Informal Learning Experiences on Social Media: The Case of #MarketingTwitter

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Informal learning in online social communities encourages a sense of belonging and support in a casual environment while enhancing members' knowledge and expertise. Several studies have explored the use and benefit of online social communities, particularly in the education field. Yet, little research examines how informal learning occurs in other professional hashtag communities on Twitter. This research explores the #MarketingTwitter professional's community to identify how users promote an instructional design of informal learning experiences and strategies to engage and impact members in the community including possible new users.

Introduction

On December 3, 2020, Twitter user @ThatChristinaG tweeted, "if you have less than 1,000 followers and work in marketing in some capacity, introduce yourself to Marketing Twitter. Say hi, tell us about yourself, and what you like to tweet about. Make friends." This tweet posted by Christina Garnett, Community at HubSpot, generated more than 5000 likes, 700 retweets, and 3000 comments. This tweet helped to contribute to the growth of the Twitter professional community called #MarketingTwitter. With her tweet, Garnett highlighted one of the key motives to user's participation in online professional communities: to provide support and create a sense of community in a casual environment. Professionals in diverse industries are looking for online niche communities that focus on topics related to their field to deepen their knowledge and expertise (Eaton & Pasquini,

2019). Several studies have explored the uses and advantages of Twitter communities in the education field (e.g., Blankenship, 2018; Goodyear et al., 2019; Gao & Li, 2019; Johnson-Holder & Bethea-Hampton, 2019; Xing & Gao, 2018;), such as #AcademicTwitter (Gomez-Vasquez & Romero-Hall, 2020), Academic Advising (#AcAdv; Eaton & Pasquini, 2019), and Twitter chats like #Edchat (Staudt-Willet, 2019).

There is growing evidence of teachers using and engaging in social media communities to share information about practice (Trust et al. 2016; Wesley, 2013), and the necessity of belonging to professional learning communities for continued professional development (Goodyear et al., 2019). Several studies focus on professional communities on Twitter for early-career networking for women in academic medicine and science (Lewis et al., 2018) and public health professionals (Hart et al., 2017). However, online professional communities are still an understudied field (Carpenter et al. 2020), particularly across different contexts and fields on social media (Veletsianos, 2017). To date, little research has centered on how instructional design of informal learning occurs in other niche professional communities on Twitter, such as marketing. Marketing is growing as a field, and with the advancement of social media and digital platforms, marketers are turning to online communities to connect, learn, participate, and belong. As diverse online professional communities continue to grow and thrive, it is imperative to research various networks' functions and contributions to professional life (Eaton & Pasquini, 2019) for instructional designers' benefit when building online learning experiences.

This paper explores how the #MarketingTwitter community shapes informal learning experiences through online social activities that provide attention, relevance, confidence, and satisfaction (Keller, 1987) using quantitative content analysis, textual analysis, and social network techniques. The research questions guiding this study are:

RQ 1. What communication patterns can be observed in the #MarketingTwitter community?

RQ 2. What kinds of users contribute to the #MarketingTwitter community?

RQ 3. How are informal learning and communication strategies shared?

RQ4. What content formats and resources are utilized with learning and message strategies?

RQ5: How does the #MarketingTwitter community promote instructional design

strategies of informal learning experiences to engage members and shape learning experiences in the community?

This paper also discusses practical implications of how informal learning in online social communities, such as #MarketingTwitter, provide insights and recommendations into instructional design strategies.

Professional Development and Informal Learning Experiences on Social Media Communities

Social media (e.g., social networking sites, listservs, messaging apps, online discussion forums, and workplace networks) enable users to participate in online communities for sharing ideas and co-production of knowledge. Literature indicates social media bridges formal and informal learning through participatory online communities (Greenhow & Lewin, 2016). Informal learning through social media encourages professional development opportunities, particularly in specific niche communities on Twitter (e.g., #AcademicTwitter, #AcWri, #Edchat), which are highly situational and interactive, and controlled by all participants (Luo et al., 2020). Twitter's newfound sanctuary for professional networking and development has led to academic interests in online communities and the possible informal learning opportunities for the rich content within these communities. When users contribute in a relaxed setting, it allows for more organic and forthcoming information on the topics discussed. According to We Are Social 2021 Digital Global Overview Report (in collaboration with Hootsuite), 63% of users globally use the internet as a tool to find information, while 30% of users utilize the internet as a tool for business research and networking (We Are Social, 2021).

Informal learning within social media communities is unplanned, unstructured, and motivated by the learner. For example, the #MarketingTwitter community is a highly participatory online community of digital marketers on Twitter. A representative Tweeter tweets, "*Hey #MarketingTwitter, what's the most gimmicky stunt you've pulled to promote something you did/will do? I'll start*". This Twitter user encourages other members in the community to share experiences and collaborate and learn from each other (Beach, 2012). Through informal learning, users could have a more effective learning experience (Marsick & Watkins, 2001) and even empower members to reach goals faster with less effort (Donelan, 2016; Klein et al., 2013). Singh (2020) has found that both professional academics and participants in industry-based jobs have relied on the internet and its communities for career development and support. Therefore, Twitter's purpose in online communities is to inspire relationships benefiting all

parties of the community (Witkemper et al., 2012).

The benefits of belonging and participating in online communities are extensive. Members turn to these communities to combat isolation, find emotional support, and build knowledge while experiencing a sense of camaraderie in informal settings (Staudt-Willet, 2019; Trust et al., 2020). Online social communities also allow members to develop desired skills or knowledge (Luo et al., 2020). They promote timely and situated informal professional learning for supporting social, cognitive, affective, and identity growth (Carpenter & Krutka, 2015; Greenhalgh & Koehler, 2017; Trust et al., 2016). Furthermore, these communities encourage instant feedback or allow space to brainstorm new ideas from interdisciplinary members (Hart et al., 2017).

Professional Online Communities: Twitter Chats and Community Hashtags

In educational literature, Communities of Practice (CoPs) and Professional Learning Communities (PLCs) are terms used to define professional development opportunities occurring on social media (Luo et al., 2020). CoPs are a group of people "who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger et al., 2002, p. 4). On the contrary, PLCs are groups of people "who share common learning/professional interests, in which interactions and discourse take place over time through discussion, analysis and problem solving, that result in professional learning" (Goodyear et al., p. 422). Literature around CoPs and PLCs have focused on how teachers and professors engage with social media for professional development purposes (Carpenter & Krutka, 2014). Nevertheless, there is limited understanding of how informal learning experiences occur via social media among professionals in business settings and/or specialized fields and what it might mean for instructional designers within these communities (Conley & Sabo, 2015; Veletsianos, 2017).

Social media platforms have been utilized in the development of both CoP and PLCs in the past decade. Teachers have used social media for professional learning purposes implementing hashtags and Twitter chats (Trust et al., 2016; Wesley, 2013). Scholars proposed Twitter's community hashtags as fostering imagined communities of mutual or common interest (Bruns & Burgess, 2011; Gruzd et al., 2011). The study of online professional communities has also been common in the health (e.g., Xu et al., 2015; Rashid et al., 2018) and education sectors (e.g., Gomez-Vasquez & Romero-Hall, 2020; Trust et al., 2020) through the

employment of community hashtags such as #TipsForNewDocs, #RemoteTeaching #RemoteLearning, #AcademicTwitter, and others. These community hashtags center around conversations related to academic life experiences, accessibility, teaching, research support and advice, and self-professional branding (Gomez-Vasquez & Romero-Hall, 2020). They serve as platforms for meeting educator's cognitive, social, and affective needs (Trust et al., 2020). These community hashtags also involve messages promoting socialization in a humorous and colloquial style (Rashid et al., 2018). Furthermore, Twitter chats are valuable avenues for making connections and enhancing education about a wide range of topics. One of the most popular chats in the education field is #Edchat (Britt & Paulus, 2016; Coleman et al., 2018; Staudt-Willet, 2019). Twitter chats, such as #Edchat, have been an excellent tool for supporting teachers' development and informal learning (Britt & Paulus, 2016). However, interactions within #Edchat are brief, thus, encouraging casual relationships through weak ties (Coleman et al., 2018). Collaboration and networking are not standard in large Twitter networks such as #EdChat due to the rapid flow of information (Staudt-Willet, 2019). Twitter chats like #Edchat have been effective for exploring ideas but are underutilized for sharing emotions (Staudt-Willet, 2019).

Online communities draw participation from a wide range of users with different levels of experience and expectations (Xu et al., 2015) from various disciplines. Gomez-Vasquez and Romero-Hall (2020) found the #AcademicTwitter community attracts educators (professors, researchers, and graduate students) and media accounts, and professionals from related disciplines. However, unequal user participation in these communities is notable and is attributed to "lurking" (Veletsianos, 2017). Most of the participants lurk, while a small number of users contribute to the community. These communities not only face lurking behavior when it comes to user participation, but also find a loss of long-term user retention. Xing and Gao (2018) determined tweets' writing style influences participants' continuation as active members. For instance, the authors found cognitive tweets (e.g., sharing personal opinions or experiences) and interactive features on those tweets (e.g., asking questions, having examples, making, or expressing arguments) contribute to a lower risk of members dropping out of those communities. The COVID-19 pandemic has contributed to the increasing use of Twitter professional niche communities for emotional support and sharing of experiences among educators (Trust et al., 2020). Therefore, it is imperative to examine instructional design characteristics rooted in social media to shape better informal learning experiences for learner retention.

Instructional Design of Informal Learning Experiences on Social Media

Instructional designers have utilized techniques and strategies from various entertainment media (e.g., film, television, comics, computer, and video games) to design educational materials for diverse audiences (Dickey, 2005). With the popularization of social media platforms and online communities, instructional designers have opportunities to learn and borrow techniques to leverage the inherent benefits of social media in instruction design. Since instructional design creates learning experiences for the unique needs of different audiences or topics (DiFranza, 2020), social media provides an array of diverse applications and online communities encouraging collective knowledge building and strategies to learn from.

Social media affordances encourage participation, engagement, collaboration, relationship building and others (Kaplan & Haenlein, 2010), which contribute to fostering online learning (Dickey, 2005). The interactivity of social media affordances is due to the "participatory nature of viewing, creating, and sharing content and the knowledge it offers" (Conley & Sabo, 2015, p.1). These platforms facilitate the development of reusable content that is easy to update and revise (Conley & Sabo, 2015). Hashtags play a key role in social media platforms and online communities. They serve as instructional content tagged with descriptors for free and easy to search and locate content (Churchill, 2006). Veletsianos (2017) emphasizes the importance of studying hashtags in online professional communities to identify their productive use. Veletsianos stresses instructional designers should investigate innovative benefits of technology (e.g., social media communities) to recognize learning techniques for professional development.

It is essential to understand how social media should be used for instructional purposes (Conley & Sabo, 2015). As an example of emergent digital media, online professional communities on Twitter may inform instructional designers in uncovering features and strategies with new methods for engaging diverse learners. In other words, using social media, especially niche communities on Twitter, in a "structured" way allows the identification of elements to improve learning experiences. Few studies, until this paper, have addressed social media platforms and the link with instructional design. For instance, Conley and Sabo (2015) published a literature review discussing how social media could be effective in the classroom by examining learning and instructional design theories. The authors proposed a Social Media Instructional Design Model Framework to guide instructional designers using social media in teaching. However, the

research does not discuss instructional strategies or techniques on social media for content creation and social interaction. Therefore, this study contributes to instructional design literature by identifying and analyzing instructional design characteristics rooted in the niche professional community on Twitter (#MarketingTwitter) through online social activities and strategies that provide attention, relevance, confidence, and satisfaction (Keller, 1987). This paper proposes a thematic framework of key themes on the #MarketingTwitter community that included instructional design features and strategies which emerged from the analysis (inductive) and previous frameworks (deductive; Keller, 1987; Goodyear et al., 2019; Rashid et al., 2018; Staudt-Willet, 2019). The thematic framework provides strategies for instructional designers to build and maintain an online social community of learners to contribute to community engagement to shape informal learning experiences.

Methodology

Using quantitative content analysis, textual analysis, and social network analysis, this paper aims to understand how the #MarketingTwitter community shapes informal learning experiences through online social conversations. Netlytic software was used to collect, download, and analyze tweets containing the hashtag #MarketingTwitter from December 5, 2020 – January 22, 2021. The raw dataset had 28017 messages and 9634 unique users. A random sample of 1,500 tweets was selected from the dataset. Netlytic software was used to identify centrality users and examine social network characteristics.

Textual analysis using Netlytic and Linguistic Inquiry and Word Count (LIWC) software was used to identify word recurrence, sentiment analysis, authenticity, and analytical thinking of the tweets. Several variables and categories were established for performing a quantitative content analysis of the 1500 tweets, using both manifest and latent units. The categorization was derived inductively and deductively:

1. Type of tweet (e.g., tweet, reply, retweet quote tweet);
2. Content format identifies the multimedia format that accompanies the tweet;
3. Resources are tools that accompany the message to amplify or support it (e.g., related hashtags, tagging, and emoji);
4. The level of engagement of the tweet in terms of likes, shares, and comments;
5. Purpose of a tweet describes the communication message strategy, such as information, community, mobilization, appreciation, inspiration, and

others. This is based on the Information-Community-Action (ICA) framework by Lovejoy & Saxton (2012) and some inductive categories;

6. Learning strategies refer to the different informal learning strategies employed in the community; this categorization was built on Carpenter et al. (2020) and Trust et al. (2020).

All categories coded were mutually exclusive. Inter-coder reliability tests were conducted to check the validity of the manual coding schemes. The authors independently coded 170 tweets. The inter-coder reliability tests performed on each variable indicated scores ranging from 0.911 to 0.989 agreement (Cohen's Kappa), indicating a high level of inter-coder reliability. The remaining tweets were divided between the authors and coded independently.

Results and Discussion

RQ1: What communication patterns can be observed on the #MarketingTwitter community?

Researchers used quantitative content, textual, and social network analysis techniques. During the analyzed period, 28 017 messages were exchanged by 9634 unique posters. Sentiment analysis revealed most tweets included positive feelings (3844 posts, 4171 terms) compared to negative feelings (274 posts, 279 terms). Most recurrent positive words were *great, good, happy, excited*, and *kind*. On the contrary, most frequently used negative words were *bad, tired, terrible, awful, and embarrassed*. To explore sentiment analysis even further, we used LIWC. Results indicated that #MarketingTwitter had a 90.83% tone, showing a high positive and upbeat style network. Negative tweets were minimal (0.65 out of 100 070 words), with only 0.15 tweets signaling anxiety, 0.12 anger, and 0.12 sadness. After this analysis, it is evident #MarketingTwitter is a positive environment for professionals to engage in conversations, as summarized in this tweet:

> I've seen so many tweets about this recently, is #MarketingTwitter a new thing? It seems so positive and there were so many great threads I already read through, so I definitely want to get involved and get to know some new marketing folks."

Communication patterns revealed formal, logical, and hierarchical thinking (73.2% according to LIWC. Furthermore, most of the users in this community showed high

expertise and confidence (LIWC Clout level: 85.78), which does not come as a surprise since this is a community of marketing professionals. Authentic levels were low (35.36) suggesting a more guarded, distant form of discourse. Other communication patterns revealed (using Netlytic software) #MarketingTwitter is a wide network (diameter: 30) based on the longest distance between two network participants. Users were not close with others (density: 0.043300), indicating a centralized network dominated by a few participants (centralization: 0.077030). Findings align with previous studies which found highly contributing users provide a significant proportion of the overall content while most users make few contributions indicating participation inequalities in online settings (Veletsianos, 2017). Only 4% of tweets were two-way conversations. #MarketingTwitter showed several small communities instead of a solid single community (modularity: 0.741800). Data indicated only five main clusters, but most participants were outside these main clusters (See Figure 1 for the #MarketingTwitter network).

Figure 1

#MarketingTwitter Network
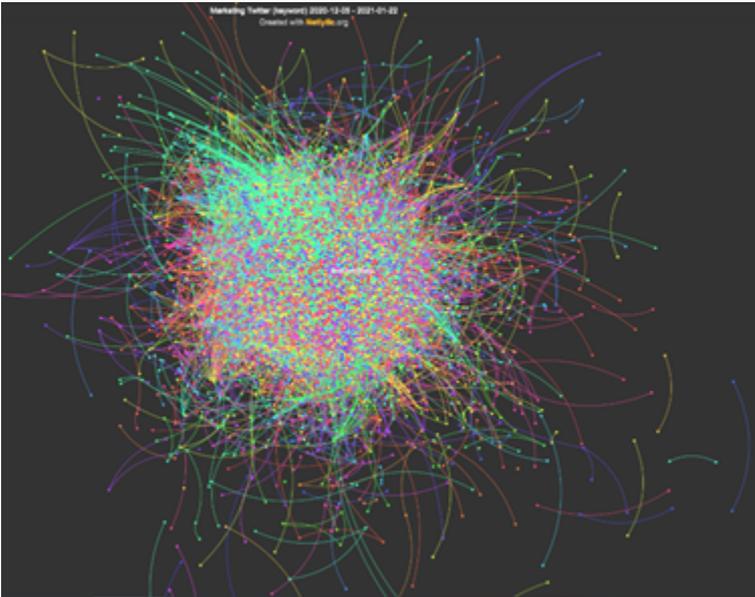
A visual showing data clusters pertaining to *#MarketingTwitter Network*

## RQ2: What kinds of users contribute to the #MarketingTwitter community?

We performed a social network analysis to identify indegree and outdegree users. A degree is the number of connections a node (user) has and is measured by the number of ties (e.g., tweets) a node receives from others. Outdegree users mention/tag others frequently; they connect others with resources and information. Most outdegree users were marketers while a few were marketing companies with an average of less than 10K followers. Indegree users are tagged or mentioned in tweets. Indegree users are key players in the network (e.g., influencers), they are extensively involved in relationships with other network members, and they are considered trusted information sources (Gruzd & Haythornthwaite, 2013). Information shared by prominent indegree users shapes how others in a community understand and view a topic. Most indegree users were Twitter accounts like ClubHouse, Adweek (media outlet), and marketing professionals with 15K followers. The highest indegree and outdegree user was a marketing professional that became a leader in this community by contributing resources and connecting with others in the community. The affordances of social media platforms allow new kinds of transparent, empathetic, and inclusive leaders with unique skills such as community building and engagement to emerge in online community groups (The Gov Lab, 2021).

RQ3: How are informal learning and communication strategies shared?

U textual and content analysis, the authors identified recurrent words in the conversations (See figure 2). Further analysis found that the top 50 words encompassed positive words like *good, great, amazing, and love*. Call-to-action language, suggesting indications of informal learning, was found in words such as *click, build, connect, check, make, read, find, join, learn, share, and dm (direct message)*. Authors also found additional words related to informal learning and community building such as *#marketingtips, tips, experience, reading, community, building, friends, follow, followers, and team*.

Figure 2

Top Ten Most Frequently Used Words
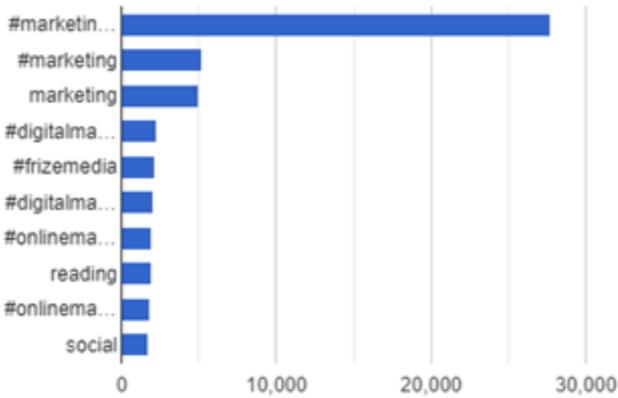
A bar graph showing the top ten more frequently used words

Table 1 shows a descriptive analysis of the variables used for quantitative content analysis. Most of the tweets included hashtags (63%), emoji (26%), and tagging (24%). Tweets had an average of 21 likes, three shares, and two comments. As seen in table 1, tweets that included only text (no images, hyperlinks, or multimedia) were used more frequently. Communication strategies were primarily informational which means users were mainly focused on distributing information and not engaging or mobilizing. However, other strategies were utilized such as community (e.g., dialogues/conversations), action or mobilization (e.g., call-to-action language), and appreciation and inspirational content (e.g., encouragement such as "*Don't Analyze the Solution. You should Try to analyze the problem. Then you will Find out a better solution*") which summed 61% of the tweets. If almost 61% of the tweets were cognitively or interactively encouraging (e.g., personal experiences, asking questions, providing examples), these results indicate members present a lower risk of dropping out of the community (Xing & Gao, 2018).

Table 1

Descriptive Analysis of Main Variables and Categories

Type of tweet	Content format	Purpose	Learning strategies
Tweet: 51%	**Text only: 58%**	**Information: 36%**	**Support ideas: 36%**
Retweet: 30%	Images/graphics: 18%	Community: 27%	Networking & education: 22%
Reply: 11%	Link to article: 16%	Inspirational: 19%	Offer/ask advice/support: 15%
Quote tweet: 9%	Multimedia: 8%	Action: 10%	Self-promotion: 15%
		Appreciation: 5%	Amplify others: 10%
		Other: 2%	Other: 2%

Variables and categories	%
Type of tweet	
Tweet	51
Retweet	30
Reply	11
Quote tweet	9
Content format	
Text only	58
Images/graphics	18
Link to article	16
Multimedia	8
Purpose	
Information	36
Community	27
Inspirational	19
Action	10
Appreciation	5
Other	2
Learning strategies	
Support ideas	36
Networking & education	22
Offer/ask advice/support	15
Self-promotion	15
Amplify others	10
Other	2

Participants encouraged diverse informal learning strategies by supporting content or other members' ideas, encouraging networking and learning, and offering or asking for support. Members supporting (or endorsing) content ideas, statements, or quotes were the most used learning strategies (See Table 1). Although tweets were informational, they provide members with resources and knowledge for informal professional development. 22% of tweets encouraged networking and education demonstrated by questions or statements that supported responses from different perspectives. Hence, it becomes a relaxed and enriching learning experience for members. For instance:

> #MarketingTwitter should get together once a month and make a thread where we answer brands on different questions regarding marketing. There is nothing to lose. They get a free advice, and we get to think outside our everyday tasks. We can help each other.

These interactive tweets provide members with opportunities to brainstorm ideas, get informed and educated while networking simultaneously (Xing & Gao, 2018).

RQ4: What content formats and resources are utilized with learning and message strategies?

Authors ran crosstabs to see descriptive relationships between the categorical variables to answer RQ4. Information and community categories (that belong to the 'purpose of tweet' variable) used mostly text (13.42% and 22% respectively), followed by links to articles (12% for informational purpose), and images/graphics (4% for community purpose). The most used learning strategies (support ideas and networking/education) had similar results as the purpose variable whereby text was mainly used, followed by image/graphics. Hashtags were used primarily for informational purposes and learning strategies such as supporting others' content ideas. When running a crosstab between purpose and learning strategies, it was found that the support of others' content ideas strategy was mainly informative (15%) and inspirational (13%).

RQ5: How does the #MarketingTwitter community promote instructional design strategies of informal learning experiences to engage and impact members in the community?

By conducting a thematic analysis of the tweets, authors identified key themes on #MarketingTwitter tweets to propose a thematic framework of instructional

design strategies for informal learning on niche professional communities to comprehend needs, interests, and motivations. As shown in Table 3, the framework builds on Rashid et al. (2018), who analyzed the health professional community on Twitter #TipsForNewDocs and proposed five main categories of sharing knowledge: propositional, personal, process, know-how, and socialization. Motivations were identified for each of the five main categories using The ARCS Model of Motivational Design Theory which details motivational characteristics of learners: attention, relevance, confidence, and satisfaction (Keller, 1987). The framework provides instructional design strategies to promote motivation to build a community around informal learning experiences on online social communities.

Table 3

Thematic framework of instructional design strategies for informal learning in niche professional communities by motivation type

Propositional knowledge (Attention)	Process knowledge (Relevance)	Personal knowledge (Confidence)	Know-how knowledge (Satisfaction)	Socialization (Satisfaction)
Self-branding and achievements	Professional development opportunities	Provide advice/support	Inspirational moments	Affiliation
Insights from colleagues	Mobilization through call-to-action language	Community engagement	Amplify content/other members	Appreciation
Improvements in the profession	Networking opportunities	Work/life balance		Everyday life

Propositional knowledge describes theoretical aspects of professional knowledge. For instance, #MarketingTwitter members engage in self-branding (i.e., going beyond simple introduction to using the opportunity to brand themselves for career opportunities or promoting achievements), learning from peers through their insights, and sharing tips on how to improve as professionals. Propositional knowledge strategies in online niche communities encourage learners' attention. It includes unexpected elements, curiosity, creative content, asking challenging questions, and providing insights and real-world examples on solving industry/work issues through active participation.

Process knowledge describes the exchange of professional development

opportunities resulting in mobilizing users to do an activity (including call-to-action language like *click, build, connect, check, read, find, join, learn, share, and dm*) leading to networking and learning opportunities. Process knowledge strategies in online niche communities encourage relevance since learners in the community share diverse valuable content, opportunities, and experiences while contributing to completion of work or tasks. Furthermore, personal knowledge (interpretations of experience) refers to professional knowledge acquired through an experience such as giving advice or support about the profession, encouraging engagement through dialogues and conversations, and learning how to balance work-life or manage stress. Personal knowledge strategies in online niche communities inspire confidence in learners because it facilitates self-growth while providing constant feedback and support.

Know-how knowledge refers to details regarding how workplaces operate, which stimulates or persuades members to think about work concepts leading to inspirational moments. It also includes the importance of amplifying or giving voice to other professionals with different perspectives regarding how an industry or a field operates. Additionally, socialization reinforces relationships through experiences by helping to create a defined sense of professional identity. Different themes regarding socialization were indicated in the results such as an appreciation of all the benefits and opportunities #MarketingTwitter provides, a sense of affiliation, and an enjoyment of everyday life tweets (day-to-day life experiences including funny moments). For instance:

> If you see the #MarketingTwitter community and feel like you don't belong — you're inexperienced, feel like you have nothing to say, etc. — know you're ABSOLUTELY welcome. We're all just nerds learning from another, having fun, and sometimes tweeting while on gummy edibles.

Both know-how knowledge and socialization in online communities encourage satisfaction by providing learners with positive consequences in learning, participating, and contributing to the community.

Conclusion

This paper explored the #MarketingTwitter professional's community to examine how members encouraged instructional design strategies for informal learning experiences built using the unique attributes of online social media communities.

Most community members used simple text forms to inform and nurture a sense of community by supporting content ideas/statements while fostering networking and informal professional development. Although links, images, and multimedia combined were found in 42% of the content shared in the community, as advancements on Twitter continue to grow, online niche professional communities are expected to use other content formats to provide an enriching informal learning experience on Twitter. Hashtags were highly used among members, offering opportunities for professional development, and as aligned with other studies, reflected user's needs and desires (Veletsianos, 2017). For instance, the second most used hashtag, #MarketingTips, suggests marketing professionals are using Twitter for informal learning experiences. Findings support the analysis of previous studies about hashtag online professional communities, and mainly focused on sharing and improving personal and professional knowledge (Rashid et al., 2018) or overall awareness of topics (Xu et al., 2015).   Call-to-action language revealed relevant opportunities for members to strengthen informal learning and community engagement. Instructional designers supporting designing interactive online learning experiences must carefully consider formats, types of posts, purpose, and online learning strategies, such as those identified in this article, on social media platforms. These features, along with the thematic framework proposed, contribute to visualizing Twitter communities in a "structured" way, and presenting the identification of elements and strategies to improve online learning experiences.

Our study aligns with Goodyear et al.'s (2019) conclusions which noticed most interactions became disconnected and fragmented due to the high number of participants – also revealed in the social network analysis results. Although findings indicate members were engaging in diverse informal learning opportunities (e.g., support content ideas/statements and fostering networking and education), most of these tweets were posted by members that are not part of highly connected clusters. To navigate against these challenges, members encourage and mobilize other members to form small niche communities (i.e., more specialized communities within marketing). For example, "Hey MarketingTwitter! I'm looking to connect with folks who are interested in or doing great things in the area of Employee Brand Advocacy and Internal marketing generally. Looking forward to exchanging ideas. Please tag or reach out". Or thesemember continue the conversation on other social media platforms like Clubhouse for informal learning, professional development, and networking opportunities - also revealed in some of the data from this study. These opportunities provide more advantageous professional relations, and new areas of discussion and research (Goodyear et al., 2019) for future studies.

Our data analysis suggests #MarketingTwitter represents an established group of marketing practitioners looking for online informal learning experiences and resources to address professional challenges. At the same time, those users are searching for opportunities to support and help each other. These findings also line up with previous studies in teaching online communities (e.g., Staudt-Willet, 2019; Trust et al., 2020), in which the benefits of these communities have positively impacted teachers' practices. The thematic framework proposed can be utilized when designing professional development and learning experiences across diverse industries, social platforms, and audiences. It suggests instructional design strategies and motivations to engage and impact informal learning experiences in online niche professional communities. Future studies can build upon this framework for analyzing Twitter educational communities such as instructional designers in education, instructional designers working in K-12 environments, or small niche communities in other fields such as public relation professors (e.g., PRprofs). One of the community leaders and highest indegree and outdegree user of the #MarketingTwitter community, @ThatChristinaG, tweeted on December 8, 2020, "This community doesn't belong to me. It belongs to all of us. Be kind. Hype each other up. Add value. Learn. #MarketingTwitter" indicating the true nature of #MarketingTwitter.

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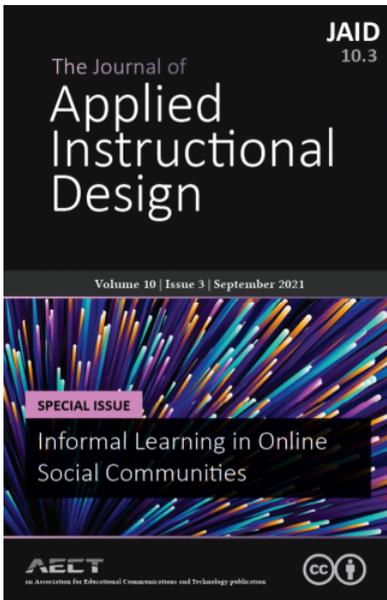
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