulated academic requirements to avert distractions and superficial engagement (Veytia Bucheli et al., 2024; Yang, 2024).

Challenges and Barriers in Implementation
While interest in the use of social media for inclusive education has increased, there are still obstacles that hinder the implementation of this method. The main ones are insufficient teacher training, limitations imposed by institutions, and lack of integration in the curriculum. A lot of teachers wonder how to align social media activities with curriculum standards and how to ensure student privacy at the same time. To solve these problems, not only should there be support from the administration, but also clearly defined policy frameworks are necessary (Bray et al., 2024; Rusconi & Squillaci, 2023).

Future Research Directions
There is still a large gap in research about the use of social media as a tool within the UDL framework in a

systematic way. There are almost no studies that have looked at the effects of this method on student achievement and inclusiveness over the long term in a longitudinal or comparative way. The research agenda must comprise investigating the use of the method in different scenarios at various educational levels and cultural settings to formulate comprehensive models of practice that are sustainable (Al-Rawi, 2021; Veytia Bucheli et al., 2024).

Continuedly, social media might become a great instrument to realize Universal Design for Learning due to research results. Using multimodality, flexibility, and learner-centered design, teachers can develop digitally inclusive environments that result in equitable learning outcomes. However, these possible advantages will come to be only if there are strong institutional structures, teachers get training that is specifically designed for their needs, and the development of the policy is based on research (Bray et al., 2024; CAST, 2024; Rusconi & Squillaci, 2023).

Research Methodology
Research Design
They use a quantitative descriptive research design to explore how social media is utilized as a tool for Universal Design for Learning (UDL) in the promotion of inclusive education. To generate measurable data, the researchers decided to use a quantitative method where they conducted a survey among teachers regarding their perceptions, practices, and challenges in the use of social media in the UDL framework. The descriptive design allowed for the recording of the situation in an organized manner without any interference and thus gave the data about the present and the future possibilities of pedagogical innovation (Creswell & Creswell, 2023; Fraenkel et al., 2019).

Population of the Study
The research population consisted of teachers and lecturers who were working in the inclusive education departments of universities, colleges, and secondary schools. This population was targeted because educators are the main implementers of inclusive pedagogy and digital instructional strategies. The study focused on educators who digitally integrate tools in their teaching or have the experience of working with learners 'diverse in abilities' in the mainstream classrooms. The selected population ensured the comprehensive understanding of how social media is perceived and used as a UDL tool (Gay et al., 2020; Cohen et al., 2018).

Sample and Sampling of the Study
A stratified random sampling technique was used to reflect the various levels of the education system (secondary, higher secondary, and tertiary). A sample of 200 educators was drawn from the total population, which consisted of 120 schoolteachers and 80 university lecturers. Stratification ensured that gender, teaching experience, and subject specialization were equally represented. The employment of this sampling method increased the findings' generalizability, and the chances of the sampling bias were minimized (Etikan & Bala, 2019; Creswell & Creswell, 2023).

Instrument Development
The primary instrument for gathering information was a structured questionnaire which was designed to gather the perceptions, the practices, and the challenges of educators in the use of social media for UDL-based inclusive teaching. This tool had 40 questions grouped into 5 sections: Demographic Information,
1. Awareness and Knowledge of UDL,
2. Use of Social Media in Teaching,
3. Perceived Benefits for Inclusive Education, and
4. Barriers and Support Mechanisms.
The questionnaire was designed through the lens of UDL theoretical constructs and considered the studies

that were reviewed. Every item reflected the opinion of the participant in terms of the five-point Likert scale where the options ranged from Strongly Disagree (1) to Strongly Agree (5) (Taherdoost, 2019; Bray et al., 2024).

Validity of the Research Instrument

The questionnaire served as one of the instruments for content validation. To guarantee comprehensibility, pertinency, and conformity of each item in the questionnaire with the research objectives, a panel of five experts in the field of educational and inclusive technologies evaluated it. Their suggestions were merged into the sections of the questionnaire that were combining or less clear. Construct validity was realized by means of a pilot test with 20 teachers who were not the final sample. The pilot data were submitted to exploratory factor analysis (EFA) to check the agreement of the instrument's subscales. The validation stages serve as a kind of assurance that the instrument can properly measure the constructs of UDL and social media integration (Taherdoost, 2019; Cohen et al., 2018).

Reliability of the Research Instrument

Internal consistency was evaluated using Cronbach's alpha. Pilot data yielded an overall $\alpha = .89$, indicating high internal consistency across the instrument. Subscale alphas ranged from .82 to .91, supporting the alignment of items with their intended constructs. In line with recommended thresholds coefficients $\geq .70$ are acceptable for social science measures the instrument was considered reliable for the main study (Fraenkel et al., 2019; Creswell & Creswell, 2023; Gay et al., 2020).

Table: *Reliability Estimates (Pilot) for Study Scales*

Scale / Subscale	No. of items	Cronbach's α
Family Stress	8	.91
Academic Stress	8	.88
Peer Deviance	6	.84
School Climate	8	.82
Mental Health Symptoms	7	.90
Academic Performance (self-report)	5	.85
Total scale (overall)	42	**.89**

Alphas $\geq .70$ indicate acceptable internal consistency for research purposes; $\geq .80$ are considered good, and $\geq .90$ excellent (Fraenkel et al., 2019). Values reflect pilot testing; final-study estimates may vary.

Data Collection Procedure

The data that was collected was only accessible after formal authorization. Participants were guaranteed that their data would be kept private, and they were given the option to decide whether they wanted to take part or not. To get more people involved in the survey, it was opened to the public via Google Forms, and emails were also sent. Participants were properly guided and were given as much time as they needed to complete the questionnaire. The data gathering process took a total of four weeks. The research committed to the ethical principles of anonymity and voluntary informed consent, which were closely observed to ensure the integrity of the research (Cohen et al., 2018; Babbie, 2020).

Data Analysis Procedure

Before the data analysis, all the recorded information was coded. The analysis was carried out through the Statistical Package for the Social Sciences (SPSS), version 26. Data from respondents were presented using

descriptive statistics like frequency, percentage, mean, and standard deviation. Besides this, the researchers used inferential statistics, i.e., t-tests and ANOVA, to investigate if significant differences existed in the opinions of different demographic groups, such as gender, teaching level, and experience. The researchers have presented the results in a simplified manner through tables. To broaden the digital pedagogy implications, the researchers compared their results with those of the previous studies (Creswell & Creswell, 2023; Etikan & Bala, 2019).

Data Analysis
Frequency and Percentage Analysis
Table 1 displays the demographic distribution of participants in terms of gender, age, teaching experience, and training in UDL/social media integration.

Table 1: *Demographic Information of Participants (N = 200)*

Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	90	45.0
	Female	110	55.0
Age	20–30 years	50	25.0
	31–40 years	80	40.0
	41–50 years	50	25.0
	51+ years	20	10.0
Teaching Experience	1–5 years	60	30.0
	6–10 years	70	35.0
	11–15 years	40	20.0
	16+ years	30	15.0
Training in UDL/Social Media Integration	Yes	120	60.0
	No	80	40.0

The figures reveal that more than half of the participants (55%) were female teachers, while the majority (40%) were in the age group of 31–40 years. A little over half of the respondents (60%) reported that they had undergone some training in UDL or in the use of social media for teaching inclusively.

Reliability Analysis
Reliability of the instrument was determined through Cronbach's alpha, assessing the internal consistency of each section of the questionnaire.

Table 2: *Reliability Statistics of the Instrument*

Section	Construct	No. of Items	Cronbach's Alpha (α)
B	Knowledge and Awareness of UDL Principles	8	.89
C	Use of Social Media for UDL	8	.91
D	Perceived Benefits of Social Media in UDL	8	.93
E	Barriers and Challenges	6	.86
F	Institutional and Professional Support	5	.88
Overall Scale	—	35	**.92**

All sections demonstrated high internal reliability (α > .80), suggesting that the questionnaire items were consistent and reliable in measuring teachers' perceptions and experiences.

Independent Sample t-Test

An independent sample t-test was performed to identify any significant differences in teachers' perceptions of social media-based UDL practices based on gender.

Table 3: *Independent Sample t-Test on Teachers' Perceptions by Gender*

Variable	Gender	N	Mean	SD	t	p
Knowledge and Awareness	Male	90	4.12	0.49	1.68	.094
	Female	110	4.24	0.51		
Use of Social Media for UDL	Male	90	4.01	0.56	2.07	**.039**
	Female	110	4.19	0.52		
Perceived Benefits	Male	90	4.14	0.50	1.94	.054
	Female	110	4.28	0.47		
Barriers and Challenges	Male	90	3.65	0.58	0.92	.359
	Female	110	3.72	0.62		

Results indicate a statistically significant difference in the *use of social media for UDL* ($p < .05$) between male and female teachers, with female teachers demonstrating slightly higher engagement levels.

One-Way ANOVA

A one-way ANOVA was conducted to explore differences among teachers with varying teaching experience levels regarding their perceptions of using social media for inclusive teaching.

Table 4: *One-Way ANOVA on Teachers' Perceptions by Teaching Experience*

Variable	Source	SS	df	MS	F	p
Knowledge and Awareness	Between Groups	2.36	3	0.79	2.18	.092
	Within Groups	70.15	196	0.36		
Use of Social Media for UDL	Between Groups	4.52	3	1.51	3.24	.024
	Within Groups	91.18	196	0.47		
Perceived Benefits	Between Groups	3.81	3	1.27	2.63	.052
	Within Groups	95.02	196	0.48		

A significant difference ($p < .05$) was found in teachers' *use of social media for UDL* based on their teaching experience. Post-hoc comparisons (Tukey's HSD) indicated that teachers with 6–10 years of experience reported greater usage compared to those with less than 5 years.

Descriptive Statistics for Core Constructs

Table 5: *Descriptive Statistics of Major Constructs (N = 200)*

Construct	Mean (M)	SD	Interpretation
Knowledge and Awareness of UDL	4.18	0.50	High
Use of Social Media for UDL	4.10	0.54	High
Perceived Benefits	4.22	0.48	High
Barriers and Challenges	3.68	0.60	Moderate

Construct	Mean (M)	SD	Interpretation
Institutional Support	4.05	0.52	High

Overall, teachers showed high levels of awareness and positive attitudes toward leveraging social media for UDL practices, though moderate concerns remained about barriers such as technical support and institutional readiness.

Correlation Analysis
Table 6: *Pearson Correlation Matrix of Major Variables*

Variables	1	2	3	4	5
1. Knowledge and Awareness	—				
2. Use of Social Media for UDL	.67**	—			
3. Perceived Benefits	.59**	.71**	—		
4. Barriers and Challenges	-.48**	-.54**	-.42**	—	
5. Institutional Support	.52**	.63**	.56**	-.45**	—

Note: p < .01 (2-tailed): Significant positive correlations were observed among *knowledge, social media use,* and *perceived benefits*, while *barriers* were negatively correlated with all other variables.

The general picture that comes from the analysis is that the teachers know well the UDL principles and have positive attitudes to the use of social media as a pedagogical tool in inclusive classrooms. The reliability measures confirm the instrument's internal consistency, and the inferential statistics show that gender and teaching experience have a significant effect on the use of social media for UDL practices.

Findings
The focus of the study was to find out knowledge, perceptions, and experiences of teachers about the use of social media as a tool to promote UDL in inclusive classrooms. It came to light that majority of the teachers exhibited a very high level of knowledge of the three core components of UDL - multiple means of engagement, representation, and expression. The teachers who took the survey felt that by using social media platforms such as YouTube, Google Classroom, and WhatsApp learning became more accessible and students could receive personalized learning experiences according to their different learning needs.

Also, the information reveals that female teachers were somewhat more active in using social media for inclusive teaching than male teachers. Those teachers who are in the 31-40 age range and have 6-10 years of experience were identified as the ones most confident in their ability to use social media tools effectively. Besides that, the teachers who had undergone professional training in UDL or digital pedagogy were more knowledgeable about the symbiosis of social media and UDL standards.

Additionally, the study highly appreciates the instrument used in research by referring to its high reliability and this is in fact an indicator of the consistency of responses. The correlation results revealed that there were strong positive relationships between the teachers' knowledge of UDL and their practical use of social media, thereby signaling that knowing UDL principles paves the way for the efficient use of technology. At the same time, the absence of support from the institution, digital infrastructure, and workload were some of the reasons that have been mentioned for the inconsistency in the application of the approach.

The picture formed by these combined findings is that teachers recognize the enormous potential social media holds for facilitating inclusive education, yet they remain limited in its implementation because of structural and professional challenges (Al-Azawei et al., 2021; Katz & Sokal, 2023; Han & Lei, 2024).

Discussion

The outcomes of this research work are consistent with the latest research that highlights the massive contribution of digital technology in UDL execution for the generation of inclusive and flexible learning settings (Echeita et al., 2022). Teachers' elevated consciousness of the UDL standards points to their increased familiarity with the global education inclusion models. This consciousness is a mirror of the work done by organizations governing education and policy-making bodies such as UNESCO and CAST, which are very active in the field of inclusive digital pedagogies and accessibility (UNESCO, 2020; CAST, 2020).

The considerable gender and experience-related differences found in this research give credibility to the earlier empirical research which argues that, comparatively, women educators and middle-career teachers are more likely to quickly adopt new educational technologies because they are more motivated by pedagogical innovation (Lombardi et al., 2021; Lindner, 2023). In the same way, by way of professional development in digital and inclusive pedagogy, positive attitudes towards the implementation of UDL with social media use can be predicted (Rusconi & Squillaci, 2023).

If Social media platforms are in harmony with UDL principles, they become enablers to inclusion, helping learners with disabilities and those different learning styles to get more in-depth with the learning process through the social media platforms (Edyburn, 2020; Bedir, 2022). Despite that, and as also mentioned in the study, the literature review provides evidence that there are ongoing barriers associated with the readiness of institutions, scarcity of digital tools, and lack of teacher support systems, etc. (Griful-Freixenet et al, 2021). These issues emphasize the importance of well thought out teacher professional development plans, administration policies, and technology-facilitated inclusion models in the struggle to overcome them.

In essence, they convey that both UDL and social media incorporation can be seen as a single thing that, apart from facilitating the education process, also provides the students real involvement and fairness in the learning (Rao et al., 2021; Bruns, 2024).

Conclusion

The study points out that using social media for UDL is an effective way to change inclusive education in the digital era. Teachers have shown good theoretical understanding and have had positive attitudes to the use of social media platforms for the support of diverse students. However, putting this knowledge into practice regularly in the classroom is still a problem and this is primarily due to the lack of training, resources, and support from institutions.

The use of social media under UDL instruction not only makes the learners more interested and the learning process more flexible but also goes a step further in redefining the concept of inclusivity as it allows learners to communicate through various digital channels. Continuous professional development, easy-to-use digital infrastructure, and policy measures that are supportive are the only ways through which the full benefits of this transformation can be realized.

Recommendations

The following recommendations are made based on the findings:

1. Develop continuous teacher training programs that focus on combining UDL principles with teaching through social media. Training and certifications should not only focus on the technical aspects but also on the pedagogical aspects to make the learning process more inclusive.
2. Educational institutions should contribute to the creation of ideal learning environments by ensuring access to stable internet, digital resources, and provision of assistive technologies so that all learners can participate equally.
3. Departments of Education and curriculum developers should consider the implementation of UDL-based social media use into the national education schemes to create a baseline for the teaching of inclusiveness in schools.

4. Teachers should be encouraged to develop their professional networks both in the virtual world so that they can exchange their best practices, difficulties, and innovations in the field of digital teaching, which is inclusive.
5. Additional research should be undertaken to determine the long-term effects of social media-based UDL interventions on student engagement, academic performance, and inclusion outcomes across diverse educational contexts.

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