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Multimodal Engagement Practices of Teacher Influencers Across Disciplines on Social Media

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Abstract

This study investigates the multimodal engagement strategies employed by teacher influencers on TikTok as an emerging digital genre for public knowledge dissemination. The corpus consists of 40 TikTok videos collected from 40 teacher influencer accounts representing eight disciplines: four soft science disciplines (English, Psychology, Economics, and History) and four hard science disciplines (Mathematics, Biology, Physics, and Chemistry). Findings reveal that teacher influencers strategically deploy textual, visual, and audio resources across five TikTok features: captions, embedded text, react options, visual support, and audio. Attention-getting resources were the most frequently used strategy, followed by directives, reader mentions, and questions. The study also uncovers clear disciplinary variation: soft science teachers predominantly employed authentic visual resources, such as popular public figures and real-world objects. In contrast, hard science teachers relied more on pedagogical resources such as mannequins, whiteboards, and markers to illustrate complex concepts.

Keywords: Multimodality; Engagement: Teacher Influencer; Social Media; Digital Learning

1. Introduction

The rapid development of digital resources bring important changes in how teachers conduct their teaching and how they communicate knowledge to students (Dharmala, 2026). In this context, TikTok has emerged as a key platform for teachers to connect and share their experiences. Teachers of TikTok received significant media attention which celebrated the innovative and creative ways of giving the public insights into the previously closed-off world of

the classroom (Amalia et al., 2025; Hartung et al., 2023; Vizcaíno-Verdú & Abidin, 2023). TikTok is used by teachers from a variety of disciplines, both hard and soft sciences, to deliver knowledge outside the classroom with the purpose to achieve wider audiences and to build identity (Hartung et al., 2023). To achieve this purpose, it depends on teachers' ability to use a variety of TikTok features interpersonally to create engaging videos and interact with audiences purposefully.

Previous studies have addressed multimodal practices of TikTok users for a variety of purposes, e.g., influencers' practices on TikTok that help craft their identity performance and self-branding (Darvin, 2022; Wang & Feng, 2022), immigrant influencers' practices to reclaim agency over migratory status (Jaramillo-Dent et al., 2022), and sellers' practices to promote and advertise products (Li et al., 2022). However, despite the growing interest in investigating multimodal practices in digital genre like TikTok, there has not been much discussion on how teachers with a great number of followers, or in this context called as teacher influencers, use multimodal features on TikTok to conduct their teaching and communicate their knowledge to wider audiences. Derived from the mentioned noticeable gap, this study would contribute to enrich the discussion about digital genre by investigating teacher influencers' engagement strategies on TikTok in delivering knowledge. A deeper discussion that will make the contribution of this study valuable will include textual, visual, audio, and semiotic analysis within teacher influencers posts on their TikTok accounts from several disciplines. This analysis will also show how genre studies is a really useful method to understand engagement in public digital genres.

In exploring TikTok for various purposes above, users have applied some features with the purpose to gain greater engagement and connect with the audience strategically. Engagement has been shown to play an important role in a range of academic genres and genres for science popularization, both traditional and digital genres (Luzón, 2023). In research on engagement, previous studies have examined engagement strategies for a variety of digital genres, e.g., TED Talk videos (Xia & Hafner, 2021), 3-min thesis presentation (Zou & Hyland, 2022). These prior studies mainly focused on analyzing linguistic mode and textual features, and a recent study by Luzón (2023) focused on textual and visual support, but they did not include other semiotic resources like audio support. The goal of this present study is to contribute to filling the gaps identified above by analyzing the multimodal practices of teacher influencers on TikTok, focusing on particular markers of engagement. Specifically, this study will address the following questions:

RQ1: What multimodal practices and engagement strategies appear in the TikTok videos of the teacher influencers?

RQ2: How do soft and hard science teachers differ in showing engagement in their teaching videos, if at all?

2. TikTok in Professional Communication

TikTok is an iOS and Android media app that can be used for creating and sharing short videos. This social media platform is owned by the Chinese company *ByteDance* that merged with Musical.ly in 2018 after *ByteDance* purchased it and incorporated it to the existing TikTok platform (Anderson, 2020). The social media app has grown exponentially to become the 7th largest with 689 million active users accessing every month as of the first quarter of 2021 (Zhaoying, 2021). TikTok is available for download in the Apple, Android and Amazon app stores. TikTok presents content one video at a time and the user must swipe up for the next video. The video on view will continue to repeat on loop until the user swipes up, or taps the screen to pause (Anderson, 2020). Icons on the video screen include the user's avatar, a heart, a chat bubble, a share arrow and a spinning circle with musical notes coming out of it.

Some of the unique features of TikTok that help this platform gains its popularity are *react and duet options* (reacting is essentially answering the viewed video with a video of one's own and duet feature encourages users to make their own videos alongside the influencers and TikTok stars), *a lip-synching app* (each video is paired with a soundtrack), *use this sound* (create a video with popular soundtracks), and *hashtags* (discover more videos with that same hashtag in the caption of the video). These interesting features help Instagram users to create contents with more various and engaging messages such as reimagining other contents into a new one (intertextuality), having two or more different types of language in a content, and having dialogue or conversation with other users (dialogism). When users create their video, there are a multitude of options including uploading sounds, pictures, filters, text, stickers and the ability to manipulate the speed of the soundtrack and the video. For this present study, the focus is analyzing the five features: caption, react and duet, text support embedded in the video, visual support, and audio support. The analysis of the caption will include describing text and hashtag, visual will include background picture, embedded video that can scaffold teaching, and embedded images that can support the

teaching, and audio support will include background music, popular song, and voice over of the author.

Because of the above appealing features, TikTok invites the rise of teacher influencers to get into the loop of this digital world. Regarding the context of this current study, teacher influencers are educators with huge followers on their TikTok accounts who move beyond traditional classroom setting into the digital realm. This online platform has become a hub for teachers to share, connect, network, and learn from each other, transcending geographical boundaries. Typically, their goals of using TikTok are to deliver knowledge and experience in more joyful ways, connect and collaborate with their followers or other teachers, share with wider audiences their personal lives, and gain popularity. To achieve these goals, generally they create engaging educational contents that discuss a particular topic using a variety of TikTok features. Sometimes, they reply and comment on other teachers' posts. Different from traditional classrooms, these digital activities can reach out to a wide variety of audiences and are accessible for the public, including followers from various backgrounds, students, and other teacher influencers.

The unique affordances of TikTok are relevant to the study of influencers and content creators due to the singularities of this platform in terms of visibility and mimesis (Abidin, 2020). The scholarship on TikTok examines the platform from a variety of angles, including a focus on the behavior, motivations, and personality traits of TikTok users (Omar & Dequan, 2020; Y. Wang, 2020). For example, TikTok's role in disseminating scientific and public health messaging (Zeng et al., 2021) , health professionals' use of TikTok to show professional identity (Southerton, 2021), US Republican and Democrat partisans' use in communicating about political issues(Medina Serrano et al., 2020), communicating Covid-19 information by official accounts featured in the COVID-19 information hub (Li et al., 2021), and growth of (sub)cultures and celebrities on TikTok (Abidin, 2020; Kennedy, 2020). Unlike Instagram and YouTube, TikTok users strive to have individual posts accumulate engagement in the form of views, comments, and shares as encourage by TikTok's culture of aiming to be picked up for and cataloged by the For You Page (Abidin, 2020). Despite the growing popularity of TikTok among professionals for a wide variety of purposes, there is little conversation about how TikTok are exploited for academic communication or knowledge sharing. In the following section, the analytical model used in this study to explore engagement will be presented.

3. Model for the Analysis of Engagement in TikTok

As a popular social media platform with a variety of features, TikTok enables its users to express multimodal practices in their videos and to gain greater engagement from wider audiences. This multimodality raises an emerging digital genre for teacher influencers to deliver knowledge and to share experiences. This study will employ two engagement frameworks from Hyland (2005) and Luzón (2023) in order to cover those multimodal practices: textual, visual, and audio. Engagement is the reader-oriented aspect of interpersonal communication. Hyland (2005) defined engagement as writers' attempt to relate to their readers with respect to the positions advanced in the text. This is an alignment dimension where writers acknowledge and connect to others, recognizing the presence of their readers, pulling them along with their argument, focusing their attention, acknowledging their uncertainties, including them as discourse participants, and guiding them to interpretations. Hyland (2005) argued that academics can connect to their readers through five ways: by bringing the reader into the discourse through reader pronouns (reader mentions), by asking questions, by appealing to shared knowledge, and by making suggestions and directing the reader to another part of the text or to another text, to perform an action or to interpret an argument (directives). However, the mentioned Hyland's framework are mainly useful to examine textual practices, both written and spoken text. To examine the visual and audio support, this study will use engagement framework by Luzón (2023): attention getting resources (resources that are intended to draw the readers' attention to the content of the TikTok videos). Luzón (2023) argued that attention getting resources include emoji, graphics, banners, videos, visuals, capital letters, infographics, and flyers. In this context, in addition to examining visual and audio support, this framework will be used to examine the following semiotic resources: emoji, colorful letters, and videos employed by the influencer teachers.

4. Corpus and Method

4.1. Corpus

The dataset analyzed in this study is a corpus of 40 TikTok videos taken from 40 TikTok accounts of teacher influencers from four soft disciplines including English, Psychology, History, Economics, this study also took data from four hard disciplines including Math, Biology, Physics, and Chemistry. This investigation includes both disciplines in order to engage broader audiences differently and to compare if there is a different strategy employed by teachers from different

programs. The TikTok accounts were retrieved through the Google searches using the keywords: "TikTok + teacher influencer + [name of discipline]" (e.g., "TikTok + teacher influencer + Psychology"). This search procedure was systematically repeated for each selected discipline. To be selected for the study, the teacher influencers account had to meet the following criteria: (i) active accounts with regular videos (account with at least 50 videos in the last year); (ii) popular account with a high number of followers (more than 100.000 followers) since popularity is considered an indication of influencers and effective communication; (iii) accounts with the main language of communication is English; (iv) accounts with its username or bio is written as teacher or specialist. Furthermore, the selected videos were those who met the following criteria: (i) videos that show the activity of teaching or sharing knowledge; (ii) videos with at least 100 thousand views, or (iii) videos with at least 50 comments.

4.2 Method

The first step in the analysis consisted of deciding the multimodality and TikTok features for which the teacher influencers used TikTok. The multimodality included textual, visual, and audio. The five chosen features were: 1) caption of the video; 2) text support embedded in the video (subtitles and thumbnails); 3) react and duet feature; 4) visual support (e.g., embedded images and videos to support teaching); 5) audio (e.g., background music, song, and voice over of the teachers). The second step was deciding the engagement frameworks used in this study: Hyland (2005) and Luzon (2023): 1) reader mention; 2) question; 3) appeals to shared knowledge; 4) directives; 5) attention getting resources. The third step was retrieving the TikTok accounts and the videos that met the inclusion criteria. The fourth step was examining the videos in order to determine categories of engagement exploited and the various semiotic resources through which engagement were expressed.

5. Findings and Discussion

The findings of this study will focus to descriptively answer the two research questions: (1) What multimodal practices and engagement strategies appear in the TikTok videos of the teacher influencers? and (2) How do soft and hard science teachers differ in showing engagement in their teaching videos, if at all?

5.1 Multimodal Practices and Engagement Strategies Used by Teacher Influencers

The analysis found that teacher influencers employed textual, visual, and audio resources which were expressed through the five features of TikTok: caption, text support embedded in the video, react feature, visual, and audio support. Table 1 presents the multimodal practices of teacher influencers that were expressed using the five features.

Table 1. Multimodal Resources and the Features

Multimodal practices	Five TikTok Features	Number of occurrences (out of 40 videos)
Textual	Caption	37
	Embedded text support (e.g., subtitles and thumbnails)	39
	React	3
Visual	Embedded images	25
	Embedded videos	8
Audio	Popular song	12
	Background music	15
	Voice over	6

As can be seen in Table 1, these videos are rich in multimodal resources to share knowledge and gain engagement. Overall, those 40 videos have textual, visual, and audio resources. The most frequent feature that appeared in those videos is *embedded text support* in the form of *thumbnail* (i.e., small image representation of the video). The second most employed feature is captions. Almost every video, 37 out of 40, has a caption to give a brief description of the video. In addition to textual resources, the teacher influencers also exploit both visual and audio support in their teaching videos. There are 37 out 40 videos that use visual resources: 25 videos use supporting images, and 8 videos use embedded videos to scaffold their teaching. Furthermore, 33 videos use audio support: 12 popular songs, 15 background music, and 6 voice over. The least frequently used

feature is the *react* option which only appeared in three videos from Math, Physics, and Chemistry teacher.

Furthermore, in using the mentioned five features, teacher influencers applied some engagement strategies in order to build effective communication and to gain wider audience attention. Table 2 presents the types of engagement strategies that were found in the multimodal practices of teacher influencers and the number of occurrences.

Table 2. Engagement strategies found in the multimodal practices of teacher influencers

Engagement strategy	**Features to express engagement**	**Number of occurrences in each discipline (out of 5)**								**Total by features**
		Psy	**Eng**	**Math**	**Bio**	**Eco**	**His**	**Phi**	**Che**	
Question	Caption	2	3	2	1	2	1	1	0	12
	Subtitle and thumbnails	2	2	3	0	1	2	4	2	16
	Total question by disciplines	**4**	**5**	**5**	**1**	**3**	**3**	**5**	**2**	**28**
Directive	Caption	2	0	0	0	4	3	5	4	18
	Subtitle and thumbnails	4	0	2	0	5	3	5	4	23
	Total directives by disciplines	**6**	**0**	**2**	**0**	**9**	**6**	**10**	**8**	**41**
Reader mention	Caption	4	4	2	1	2	1	2	2	18
	Subtitle and thumbnails	2	0	1	2	2	1	4	3	15
	Total reader mention by disciplines	**6**	**4**	**3**	**3**	**4**	**2**	**6**	**5**	**33**

Appeals to shared knowledge	Photos//realia to support teaching	2	3	5	3	4	4	3	1	25
	Total appeals to shared knowledge by disciplines	**2**	**3**	**5**	**3**	**4**	**4**	**3**	**1**	**25**
Attention getting resources	Embedded videos	1	2	0	1	0	4	4	0	12
	Embedded images/realia	2	3	5	3	4	4	3	1	25
	Emoji	1	6	2	0	1	3	1	0	14
	Colorful subtitles and thumbnails	5	5	5	5	4	2	2	2	30
	Audio support	2	1	4	5	5	5	5	4	31
	Total attention getting resources by disciplines	**11**	**17**	**16**	**14**	**14**	**18**	**15**	**7**	**112**

As can be seen from table 2, teacher influencers use a variety of engagement strategies which are expressed through the five features of TikTok. The most frequently used strategy by all teachers is *attention getting resources* (i.e., resources that are intended to draw the readers' attention to the content of the TikTok videos) with a total of 112 appearances in 40 videos. Those resources are expressed through embedded videos, embedded images and realia, emoji, and colorful subtitles and thumbnails. Following *attention getting resources*, the most frequently employed engagement strategies were *directives* (41 occurrences), *reader mentions* (33 occurrences), and *questions* (28 occurrences), respectively, across the 40 videos. The least engagement strategy used by teacher influencers is *appeals to shared knowledge* with 25 occurrences. The details of engagement strategies manipulated by teacher influencers are presented in the following sub-section.

5.1.1 Questions expressed in caption, subtitle, and thumbnails

Question is one of the engagement strategies that is used by teachers from all disciplines, and typically it is applied in the caption of the video, as can be seen in Figure 2. Having questions in the caption, subtitles, or thumbnails shows an effective communication strategy to bring TikTok viewers into an arena where they can be led to the teachers' point of view (Costache & Enăchescu, 2026; S. Wang et al., 2024). Typically, the length of the question is one to two sentences, and they include reader mention. Furthermore, the caption of the video is typically followed by hashtags. The most frequently used ones are hashtags to express field of study (e.g., #psychology, #english, #biology, #math), occupation (e.g., #teacheroftiktok, #mathtutor, #biologyteacher, #psychologist), and topic of the teaching (e.g., #traumabonding, #idiom, #algebra, #muscles). The example of question used by each teacher in their video caption are as follows:

(1) Did you notice the change the first time? (Psychology teacher)

(2) What are these words in your language? (English teacher)

(3) 7:0? 0:0? -99:0= 🤔 (Math teacher)

(4) Does anyone else just see these things and struggle to comprehend how they're even real? (Biology teacher)

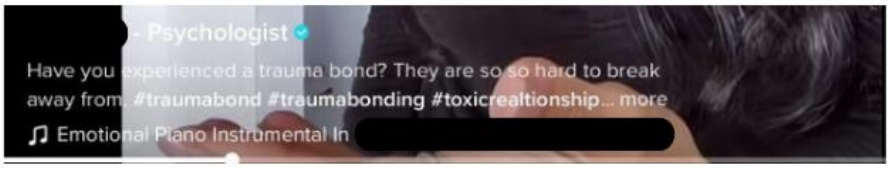


Figure 2. Question in the caption used by a Psychology teacher

5.1.2 Directives expressed in caption, subtitle, and thumbnails

Directive is the engagement strategy least used by teachers. Hyland (2005) described directives as the writers' attempt to instruct the reader to perform an action or to see things in a way determined by the writer. In this context, directives have two main purposes: they appeared in the caption to direct readers to watch the video and also occurred at the end of the video directing readers to follow the account and watch other videos that relate to the topic of teaching as can be seen in Figure 3 below.

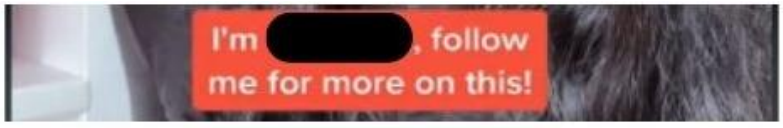


Figure 3. Direction to follow the account by a Psychology teacher

5.1.3 Reader mention expressed in caption, subtitle, and thumbnails

Reader mention, which addresses and acknowledges the readers as participants in the discourse takes various forms: second personal pronoun and name of the readers @mention. This engagement feature typically occurs in the caption of the video when teacher influencers deliver questions. The example of reader mention used by each teacher in their video caption are as follows:

(1) Have **you** experienced a trauma bond? (Psychology teacher)

(2) Do **you** know the names of all these in English? (English teacher)

(3) Replying to **@my dog is better than your dog** (Math teacher)

(4) This is going on in **your cells** right now (Biology teacher)

5.1.4 Appeals to Shared Knowledge Expressed Supporting Images and Realia

Appeals to shared knowledge recognizes the presence of explicit markers where readers are asked to recognize something as familiar or accepted (Hyland, 2005). From the corpus, teachers from each discipline employ shared visual resources to scaffold their teaching. Firstly, three out of five English teachers use authentic materials in the forms of real photos of an object and a short clip of movie scenes. Similar to English, Psychology teachers also apply authentic pictures in the forms of real photos of well-known celebrities and a video clip showing interaction of two people.

Economics teacher influencers also relied extensively on authentic materials to communicate economic concepts and enhance audience engagement. Three of the five teachers incorporated real-world visual resources, including photographs of prominent politicians and national leaders to contextualize discussions of global economic stability, images of U.S. dollar banknotes to illustrate monetary concepts, and everyday household items to demonstrate the long-term value of money and financial decision-making. Rather than presenting economic theories in isolation, these authentic visuals situated abstract concepts within familiar social and economic contexts, making them more tangible and relatable for viewers (Malik, 2023; Malik & Fürstenau, 2024).

Similarly, History teacher influencers predominantly employed authentic visual materials to support their teaching. Four of the five teachers incorporated historical photographs and artifacts, including images of former American colonial governments to explain the history of the United States, old cassette tapes to illustrate historical artifacts and technological change, portraits

of Ann Lowe to present her biography, and the Mona Lisa painting to discuss its historical and cultural significance. These authentic visuals helped contextualize historical content and enhance audience engagement by connecting historical concepts to recognizable real-world references (De Atalaya et al., 2023).

Unlike the soft science teachers, Biology influencers mainly use mannequin in their videos. There are three out of five teachers who use mannequin that engage with the learning topic, e.g., mannequin legs muscles, mannequin head and brain, and mannequin cells. These pedagogical resources enabled the teachers to visualize abstract biological concepts and anatomical structures that are difficult to explain through verbal descriptions alone. Math teachers mainly employ white board and white paper to do the mathematical calculation, e.g., fraction, mental multiplication, scholastic test (SAT), division, and arithmetic sequence. This finding suggests that mathematics teachers rely on instructional visual supports to facilitate procedural understanding.

Physics teacher influencers employed a balanced combination of authentic and pedagogical visual resources to explain scientific concepts. Authentic materials included demonstrations using plates and water to illustrate the Leidenfrost effect and water levitation, as well as real-world videos of trains to explain speed and motion. In contrast, pedagogical resources comprised animated illustrations of a girl and a ball to demonstrate kinetic energy, along with computer-generated videos of space to explain quasiparticles and other abstract physical phenomena. This combination of authentic and pedagogical resources suggests that physics teachers strategically select multimodal supports according to the nature of the concept, using real-world demonstrations for observable phenomena and artificial visualizations for abstract or invisible processes.

Chemistry teacher influencers employed a combination of authentic and pedagogical visual resources to explain chemical concepts. Authentic resources included real electrical equipment to demonstrate Light Fidelity (Li-Fi) technology, which transmits sound through light, and metal samples to explain the properties of Shibuichi alloy used in jewelry. Pedagogical resources, meanwhile, consisted of whiteboards and board markers to illustrate calculations involving the chemical composition of paracetamol and to explain concepts in organic chemistry. This combination suggests that chemistry teachers strategically integrated authentic demonstrations with pedagogical visual supports to communicate both practical applications and abstract chemical concepts in an engaging and comprehensible manner.

It can be said that all soft science teachers: Psychology, English, Economic, and History tend to use more authentic resources. For example, real photos of popular figures are unique to both English and Psychology teachers, and photos of real-world objects are unique to Economics and History teachers. This preference may reflect the contextual and interpretive nature of these disciplines, where real-world people and objects provide meaningful contexts for illustrating concepts and fostering audience engagement. By connecting disciplinary content to familiar social and cultural references, authentic resources can make abstract ideas more relatable and accessible to online audiences (Chang et al., 2024; Khadka & Kandel, 2026). In contrast, generally the hard science teachers: Biology, Math, Physics, and Chemistry prefer to use more pedagogical materials. For example, mannequin is unique to Biology teachers, and whiteboard and marker is unique to Math teacher. This preference likely reflects the conceptual nature of these disciplines, where instructional tools such as mannequin, whiteboards, and demonstrations facilitate the visualization of abstract concepts and step-by-step explanations. Consequently, pedagogical resources appear to play a central role in making complex scientific content more comprehensible and engaging for online audiences (Wang et al., 2022).

These findings resonate with the construct of discourse by Gee (1989) where he argued that discourse is a sort of identity kit which comes complete with the appropriate costume and instructions of how to act, talk, and write, so as to take on a particular role that others can recognize. These particular content creators use various features in TikTok and apply multimodality to construct their role as teacher influencers who share knowledge to achieve wider readers both expert and non-expert audiences. TikTok allows speakers to engage readers in multiple ways - more than in a print paper - and that teachers make use of this.

5.1.5 Attention getting resources expressed in other semiotic resources

The most frequent category of engagement strategies is attention getting resources, i.e., resources that are helpful to draw readers attention to the content (Luzón, 2023). For example, two videos from English teachers, one video from Psychology, and one video from Biology use embedded video in order to give examples of the topic they were explaining in their content videos. For instance, English teachers use a clip from a movie scene to give an example of English idiom, Psychology teacher use a video clip of people interaction to give an example of change blindness,

and Biology teacher use a video of cell to visualize the concept of moving motor protein around cells.

In addition to embedded videos, another form of attention getting resources is emoji. From the corpus, it can be interpreted that some teachers use it for paralinguistic purposes and reinforce the meaning of their text. For example, Math teacher uses a thinking emoji to emphasize the meaning of the question in the caption: "*7:0? 0:0? -99:0=* 🤔", and English teacher use ball emoji to emphasize the word "ball" that he is using: *the balls in your court* 🏀. The last attention getting resources that are used by all teachers from the four disciplines is colorful subtitles and thumbnails. These colorful subtitles aim at having the main idea of the topic written and visualized in the video, while Thumbnails hook the readers in as this is the first thing readers see when browning the homepage of the teachers' TikTok account.

5.2 Different multimodal practices of soft and hard science teachers

The findings reveal that both soft and hard science teacher influencers use a variety of multimodal practices though TikTok features: caption, embedded text (subtitles and thumbnails), visual support, audio support and react option which are expressed through various engagement resources: question, directives, appeals to shared knowledge, reader mention, and attention getting. However, there are two main differences of how teachers from different disciplines differ in exploiting TikTok resources. Firstly, soft science teachers including Psychology, English, Economics, and History tend to use more authentic resources, such as of real photos of famous figures, images of real-world objects, and movie scenes to scaffold their teaching, such as giving examples of the topic and visualizing the topic. This choice may reflect the contextual and interpretive nature of these disciplines, where authentic resources provide meaningful real-world contexts that make abstract concepts more accessible and enhance audience engagement (Chang et al., 2024; Khadka & Kandel, 2026) .

On the other hand, hard science teachers including Physics, Chemistry, Math and Biology, tend to use pedagogical resources to scaffold their teaching. Math tutors mainly use white board and colorful board markers to show mathematical calculations, e.g., fraction, division, multiplication, etc. Biology teachers mainly employ mannequin to highlight specific organs that they were discussing, e.g., head mannequin, muscle mannequin, etc. Meanwhile, Physics and Chemistry make relatively equal use of authentic and pedagogical materials. This choice probably

stems from the conceptual character of these fields, where educational materials assist step-by-step explanations and help visualize abstract ideas, making difficult scientific material more approachable and interesting (Wang et al., 2022). This visible difference between soft and hard science exist because they have distinguished learning process and goal. Hard sciences, like Biology, Physics, Chemistry and Mathematics, mainly involve experiments and calculation where pedagogical resources are really helpful to support their specific needs. In contrast, soft science, like English, History, Economics and Psychology, relate with the study of human behavior and feeling in which bringing in more authentic materials into the classroom is more helpful for students.

The second noticeable difference of multimodal practices of teacher influencers is the way they incorporate audio support in their teaching videos. Hard science teachers tend to use more audio resources rather than soft science. 15 out of 20 videos from hard science use background music and popular songs, while there are only 7 out of 20 videos from soft science teachers which incorporate audio resources. The audio that they use are in the form of background music (e.g., background sounds of flowing water and a moving train when illustrating the two concepts), popular songs (e.g., *Wanna be startin somethin* by Michael Jackson, *Remember* by Becky Hill & David Guetta), or voice over if the author did not appear in the video.

6. Conclusion

The aim of this study was to explore the multimodal practices of teacher influencers from eight different disciplines when using TikTok, focusing on the ways various linguistic and semiotic resources are used to show engagement. The findings revealed that the 40 teacher influencers mainly employ various features of TikTok to include in their videos: caption (37 out of 40), text support which includes subtitle and thumbnails (39 out of 40), visual resources (33 out of 40), and audio resources (33 out of 40). It shows that these TikTok videos are rich in multimodal practices and resources to share knowledge to wider audiences. These multimodal practices were expressed through the five engagement resources: question, reader mention, directives, appeals to shared knowledge, and attention getting resources. The most frequent engagement strategy appeared in teacher videos was *attention getting resources* where teachers exploited a wide variety of semiotic resources such as pictures, embedded videos, emoji, colorful texts, and audio support. However, there are two aspects where teachers differ in their multimodal practices: soft science teacher

influencers tend to apply authentic visual support (e.g., real photos of popular public figures and real-world objects and movie scenes) and they were less using audio support (7 out of 20). In contrast, hard science influencers preferred to use pedagogical resources (mannequin and whiteboard) and mostly they liked to incorporate audio support (15 out of 20).

Finally, the results shed light on the new trend that digital genre, especially TikTok, comes out as an emerging platform which offers a variety of digital multimodal features and semiotic resources for academic communication. TikTok allows speakers to engage readers in multiple ways by exploiting its numerous features and applying multimodality - more than in a print paper - and that teacher influencers make use of this. This study will hopefully fortify the conversation of the digital genre and provide insights that could help teachers develop skills for multimodal composing, especially those who aspire to become TikTok influencers in sharing academic knowledge and experiences.

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Disclosure Statement

The authors claim no conflict of interest.

Ethical Approval

Not applicable. This study did not involve human participants, primary data collection, animals, or experimental procedures requiring ethical approval.

Consent to Participate

Not applicable

Consent to Publish

Not applicable

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