# INSTRUCTIONAL DESIGNERS CONDUCTING PROFESSIONAL LEARNING USING SOCIAL MEDIA: A PHENOMENOLOGICAL STUDY OF THEIR EXPERIENCES THROUGH A SELF-REGULATED LEARNING LENS

by

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## ABSTRACT

INSTRUCTIONAL DESIGNERS CONDUCTING PROFESSIONAL LEARNING USING SOCIAL MEDIA: A PHENOMENOLOGICAL STUDY OF THEIR EXPERIENCES THROUGH A SELF-REGULATED LEARNING LENS

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Because the instructional design and technology field is dynamic (Sharif & Cho, 2015; Wang et al., 2021), instructional designers need to pursue continuous, just-in-time professional learning (Carliner, 2018) to improve knowledge, skills, and abilities (Sharif & Cho, 2015; Ritzhaupt & Martin, 2015), without being constrained by location, budget, and time (Muljana et al., 2020; Muljana et al., 2021). On the one hand, the omnipresent social media technologies offer affordances for facilitating this type of professional learning. Such technologies allow instructional designers to reach out to colleagues, search for ready-to-implement strategies, and find relevant, timely information. On the other hand, conducting continuous learning requires proactive and strategic planning, in which self-regulated learning (SRL) plays a role. Unfortunately, not all working professionals are aware of the strategies to develop SRL skills. In addition, using social media may be perceived as a learning distraction. A call for an in-depth exploration of intersecting instructional designers' continuous professional learning, social media, and SRL emerges to address such challenges.

This qualitative study is aimed to explore instructional designers' SRL experiences conducting professional learning using social media. Three research questions guide this study: (1) How were instructional designers' SRL experiences conducting professional learning in a social media environment? (2) How did instructional designers support their SRL by using social media? (3) What challenges did instructional designers experience when conducting professional

learning using social media? These questions are addressed through a phenomenological study that employs semi-structured interviews and thematic analysis using multiple coding approaches.

The findings suggest that an application of SRL seems to occur while instructional designers use social media for professional learning (e.g., through determining the sources of motivation, setting proximal goals and strategic plans, seeking help, trying the strategies offered by colleagues, an adaptation of strategies, and open-minded attitudes during self-reflection activities). Additionally, there appears to be a gradual development of SRL skills while instructional designers interact in social media environments. They also encounter challenges, but some challenges can potentially be overcome by applying SRL strategies. Discussion and implications inform (a) instructional designers who pursue continuous professional development, (b) educational programs and instructors who educate prospective instructional designers regarding ways to promote relevant skills by scaffolding SRL skills and considering social-media-supported learning, and (c) employers and those with supervisory roles who support employee's just-in-time learning.

To my parents, Gie Vong Liem and Sophia Lim—this dissertation is dedicated to you. You worked so hard to provide me with better educational opportunities by being brave and moving overseas. Without you, I would not be where I am now. I assure you that all the blood, sweat, and tears you put in were worth it and paid off. To my husband, Mike, and children, S and J, thank you for being such great "team players" during my doctoral journey. It is because of you that I finished this doctoral journey. I love you all!

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## NOMENCLATURE

| | |
|---|---|
| Community of Practice (CoP) | 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" regularly (Wenger et al., 2002, p. 4) and explains how professional learning occurs most likely outside the formal educational setting and through social interaction and knowledge sharing. |
| Informal learning | The effort of gaining knowledge and skills through a process that is learning is flexible and not limited by a specific curriculum and timeline (Richter et al., 2011). |
| Instructional designer | A change agent whose job is beyond creating learning artifacts and experiences (Tracey & Boling, 2014) and influencing the knowledge, skill, and/or the performance of target learners and organizations (Spector, 2008; Tracey & Morrison, 2018). |
| Professional learning | The efforts conducted by working professionals to continually seek knowledge and improve skills. |
| Self-regulated learning (SRL) | Self-directive learning process involving learners' thoughts, behaviors, and affects to achieve their goals purposely and strategically in improving learning (Zimmerman, 2002). |
| Social cognitive theory (SCT) | A theory explaining how learning occurs by focusing on the learner's cognitive operation within a social experience; the cognitive operation then influences how a learner behaves (Grusec, 1992). |
| Social learning theory (SLT) | A theory explaining learning by emphasizing the important role of social environment; learning is beyond the process of receiving stimuli and displaying a response because learners behave depending on the surrounding situation. For example, learning can occur by observing how others behave and the consequences for that respective behavior (Bandura, 1971). |
| Social media | The "internet-based tools that allow users to build networks through which they may then communication and share information with each other" (Dennen, 2018, p. 237). |

# TABLE OF CONTENTS

Page

Page

# LIST OF TABLES

# LIST OF FIGURES

Figure Page

# CHAPTER I

## INTRODUCTION AND LITERATURE REVIEW

Technology has been rapidly developing, allowing people to produce, share, and consume information (Gretter & Yadav, 2016; Kumar & Pande, 2017; van Laar et al., 2019). These technological advances have further allowed people to connect with one another in the spirit of information seeking and sharing. Social media, defined as "Internet-based tools that allow users to build networks through which they may then communicate and share information with each other" (Dennen, 2018, p. 237), is among these advances and has become a ubiquitous phenomenon. Social media growth has been rapid, and its usage has changed from the original intentions (e.g., YouTube is now used for amateur videos but also provides educational training and corporate content). The prevalent use of social media has changed the way people communicate, collaborate, and learn (Lewis et al., 2010). One possible reason is that social media provides real-time, up-to-date information, even from reliable sources (Le et al., 2019). For instance, more than 95% of Fortune 500 companies actively publish information and engage with people through social media, providing timely knowledge and promoting meaningful social interactions (Barnes et al., 2018).

Within the educational setting, social media has gained attention among educators and learners. In the formal setting, teachers from the K-12 setting perceive the potential of using social media for facilitating learning; for instance, Charoenwet and Christensen (2016) investigated the use of social technology (i.e., Edmodo) to engage biology students in a high school setting. Edmodo is a technological tool primarily used in the K-12 setting that allows teachers to manage content, share with colleagues, students, and parents, and promote engagement among these stakeholders (Edmodo, 2021). Charoenwet and Christensen (2016)

discovered that learning activities facilitated through Edmodo might have explained the positive results in student learning performance. Furthermore, learners from beyond K-12 use social media to acquire and share knowledge and engage in collaborative activities (Romero-Hall, 2017a, 2017b; Romero-Hall et al., 2020).

When learners enter the workplace becoming working professionals, their learning context may transform into an informal setting. Social media provides affordances, helping learners seek up-to-date information and timely knowledge. They can use social media to explore, organize, create resources, and engage with their networks who share common interests (Gruzd et al., 2016). Furthermore, the widespread use of social media yields significant increases in communication among colleagues, clients or consumers, and corporate organizations (Barnes et al., 2018; Frampton & Chile, 2013). Despite the potential, framework, and guidelines for selecting proper social media tools and conducting effective professional learning using such tools are still limited (Dabbagh et al., 2015; Luo et al., 2020)

The use of social media can support working professionals' dynamic learning needs. Teachers in formal educational settings use social media to scaffold learner control and promote personalized learning (Matzat & Vrieling, 2016; McLoughlin & Lee, 2007). However, working professionals seek learning opportunities due to job demands and the need to stay abreast with the profession to ensure successful job performance. They are aware that the strategies from colleagues who have been in similar job tasks and experiences are more effective (Littlejohn, 2017). When they see the need to increase knowledge and skills, they will seek just-in-time resources. Social media can provide such a learning opportunity because social technologies are not limited by geographical and temporal boundaries (Krutka et al., 2017; Trust et al., 2017). This also suggests that if working professionals intend to perform the tasks in the workplace

successfully, it is crucial for them to proactively plan and self-regulate their own professional learning and development (Littlejohn et al., 2012; Littlejohn, 2017; Siadaty et al., 2016a, 2016b; Siadaty et al., 2012). However, not all working professionals have the skills to initiate and regulate their professional learning effectively (Siadaty et al., 2016a, 2016b), which highlights the need to delve into an investigation that can yield recommendations for enhancing self-regulated learning in the professional learning context.

Instructional designers are among the working professionals who need to stay abreast with the field. Notably, the work that instructional designers perform is beyond creating learning interventions, artifacts, and instructions (Tracey & Morrison, 2018). Instructional designers help enhance organizational performance by providing training opportunities to the employees; therefore, their job influences the knowledge and skill improvement of the targeted learners (Tracey & Boling, 2014). In the military and higher education sectors, instructional designers may have to work with subject matter experts to convey information and select appropriate strategies so that the solutions can achieve the learning goals (Bratton-Jeffery, 2018; Litfield, 2018). At the beginning of the COVID-19 pandemic, higher education institutions had to assist in the rapid conversion of traditional courses into a remote delivery mode (Johnson et al., 2020). Because leveraging online teaching and learning strategies is beyond replicating the traditional course environment, instructional designers have made a significant contribution to assist faculty members during the pandemic—instructional designers was perceived as “first responders,” highlighting their important role in a dynamic situation (Abramenka-Lachheb et al., 2021a, p. 294).

Alongside the rapid technology development, where new technological tools are continually introduced, instructional designers perform multiple tasks and conduct varied

responsibilities at work. Unfortunately, instructional designers may encounter constraints when pursuing professional learning opportunities, such as funding, time, and travel restrictions that can hinder them from attending professional development events (Muljana et al., 2020). Social media can accommodate the urgency of pursuing just-in-time learning opportunities without limited by such barriers. For instance, when the need to learn for new strategies (i.e., on how to use the newly updated authoring software or tackling a challenge of creating a learning intervention that is not in their expertise) arises or if instructional designers encounter design constraints, they may want to immediately reach out to colleagues in their social networks for advice (Muljana & Luo, 2021). Nevertheless, as Luo and Hostetler (2020) pointed out, the new practices of pursuing professional learning using social media deserve an in-depth investigation. Particularly, the investigation on such a professional learning context conducted by instructional designers is still limited.

Although social media offer several benefits, barriers to using social media for learning coexist. Some educators are wary about their students' information being in the cyber world (Mancha & Ranieri, 2016; Luo et al., in press). The use of social media for professional purposes is also not free from challenges. Working professionals may also have concerns about cyber safety and privacy issues, as well as shaming and cyberbullying (Dabbagh et al., 2015). These concerns have revealed a research gap, highlighting a need to study the use of social media for professional purposes in an effective manner. Although the benefits of social media for enhancing learning have been discussed in existing literature, the practices of using them for professional purposes need further exploration (Luo & Hostetler, 2020). This dissertation study focuses on instructional designers' experiences conducting professional learning within a social environment, explored from the lens of self-regulated learning.

# Literature Review

It is imperative to review the literature and understand the theoretical underpinnings in order to investigate instructional designers' experiences in using social media for professional learning and how self-regulated learning occurs within these experiences. Particularly, an understanding of the relevant theoretical foundations and literature (i.e., self-regulated learning (SRL) models, SRL processes, and the needs for professionals to regulate their professional learning and development) serves as groundwork for exploring whether an application of SRL emerges in such a context. There is an increased number of social media usage for learning purposes. Working professionals, such as instructional designers, tend to turn to social media to acquire timely professional development resources, given that the instructional design and technology field continuously evolves (Muljana & Luo, 2021). A comprehension of how the relevant theories ground and apply to social-media-supported learning is an essential component of this study.

## Theoretical Foundations

This literature review section presents the theoretical foundation and supporting information related to the use of social media for learning. Social learning theory provides a groundwork for the development of the social-cognitive theory that has inspired the emergence of self-regulated learning models.

### *Social Learning Theory*

Social learning theory (SLT) explains learning by emphasizing the role of the social environment. The way a learner behaves depends on the situation. For example, learners tend to execute behavior that they perceive as valuable and are less likely to adopt unrewarding behavior (Burton et al., 2004). In other words, learners adopt self-satisfying behaviors rather than the

unpleasant ones; therefore, both external reinforcement and self-reinforcement form an alliance in promoting learning and performance (Burton et al., 2004).

According to Bandura (1971), achieving learning is more than a behavioral change that occurs within a learner. There is another factor beyond the process of receiving stimuli and displaying a response; such a factor includes the social element of the learning environment. Learning can occur by observing other people's actions and the consequences of those respective actions (Grusec, 1992). Therefore, Bandura has advocated for facilitating learning through modeling so that learners can observe how a procedure or task is performed, and the observation can serve as a guide for the learners' future action (Bandura, 1971). Modeling can also be further facilitated through a symbolic model, such as through media (e.g., characters in a television show) and verbal instructions (e.g., reading or listening to a description and explanation) (Bandura, 1978). Bandura's idea of observational learning and modeling emphasizes the role of social interactions in the learning process (Brieger et al., 2020). Learning happens as a result of learners' interaction with others, which can further yield knowledge sharing and creation (Brieger et al., 2020; Slootweg et al., 2013).

In today's context, an application of the SLT elements can occur in a technology-enhanced learning environment, such as in web-based learning and social-media-supported learning. The number of online courses continues to increase, partly due to the technology affordances that allow learners to interact with the instructor and other learners without geographical and temporal barriers (Muljana & Luo, 2019). The affordances of online learning provide an outlet for learners and instructors to share information and promote knowledge generation (Hill et al., 2009). Instructors and learners can use technological tools in an online learning environment, such as online discussion forums, to offer insights, share prior experiences

and reflection, and invite responses from other learners. Additionally, modeling may occur when learners interact with other colleagues in online discussions (Hill et al., 2009). For example, a learner sharing a working strategy or successful examples may inspire others to replicate the strategy.

An application of SLT also occurs in social-media-supported learning, which can be achieved through social interactions. To promote successful observational learning, the learners need to pay attention, have an ability to retain the information and then reproduce the learned behavior, and possess a motivation to reproduce the behavior (Schunk & DiBenedetto, 2020). Educators can utilize social media tools to manage learners' attention. For example, the increasing active usage of social media, including Facebook and Twitter, displays the activity level of posting and reading that attract users' attention to react, share, or reply to a message. There exists an interconnection between attention and interaction within the social media environment (Deaton, 2015). People react to a post and reply to a post because it may have attracted their attention. People share a post because their attention may have been maintained. There indicates a level of focused attention when people use social media; the social media tools seem to sustain their attention, thereby resulting in a recursive activity of generating and sharing content (Casey & Wells, 2015; Deaton, 2015). Using social media provides an opportunity to enhance information retention as they can present multiple representations such as graphics, audio, and videos. This type of representation potentially enhances memory creation that may further promote knowledge retention (Deaton, 2015). Interacting with others using social media tools may also enhance learners' motivation; they can observe what others have been working on and accomplished, inspiring them to achieve a similar outcome (Deaton, 2015).

**Community of Practice.** SLT, as aforementioned, emphasizes the social aspect of learning. Learning can occur through observing and modeling other people's actions, particularly because learners can see the consequences of those actions and decide if they want to model the actions rather than through trial-and-error learning experiences (Bandura, 1971, 1999). This implies that communities can play an imperative role in supporting learning, serving as a foundation of knowledge seeking and sharing, and as an environment for learners to observe, interact with, and model the experts (Li et al., 2009).

The concept of community of practice (CoP), developed by Wenger (1998), resonates with SLT. Specifically, CoP explains how professional learning occurs through social interaction and knowledge sharing (Wenger, 1998) and most likely outside formal educational setting (Lave & Wenger, 1991). Defined as 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" regularly (Wenger et al., 2002, p. 4), a CoP serves as a learning community when it has the following three characteristics: (1) domain, which is the shared expertise of the members that differentiate them from other groups; (2) community, which is a space where the members can interact with and learn from one another; (3) practice, which is the development of artifacts, resources, stories, dialogues, experiences, and best practices as a result of the interactions among members (Wenger & Snyder, 2000; Wenger et al., 2002). Because of the domain, CoP members have a shared commitment to the domain, value the collective expertise, and are willing to learn together, all of which distinguish the group from a community of interests (Wenger & Wenger-Trayner, 2015). Because of the community, the members can interact through dialogues and joint activities that can result in the shared practice in the form of resources or knowledge base

(Wenger & Wenger-Trayner, 2015). Table 1, adapted from Wenger and Wenger-Trayner, 2015, lists some activities and conversations that may take place in a CoP.

**Table 1**

*Several Examples of Activities and Conversations Taking Place in a CoP*

| Activity | Conversation |
|---|---|
| Problem solving | "Can I use some of your ideas to overcome this design challenge? I'm stuck." |
| Requests for information | "Where can I find some templates that I can use with Articulate Storyline?" |
| Seeking experience | "Has anyone dealt with a subject matter expert in this kind of situation?" |
| Discussing developments | "What do you think about the new Articulate Storyline version? Is it worth purchasing a personal license?" |
| Mapping knowledge and identifying gaps | "Who knows about developing a good portfolio? Is there a specific group that I can connect with?" |

*Note*. Adapted from "Community of Practice: A Brief Introduction," by E. Wenger and B. Wenger-Trayner, 2015, What do Communities of Practice Look Like section (https://wenger-trayner.com/introduction-to-communities-of-practice/). Copyright 2015 Wenger-Trayner.com.

CoP members may participate at various levels, according to Wenger et al. (2002). For example, some members show high activity by serving in a leadership role, leading the dialogues, recruiting new members, coordinating activities, and sharing insights; these members are called the core members. There are also active members whose participation is lower than the core members, but they actively seek knowledge and share information and resources (Muljana et al., 2020). Another type of participation is peripheral, typically performed by the peripheral members—sometimes called lurkers—who prefer to observe the interactions, use the resources,

and ask questions, rather than sharing insights (Kollock & Smith, 1996; Muljana et al., 2020). Lave and Wenger (1991) suggest that newcomers may want to learn through peripheral participation initially. As they have familiarity with the other members, they can increase their participation level (Lai & Chen, 2014). This implies that: (a) people who are labeled as lurkers may know how to regulate their knowledge-seeking through their participation levels (Romero-Hall et al., 2020); and (b) the participation level of members may be dynamic, fluctuating from time to time (Guldberg & MacKness, 2009; Muljana et al., 2020).

The facilitation of CoP can take place in online platforms, such as through Internet-based tools (Wenger & Wenger-Trayner, 2015). By using these technological advances, CoP can be extended by allowing interactions among members from dispersed geographical locations and time zones (Wenger et al., 2002; Woo, 2015). As expected, the facilitation of online CoP can also be found in social media. For example, Britt and Paulus (2016) suggest that Twitter hashtags can be used to facilitate CoP activities; people can carry out conversations, interact, and share information with others who use the same hashtags. Similarly, Eaton and Pasquini (2020) have found the benefit of Twitter-facilitated CoP—also through the use of a hashtag—to support the professional learning of higher-education working professionals. Additionally, Muljana et al. (2020) have facilitated CoP-based professional development (PD) for instructional designers from around the world without any fees; the coordination of the PD events takes place in a Facebook group, and the event occurs in a free learning management system. Validating Wenger et al.'s (2020) idea regarding the CoP members' various participation levels, Muljana et al. (2020) found that the members, regardless of their participation levels, perceived the value of learning from others. Findings for these social-media related studies imply that CoP facilitated through social media platforms may offer learning benefits to working professionals without

worrying about geographical and temporal boundaries. Although there seem to be benefits, there is still a lack of understanding regarding how the knowledge learned and resources gained from a social-media-supported CoP translate into professional practice (Eaton & Pasquini, 2020). Additionally, further research is needed to explore the factors underlying the emerging practice of working professionals' participation in social-media CoPs (Eaton & Pasquini, 2020).

### *Social Cognitive Theory*

Bandura's SLT, as mentioned above, additionally emphasizes learners' cognitive operation within a social experience; the cognitive operation then influences how the learner behaves (Grusec, 1992). For example, when a learner is exposed to a social experience through modeling and verbal discussion, the learner conducts a cognitive operation to integrate the information received socially. Through the cognitive operations, learners "mentally represent their environments and themselves" and involve their perceived self-efficacy and self-reactions (Grusec, 1992, p. 781). The emphasis on the role of cognition in influencing the learners' responses to the environmental stimuli has led to the development of the social cognitive theory (SCT) (Grusec, 1992; Schunk & DiBenedetto, 2020).

Bandura (1986) describes that human action is influenced by three connected factors: personal, behavioral, and environmental influences. Within the personal factor, learners possess human agency, allowing them to manage their own thought processes, motivation, and activities (Bandura, 1989, 2001). Personal influences entail processes that trigger and sustain motivational sources, such as goals, self-evaluations of progress, self-efficacy, and social comparisons, among others (Schunk & DiBenedetto, 2020). When learners have a goal, particularly one in accordance with specific performance standards, they are likely to manage their efforts in achieving the goal (Schunk & DiBenedetto, 2020). As they progress toward achieving the goal, their self-efficacy

tends to increase (Locke, 2018; Schunk, 2012). Self-efficacy is additionally associated with social comparisons; learners observing a successful strategy are likely to believe that they can be successful by emulating the strategy, thus increasing their own self-efficacy and motivation (Schunk & DiBenedetto, 2020).

Behavioral influences involve learners' observable actions, such as their choice of activities, effort, persistence, and environmental regulation, among others (Schunk & DiBenedetto, 2020). These actions are associated with personal influences. For example, learners with high self-efficacy are likely to regulate their effort, persist in undertaking challenging activities, and perform better (Schunk & DiBenedetto, 2020; Schunk & Usher, 2019; Zimmerman, 2000). Self-efficacious learners are also more capable of managing their environments to effectively support their learning, including time management and study environment (Zimmerman, 2000). Simply put, self-efficacious learners tend to set goals, utilize learning strategies, monitor their learning progress, and manage the environments suitable for supporting the learning process (Zimmerman, 2002).

Other influences affecting learners are within the environment, such as social models, feedback, rewards, and opportunities for self-evaluation, among others (Schunk & DiBenedetto, 2020). Learners tend to be eager to learn about socially modeled actions from those who are more proficient, thereby increasing their motivation to emulate the actions. The competent models may be peers who have successfully performed a similar task. While observing, learners may be internally building their self-efficacy, believing that if others can perform it well, then they will be able to do so (Schunk & DiBenedetto, 2020). Giving feedback and rewards may also boost learners' self-efficacy, such as those that emphasize learners' progress and

accomplishment and allow learners to self-evaluate their performance (Schunk & DiBenedetto, 2020).

The three influences (i.e., personal, behavioral, and environmental influences) described in SCT are still relevant to today's context, where technologies are ubiquitous. For example, social media tools allow learners to connect with one another, giving them opportunities to model from their peers (Chu, 2020; Schunk & DiBenedetto, 2020). However, how the personal, behavioral, and environmental influences may be occurring in and affecting social-media-supported learning deserves in-depth exploration, which calls for more research grounded in SCT to examine such a phenomenon (Schunk & DiBenedetto, 2020).

### *Self-Regulated Learning*

Bandura refers to the connections of the personal, behavioral, and environmental influences—the elements of SCT—as triadic reciprocality (Bandura, 1986, 1999), which motivated Zimmerman to develop an SRL model in 1989 (Zimmerman, 1989). Zimmerman's first SRL model, called triadic analysis of SRL, is aligned with Bandura's triadic reciprocality, displaying the relationship among personal, behavioral, and environmental factors (Panadero, 2017). Zimmerman believes that the connections of the three factors are not linear (Zimmerman, 1989). Therefore, Zimmerman extended the initial SRL model to include the cyclical phases of SRL, further highlighting the connections of all elements reciprocally (Panadero, 2017; Schunk, 2012).

According to Zimmerman (2002), SRL is a self-directive learning process involving learners' thoughts, behaviors, and affects to achieve their goals purposely and strategically in improving learning. SRL is positively related to academic achievement (Broadbent, 2017). Learners applying SRL initiate their proactive learning process by determining the sources of

motivation, implementing goal-driven strategies and strategy monitoring, and performing continuous adjustments of these strategies to achieve learning improvement (Bembenutty, 2011). Scholars examining SRL in the educational context (e.g., K-12 and higher-education contexts) tend to utilize Zimmerman's (2000) SRL model as a framework that consists of three recursive phases: (1) forethought phase, when learners set a goal and identify the sources of motivation; (2) performance phase, when learners determine, execute, and monitor their learning strategies; and (3) self-reflection phase, when learners self-evaluate their performance and plan to adopt and/or adapt a better strategy for improving their learning process.

When learners have entered a workplace, SRL continuously plays an essential role in promoting successful professional growth (Littlejohn et al., 2012; Littlejohn, 2017; Siadaty et al., 2016a, 2016b; Siadaty et al., 2012). Siadaty et al. (2012) have developed the SRL@Work model, displayed in Table 2, by adapting the existing SRL models. Working professionals self-regulate their learning at the macro level through three phases: 1) forethought, 2) performance, and 3) self-reflection. To accomplish the macro-level SRL processes, working professionals perform specific actions at the micro-level within each process. For example, they perform task analysis (e.g., what will be entailed in a new task), goal setting, and make plans in the forethought phase. Next, they perform the task, apply a suitable strategy, and revise the strategy as needed during the performance phase. In the self-reflective phase, they evaluate and reflect on their performance and sometimes share their learning experiences with peers.

**Table 2**

*The Macro-Level and Micro-Level Processes in SRL@Work*

| Macro-level SRL process | Action (micro-level process) | Description |
|---|---|---|
| Forethought (planning) | Task analysis | To become familiar with the learning context and the definition and requirements of a (learning) task at hand |
| | Goal setting | To explicitly set, define or update learning goals |
| | Making personal plans | To create plans and select strategies for achieving a set learning goal |
| Performance (engagement) | Working on the task | To consistently engage with a learning task and using tactics and strategies |
| | Applying appropriate strategy changes | To revise learning strategies, or apply change in tactics |
| Self-reflective (evaluation and reflection) | Evaluation | Evaluating one's learning process and comparing one's work with the others' |
| | Reflection | Reflecting on individual learning and sharing learning experiences |

*Note*. From "Association Between Technological Scaffolding and Micro-Level Processes of Self-Regulated Learning: A Workplace Study," by M. Siadaty, D. Gašević, and M. Hatala, 2016, *Computers in Human Behaviors, 55*, p. 1010. Copyright by Elsevier Ltd.

An application of the SRL elements may occur in social-media-supported learning. For example, when learners apply SRL, they direct and manage themselves in seeking knowledge (Charoenwet & Christensen, 2016). Learners, especially working professionals, have various learning needs. Using social media provides learners an opportunity to create their own personal learning experience; learners can engage in collective knowledge sharing and creation, facilitate their own meaning-making, and self-monitor and self-evaluate their learning (Dabbagh & Kitsantas, 2012, 2013). For another example, learners with SRL skills do not mind asking for

help when they need to identify strategies to enhance their learning (Chao et al., 2018; Cheng & Tsai, 2011). Since social media allows for social interactions and participation among users, learners can seek help regarding the topic interests from others in the social media community or advice on tackling challenges at work. In other words, they can find and organize information around their own individual learning goals (Dabbagh & Kitsantas, 2013; Scott et al., 2016).

Facilitating learning activities that enhance SRL can also take place in social-media-supported learning. As aforementioned, using Edmodo allows students in the K-12 setting to have a virtual space to share and discuss information, promoting their interaction with the teacher and other students and encouraging collaborative learning (Charoenwet & Christensen, 2016). The teacher serves as a facilitator, assigning learning activities to assist students in directing their own learning, being strategic in providing feedback to their peers regarding the shared information, and encouraging help-seeking for those who need help from their peers in understanding a topic. In Charoenwet and Christensen's (2016) study, students gained a learning achievement and enhanced their perceived SRL after performing learning tasks facilitated through Edmodo. The examples mentioned here show that learners can use social media as a tool to interact with others intellectually and environments or communities of people with shared interests; other people in the social media environments or communities may mutually perform similar interactions (Laru & Järvelä, 2015).

**Personal Learning Environments to Support SRL.** There is a term, called personal learning environments (PLE), intersecting the application of SRL and the use of social media. PLEs are "tools, communities, and services that constitute the individual educational platforms that learners use to direct their own learning and pursue educational goals" (EDUCAUSE Learning Initiative, 2009, p. 1). PLEs are beyond the applications, tools, or platforms because the

use of PLEs is to support the learner-centered learning process (EDUCAUSE Learning Initiative, 2009). Within PLEs, learners can collect, curate, and share information; simultaneously, they may contribute to the collective knowledge creation that resonates with their own context (Dabbagh & Kitsantas, 2012; Dabbagh & Reo, 2011; Dron, 2007). Essentially, using PLEs can encourage learners to self-direct and stay in charge of their own learning, particularly since PLEs allow them to organize learning resources and conduct the learning process according to individual goals and learning pace (Dabbagh & Kitsantas, 2012; Johnson et al., 2011).

Based on the rationale above, Dabbagh and Kitsantas (2012) display a connection between applying SRL and using social media by developing a framework that is applicable in personal learning environments (PLEs). This framework serves as guidelines for the educators, especially from the higher-education setting in promoting student SRL skills within a PLE. As seen in Table 3, the framework includes three levels that are ordered according to the interactivity levels of social media technologies: "(1) personal information management, (2) social interaction and collaboration, and (3) information aggregation and management" (Dabbagh & Kitsantas, 2012, p. 6). Within each level, instructor can use a variety of social media tools. As the level moves up, the degree of interaction with social media can be increased gradually. For example, in Level 1, an instructor may introduce relevant social media tools and encourage students to use them for personal purposes. In Level 2, an instructor may encourage students to enable the sharing features and invite peers' comments. In Level 3, an instructor may provide instruction on how to aggregate information from social media and conduct a reflection regarding the aggregated information.

**Table 3**

*Examples of Using Social Media to Support Self-Regulated Learning by Following the Framework Developed by Dabbagh and Kitsantas (2012)*

| Social media type | (Level 1) Personal information management | (Level 2) Social interaction and collaboration | (Level 3) Information aggregation and management |
|---|---|---|---|
| Blogs | Learner uses a blog as a private journal to set learning goals and plan for tasks | Learner enables the blog comment feature to allow for feedback from others, enabling basic interaction and sharing | Learner configures a blog to pull in additional content and adds the blog to RSS aggregation services |
| Wikis | Learner uses wiki as a personal space for content organization and management | Learner enables the wiki's collaborative editing and commenting features | Learner views a wiki's history to promote self-evaluation of learning across time |
| Google Calendar | Learner uses Google Calendar for personal planning | Learner enables the calendar sharing features to allow feedback and collaboration to complete tasks | Learner archives personal and group calendars to promote self-evaluation regarding time planning and management |

Table 3 (continued).

| Social media type | (Level 1) Personal information management | (Level 2) Social interaction and collaboration | (Level 3) Information aggregation and management |
|---|---|---|---|
| YouTube or Flickr | Learner uses YouTube or Flickr to set up a personal media archive related to learning resources | Learner enables the sharing feature of the media archive and join similar media archives created by peers | Learner aggregates media from several media archive to refine their personal archive |
| Social networking sites | Learner creates a profile on LinkedIn | Learner connects to online communities related to their professional goals | Learner engages in self-reflection with the goal to restructure their profile and social presence |
| Social bookmarking | Learner uses a social bookmarking tool to organize learning resources | Learner collaborates with others and creates a shared list of bookmarks related to a specific learning topic or project | Learner self-reflects on their personal and group bookmarks to enhance the desired learning outcome |

*Note*. Examples of using social media to support self-regulated learning within PLE, following Dabbagh and Kitsantas' (2012) framework. Within a formal education context, instructors may apply the framework to encourage learners and demonstrate the steps. From "Personal Learning Environments, Social Media, and Self-Regulated Learning: A Natural Formula for Connecting Formal and Informal Learning," by N. Dabbagh and A. Kitsantas, 2012, *Internet and Higher Education, 15*(1), p. 7 (https://doi.org/10.1016/j.iheduc.2011.06.002). Copyright 2012 by Elsevier.

Dabbagh and Kitsantas (2013) conducted a study utilizing the framework of using social media for supporting SRL in PLEs that they developed in 2012, especially to examine the context of professional learning. The participants were 87 working professionals—53 of them were instructional designers. Study findings indicate that the participants' social-media activities are coherent with the three interactivity levels as specified in the framework. Working

professionals took advantage of social media affordances for “knowledge management and construction as well as social interaction, and collaboration” (Dabbagh & Kitsantas, 2013, p. 270). Furthermore, the use of social media among the working professionals supported their SRL in a PLE. Their results show participants’ perceptions regarding “goal-setting, self-monitoring, help-seeking, motivation, and task strategies” (Dabbagh & Kitsantas, 2013, p. 270). However, their participants did not find social media useful in promoting self-evaluation and time management, mainly that social media may cause a distraction.

Further exploring the mixed findings, Dabbagh et al. (2015) conducted another study by interviewing 11 participants recruited from the 87 participants of an earlier study. The findings confirm their earlier study; the use of social media in developing PLEs support “goal setting, task strategies, motivation, [and] self-monitoring” (Dabbagh et al., 2012, p. 178). They also discovered that the 11 participants perceived an establishment of self-evaluation; participants regularly evaluated the use of social media and whether the tools were relevant and helpful in accomplishing their tasks. However, these participants did not perceive social media tools to help enhance their time management and help-seeking. These mixed findings specifically call for a further investigation as there have been new social media tools for project management that assists in managing time and tracking tasks, such as Asana and Trello (Fathurrahman, 2020;). Additionally, professional groups on social network sites, such as Facebook, Twitter hashtags, and Reddit, have recently emerged and allowed working professionals to ask questions, seek help, support, and resources, and offer advice (Davis, 2015; Hunter & Hall, 2018; Staudt Willet & Carpenter, 2020).

## Professional Learning and Development

After reviewing the theoretical foundations applicable for social-media-supported learning, it is imperative to review today's working professionals' characteristics and context. Such a review provides an understanding of what drives working professionals to continuously pursue professional learning and development. The subsequent sections also include a review of instructional designers, as working professionals, and their professional context that demands them to continually conduct professional learning and the needs for regulating professional learning to stay competitive in the workforce.

### *The Nature of Professional Learning and Development*

In the workplace setting, learning does not focus on course objectives anymore (Littlejohn, 2017). Instead, the learning need revolves around the timely, urgent workplace demands. Therefore, working professionals are likely to be motivated to acquire knowledge and skills when new tasks requiring new procedures emerge (Littlejohn, 2017). Working professionals should proactively conduct professional learning and seek knowledge if they intend to keep up with the field and stay competent at the workplace (Gruzd et al., 2016; Littlejohn et al., 2017; Littlejohn et al., 2012).

Conducting professional learning can occur intentionally and unintentionally (Eraut, 2000, 2004). As Littlejohn (2017) explained, Eraut's typology of intentional and unintentional learning describes this phenomenon about professional learning. Intentional learning in the professional context can occur in formal learning, such as through education, training, or certificate program (Littlejohn, 2017; Tynjälä, 2008). It can also occur in a non-formal environment (Gruzd et al., 2016), such as asking a peer to help with a task or demonstrating how to perform a task (Littlejohn, 2017). Unintentional learning, on the other hand, is unplanned

(Eraut, 2000). For example, a few staff members have a casual conversation over a break time and happen to learn from one another about a new task or procedure shared through this conversation (Littlejohn, 2017). Essentially, a learning opportunity can be found and pursued by engaging with colleagues (Milligan et al., 2014; Littlejohn, 2017). In other words, learners can connect with professional colleagues to seek relevant knowledge and experiences; in processing the knowledge, they create new knowledge that can be contributed back to the collective (Littlejohn, 2017; Milligan et al., 2014;).

Because professional learning can enhance the individual's job performance, it also means that the individual contributes to the overall organizational performance (Yanchar & Hackey, 2015). It is not surprising that many organizations and companies support professional learning, including the informal one (Carliner, 2018; Yanchar & Hackey, 2015). A possible explanation is that informal learning is flexible and not limited by a specific curriculum and timeline. Therefore, employees can learn about a timely topic and gain just-in-time knowledge and skills as the need arises (Richter et al., 2011).

### *Instructional Designers and Professional Learning*

The instructional design and technology field is dynamic; the field continuously progresses, alongside the increasing use of modern technologies (Sharif & Cho, 2015; Wang et al., 2021). If instructional designers intend to stay adept in their profession (regardless of their work setting, such as corporate, governmental, non-profit, and education sectors), it is critical for them to continually improve their knowledge, skills (Sharif & Cho, 2015), and abilities (Ritzhaupt & Martin, 2015). Therefore, instructional designers are expected to keep abreast of up-to-date information and technologies (Ritzhaupt & Kumar, 2015). However, learning resources may sometimes be limited in the workplace environment (Muljana & Luo, 2021).

Additionally, instructional designers may encounter barriers such as budget and travel constraints. When they encounter such constraints, instructional designers are willing to find learning opportunities that are not restricted by geographical, funding, and temporal limitations (Muljana et al., 2020).

Due to the dynamic field of instructional design and technology, instructional designers should pursue informal learning to keep up with the field (Carliner, 2018). The type of tasks that instructional designers conduct is mostly knowledge-based work (Carliner, 2018). While attempting to stay competent at work, instructional designers need flexible learning opportunities, allowing them to seek information immediately and apply it in the real setting. Particularly, instructional designers sometimes encounter time pressure when the project requests increase, and the deadlines are tight. Pursuing informal learning does not require instructional designers to schedule formal class or training sessions or wait until a professional development opportunity arises. For example, instructional designers are aware of the need to stay abreast with the educational technology, its strategic integration into a learning environment, and keep up with the job demands (Abramenka-Lachheb et al., 2021b). Instructional designers can reach out to their colleagues on social media, such as in Facebook professional groups or LinkedIn, to ask questions regarding how to tackle a task challenge and exchange best strategies (Muljana & Luo, 2021). Furthermore, employers are likely to support informal professional learning as it assists their staff members in expediting the product development cycles (Carliner, 2018).

### *The Needs for Regulating Professional Learning*

The role of SRL in working professionals' career growth has been perceived as imperative (Littlejohn et al., 2012; Littlejohn, 2017; Siadaty et al., 2016a, 2016b; Siadaty et al., 2012). Based on the job demands, working professionals are likely to seek knowledge from their

networks when they perceive the need (Littlejohn, 2017). There is a notion that they understand the value and relevance of acquiring up-to-date information and ensuring successful job performance; therefore, they may have the initial drive to connect and interact with peers and collective knowledge (Littlejohn & Hood, 2016; Littlejohn, 2017). There is an awareness among working professionals that learning the strategies from others who have been in similar experiences is more effective (Littlejohn, 2017). To reiterate, if the working professionals intend to perform the tasks at work successfully, it is crucial for them to proactively plan and self-regulate their own professional learning and development (Littlejohn et al., 2012; Littlejohn, 2017; Siadaty et al., 2016a, 2016b; Siadaty et al., 2012). However, Siadaty et al. (2016a, 2016b) have pointed out that, in some cases, working professionals may not have the skills to initiate and regulate their professional learning effectively. Additionally, most of the SRL-related literature tend to focus on the formal educational setting (Dabbagh & Kitsantas, 2012; Järvelä et al., 2015; Laru & Järvelä, 2015; Matzat & Vrieling, 2016). Research exploring the application and support of SRL for working professionals in the informal learning context is much needed to expand the body of literature (Siadaty et al., 2016a, 2016b).

**Social Media**

In the subsequent sections, the discussion centers on the definition of social media, the prevalent use of social media, how these social technologies have influenced the way people pursue professional learning opportunities, and the connection with self-regulated learning in a professional context. Then, it continues with the challenges of using social media for professional learning, which is crucial to recognize the research gap and call for the study.

### *Definition of Social Media*

Aichner et al. (2021) present a review of social media definitions used from 1994 to 2019. The definition of social media has transformed over the years. In the early 1990s, the term social media represents the computer networks that link people, and therefore they can socially network (Wellman, 1996). In the late 1990s, the definition placed an emphasis on virtual community, serving as a space for people to share common interests (Hagel, 1999). The affordances of social media in providing a virtual community are still included in the definition used in the early 2000s, which highlight the advantage of promoting social interactions without the geographical and temporal barriers (Balasubramanian & Mahajan, 2001; Ridings et al., 2002). Since then, the definition has become broader to include the overarching affordances, such as a representation of user's persona, content generation, upload, and exchange, dialogue creation, and engagement between individuals (Aichner et al., 2021). To represent all the aforementioned definitions, one definition that is sufficiently broad and relevant to the scope of this study has been selected as an operational definition for this study: "social media are Internet-based tools that allow users to build networks through which they may then communicate and share information with each other" (Dennen, 2018, p. 237).

Dennen's (2018) definition indicates that social media tools are not restricted to only social networking sites, such as Facebook and Twitter. People can use social media tools for more than seeking and sharing information. Several social media tools can be used to curate information. For example, people can tag words and annotate notes in tools before sharing them with others (Dennen, 2018), such as Hypothes.is, Perusall, and Scoop.it. Luo et al. (in press) have additionally provided a variety of social media examples. For instance, blogs allow users to publish text-based content that may include images and/or videos. YouTube allows users to

upload and share video content and subscribing to the producer's channel and watch the videos. Educational content such as tutorials can be commonly found on YouTube. Wikis allow collaborative writing among multiple contributors. Put simply, social media includes expansive genres such as media sharing sites, social networking sites, social bookmarking, blogging, and messaging (Luo et al., in press; Ottenbreit-Leftwich & Brush, 2018). This study utilizes Dennen's definition and Luo et al.'s classification of social media, which include a wide variety of social technologies that the working professionals possibly use for professional purposes.

### *The Prevalent Use of Social Media*

Using social media has become a ubiquitous phenomenon nowadays. Facebook gained more than 2.5 billion global monthly active users by the end of 2019 (Clement, 2020a). Twitter gained 302 million users by 2015 (Peters et al., 2015), and there were about 152 million monetizable daily active users by 2020 (Clement, 2020b). YouTube is not merely a repository of amateur videos anymore; instead, it additionally hosts corporate-generated and individual user-generated content, such as music and videos, including those for educational purposes (Tankovska, 2021). The fact that the YouTube app has been downloaded over 17.3 million times from the mobile app stores by 2019 indicates its widespread mobile usage (Tankovska, 2021). Reddit, another social media platform, has gained more than 330 million average active users monthly (Reddit Inc., 2020). It is not a surprise that the prevalent use of social media has changed the way people communicate, collaborate, and learn (Lewis et al., 2010). As alluded, one possible reason is that social media provides a real-time, up-to-date wealth of information, even from trusted sources (Le et al., 2019), such as the Fortune 500 companies that actively disseminate information and interact with people through social media (Barnes et al., 2018).

### *Social Media and Knowledge Seeking*

The prevalent use of social media has impacted the way people acquire knowledge and learn, supporting both formal and informal learning settings (Laru & Järvelä, 2015). As aforementioned, social media tools allow the creation of personal and social learning spaces, enabling individual, collaborative, and collective learning (Dabbagh & Kitsantas, 2013; Laru & Järvelä, 2015; Wong et al., 2010). Learners from the formal learning setting use social media both for personal and academic purposes (Dabbagh & Kitsantas, 2013; Matzat & Crieling, 2016), such as for obtaining and sharing information, engaging in collaborative learning activities, and increasing networking with others (Romero-Hall, 2017a, 2017b; Romero-Hall et al., 2020). Examples of social media tools include social bookmarking, blogging, microblogging, collaborative writing using wikis, media sharing, social tagging, social networking sites, and cloud-computing (Dabbagh & Kitsantas, 2012). Educators, especially in secondary and tertiary education settings, have perceived the potential of integrating social media tools and have been acquiring strategies and best practices of using social media for facilitating learning (Dabbagh et al., 2015; Gruzd et al., 2016; Junco et al., 2013; Matzat & Vrieling, 2016).

In the informal learning context (i.e., when learners have entered the professional world), learners proactively seek new knowledge and learning experiences through interactions with networks of colleagues and information and resources available in those networks (Gruzd et al., 2016). Working professionals engage with peers to seek relevant knowledge and experiences; in processing the knowledge, they create new knowledge that can be contributed back to the collective (Milligan et al., 2014; Littlejohn, 2017). Such professional learning opportunities and activities can be made possible by social media platforms. Learners can also explore, organize, create resources, and engage with their networks who possess common learning interests (Gruzd

et al., 2016). For example, when instructional designers cannot find relevant and suitable resources at work, they turn to their professional networks on social media for advice (Muljana & Luo, 2021). In addition to seeking and processing knowledge, these learners also share some of the information and resources, contributing to the knowledge-building and practice-building community (Gruzd et al., 2016; Milligan et al., 2014; Littlejohn, 2017).

### *Social Media, Self-Regulated Learning, and Professional Learning*

The use of social media tools may positively influence the application of SRL (Dabbagh & Kitsantas, 2012; Laru & Järvelä, 2015). As mentioned earlier, social media allows for social interaction and participation among users. Learners can seek help regarding the topic interests from others in the social media community; in other words, they can find and organize information around their own individual learning goals (Dabbagh & Kitsantas, 2013; Scott et al., 2016). When using social media, learners direct and manage themselves in seeking information, which is where SRL plays a crucial role (Charoenwet & Christensen, 2016). Furthermore, social media enables the creation of a personal learning environment; learners can seek the information they individually need, engage in collective knowledge sharing and creation, facilitate their own meaning-making, and self-monitor and self-evaluate their practice (Dabbagh & Kitsantas, 2012, 2013).

As described in the Self-Regulated Learning sub-section, there exists a framework for using social media to support SRL. Dabbagh and Kitsantas (2012) developed this framework, providing guidance for educators, especially from higher education setting, to foster learners' SRL skills. Dabbagh and Kitsantas (2012) intersect the application of SRL and the use of social media through PLE. PLE can be tools and communities that can promote learners' self-directed learning according to their individual learning goals and pace (Dabbagh & Kitsantas, 2012;

EDUCAUSE Learning Initiative, 2009; Johnson et al., 2011). Dabbagh and Kitsantas' (2012) framework include three levels of interactivity for using social media: "(1) personal information management, (2) social interaction and collaboration, and (3) information aggregation and management" (Dabbagh & Kitsantas, 2012, p. 6).

Both social media and SRL, forming a natural alliance, can support learning and professional growth (Matzat & Vrieling, 2016). In this sense, social media is not merely a tool to enhance SRL; conversely, SRL also has a crucial influence on encouraging learners to engage in the social-media-enabled discussions. The use of social media facilitated through formal education is intended to scaffold learner control and promote personalized learning (Matzat & Vrieling, 2016; McLoughlin & Lee, 2007). However, working professionals seek knowledge from their networks when they perceive the need (Littlejohn, 2017). They pursue professional learning opportunities based on the demand of the job. When they understand the value and relevance of acquiring up-to-date information and ensuring successful job performance, they are likely to have the initial drive to connect and interact with peers and collective knowledge (Littlejohn & Hood, 2016; Littlejohn, 2017). Working professionals are aware that learning the strategies from others who have been in similar experiences is more effective (Littlejohn, 2017). Put simply, they are driven by internal motivation and specific goals to find appropriate strategies, thereby reaching out to colleagues through social-media-enabled discussions. While some of the literature pieces have attested the benefits of social media for professional learning, there remains a question whether the use of social media is truly self-directed by the learners or if there is another motive, wherein a further exploration can offer more insights (Bruguera et al., 2019).

### *Challenges of Using Social Media*

Despite the benefits of using social media, there are challenges, posing some barriers that hinder the effective use of social media for professional learning. Social media allows users to interact without meeting in-person or knowing each other personally, providing an outlet for freedom of expressing insights and comments. Shaming others and cyberbullying may occur in this type of environment, raising concerns about cyber safety and privacy issues (Dabbagh et al., 2015). This may happen due to insufficient recommendations and criteria for selecting suitable social technologies and spaces for professional learning (Dabbagh et al., 2015; Luo et al., 2020). Additionally, guidelines and recommended strategies to support the effective use of social media in the professional learning context are still limited (Dabbagh et al., 2015; Luo et al., 2020).

In addition, other barriers may keep professionals away from social media. Carpenter and Harvey (2019) conducted a study, investigating educators' challenges that can be categorized according to the intrapersonal, interpersonal, school community, and online educator communities' factors. Within the intrapersonal boundary, professionals like teachers may find it challenging to balance the use of social media for personal and professional matters. Interpersonally, professionals perceive the benefit of using social media to improve networks and gaining learning opportunities; however, they may not want to simply trust the credibility of the colleagues met on social media (Carpenter & Harvey, 2019). Educators are also wary about sharing their insights on social media, especially that the information posted on social media is public wherein other stakeholders (e.g., administrators and parents) in the school community can see. When engaging in online communities, deepening conversations can be challenging; disagreements may occur, potentially triggering defensive and offensive responses (Carpenter & Harvey, 2019). These challenges altogether suggest further research on the strategies that

professionals utilize to minimize the challenges and maximize the learning opportunities within the social media environment (Carpenter & Harvey, 2019).

Furthermore, studies investigating the role of SRL in the context of professional learning are still scant (Siadaty et al., 2016a, 2016b). As SRL skills are needed to improve work performance, there remains a question regarding which SRL elements emerge as the working professionals use social technologies to conduct their professional learning. To overcome the aforementioned challenges, working professionals such as instructional designers can benefit from a framework and recommendations regarding selecting and utilizing social media to enhance their professional learning as well as SRL skills.

**Summary of Literature Review**

The theories reviewed above present the theoretical foundations related to using social technologies for professional learning that potentially demonstrates SRL phases. SLT provides the first layer of the theoretical foundation highlighting the social aspect of learning, serving as a precursor of SCT. SCT introduces the three triadic reciprocal elements of learning (i.e., personal, behavior, and environment influences), further highlighting the social factor of learning that underpins the use of social technologies for learning purposes. As SCT also serves as a foundation for SRL development, the theory also guides this study in exploring the occurrences of SRL phases within social-media-supported learning. Simply put, SLT, SCT, and SRL share similar key points, such as the importance of social interaction, collective learning, and collaboration.

We live in a dynamic, fast-changing world. Therefore, it is crucial for working professionals to keep up with the field and job demands. When they receive new tasks requiring new procedures, they perceive the need to pursue just-in-time professional learning and

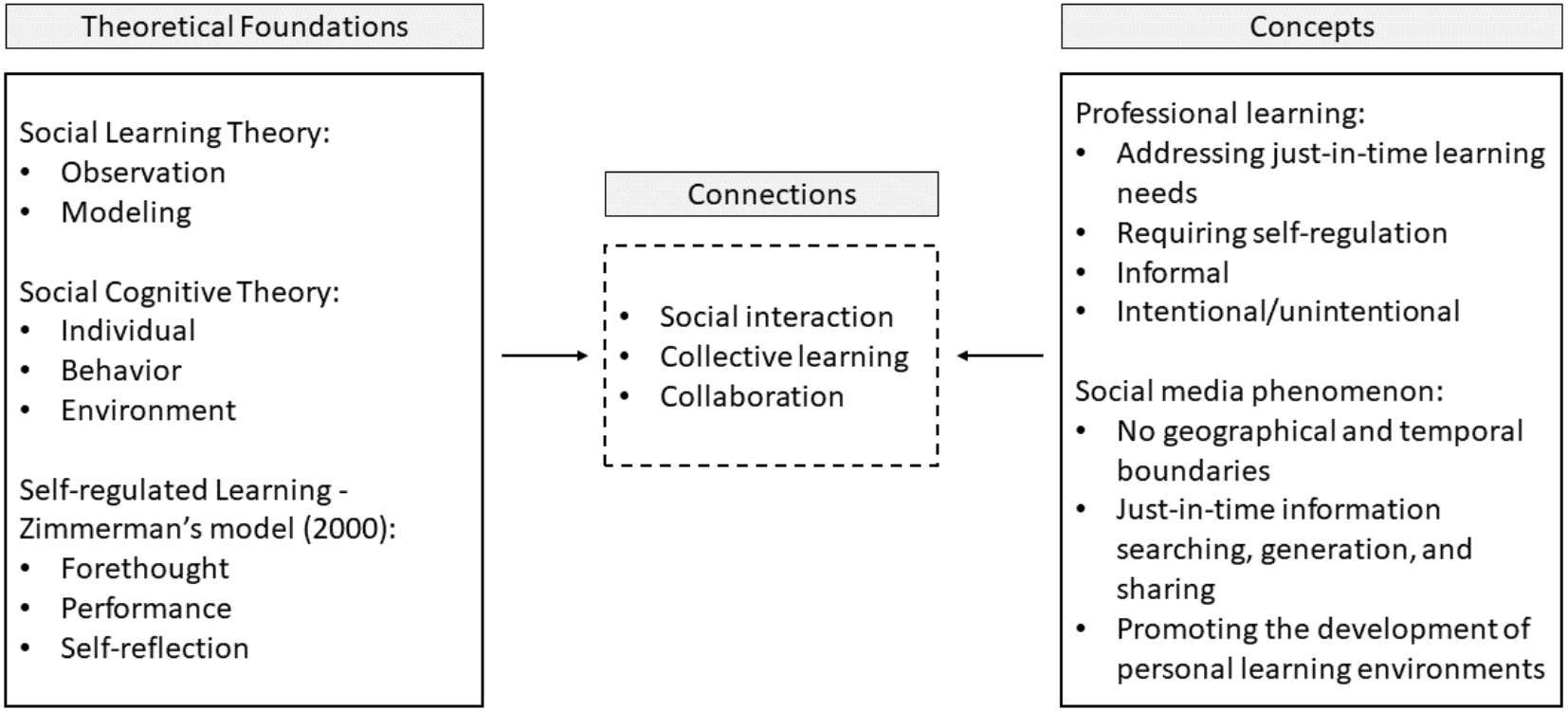
development, self-regulate the learning efforts, and support their SRL. While professional learning and development can take place in a formal environment, informal learning opportunities may fulfill their learning needs more flexibly as it is not restricted by a certain curriculum and schedule. Alongside this need, the affordances of social media have influenced the way people communicate, interact, and seek and build knowledge. Particularly, social media collapse the geographical, temporal, and economic limitations that may restrict people from connecting and learning together and from each other. However, as mentioned by Siadaty et al. (2016a, 2016b), working professionals sometimes may not have the skills to initiate and regulate their professional learning and development.

As the use of social media keeps increasing, there also exist the challenges of using social media for learning effectively. Cyber safety and privacy-related issues are among the top concerns, especially since their information may be publicly accessible (Dabbagh et al., 2015). For example, working professionals may face a dilemma, worrying if coworkers and employers use social media, such as Facebook, and attain private information that is not related to their professional identities (Frampton & Child, 2013). Additionally, people are connected behind a gadget screen when they use social media, and this type of environment may result in brazen behaviors such as shaming and cyberbullying (Dabbagh et al., 2015). Figure 1 provides a visual representation of the key points drawn from the literature review, including the theoretical foundations and the reviewed concepts.

The aforementioned concerns suggest a need for a study that explores working professionals' experiences—in this study context, instructional designers' experiences are illuminated—in using social media for professional learning and in supporting their SRL within this learning context. Because SRL is an important aspect of career achievement, this study is purported to yield recommendations so that working professionals like instructional designers can take benefit of social media affordances to support their effective professional learning and minimize the barriers. Educators providing formal training to prospective instructional designers may apply the recommendations for supporting SRL in professional learning. This study specifically focuses on the context of instructional designers' professional learning in a social media environment and how SRL occurs in such a learning environment.

**Figure 1**

*The Key Points of the Theoretical Foundations and Concepts Reviewed in this Study and Their Connections*




*Note.* The theoretical foundations reviewed are social learning theory (including the examples of learning by observing and modeling), social cognitive theory (including the triadic reciprocality), and self-regulated learning (including Zimmerman's model). The concepts reviewed are professional learning (how it addresses just-in-time learning needs but needs self-regulation) and social media phenomenon (how it collapses geographical/temporal boundaries, addresses just-in-time information searching, and supporting personal learning environments). These theoretical foundations and concepts are all connected in the topics of social interaction, collective learning, and collaboration.

## Purpose of the Study

Grounded in social-based learning theories, the purpose of this qualitative phenomenological study is to explore instructional designers' SRL experiences conducting professional learning within a social media environment. This study will also describe the phenomenon of the instructional designers' experiences of supporting their SRL in social-media-supported professional learning. The findings are purported to expand the literature through practical implications regarding using social media in the professional context and enhancing SRL skills in such a context. For this study, social media is defined as "Internet-based tools that allow users to build networks through which they may then communicate and share information with each other" (Dennen, 2018, p. 237). Social media includes overarching genres such as media sharing sites, social networking sites, social bookmarking, blogging, and messaging (Luo et al., in press; Ottenbreit-Leftwich & Brush, 2018).

## Research Questions

Three research questions guide this study:

1. How were instructional designers' SRL experiences conducting professional learning in a social media environment?
2. How did instructional designers support their SRL by using social media?
3. What challenges did instructional designers experience when conducting professional learning using social media?

## Significance of the Study

This dissertation study expands the knowledge regarding the professional learning conducted in a social media environment in a few ways. First, the findings will expand the social media research and literature, especially in the context of informal, professional learning. For

example, several theories, such as SLT, SCT, and SRL, serve as the foundation for this study. The findings of this study provide additional empirical evidence about learning through observing and modeling, consistent with Bandura's (1971) SLT work. According to the literature review, how the components of triadic reciprocality in SCT may play a role in social-media-supported learning deserves in-depth exploration (Schunk & DiBenedetto, 2020). This dissertation study additionally provides further empirical information, based on instructional designers' experiences in being proactive, actively monitoring, taking charge of their professional learning, and exercising their human agency while taking advantage of social media affordances. Findings regarding instructional designers' experiences in setting learning goals, being self-motivated, asking for help, trying the recommendations from colleagues, and adjusting their design practice can be expected in this study, which further contributes empirical evidence to the SRL-related scholarship.

In addition, the affordances of social media have been documented in existing literature, but the recent practices of using them for professional purposes need further exploration (Luo & Hostetler, 2020). Particularly, the investigation of such a phenomenon within the focused context of instructional designers is also still a rarity, despite the crucial need for instructional designers to continually seek timely information. Additionally, SRL continues to play an essential role in working professionals' career growth and achievement. However, they sometimes may not have the skills to initiate and regulate their professional learning (Siadaty et al., 2016a, 2016b). Furthermore, most SRL-related studies tend to take place in the formal education setting (Dabbagh & Kitsantas, 2012; Järvelä et al., 2015; Laru & Järvelä, 2015; Matzat & Vrieling, 2016). Hence, further exploration regarding SRL in the informal, professional learning context is much needed (Siadaty et al., 2016a, 2016b). Notably, there are challenges in using social media

for professional learning. Such challenges need to be understood in a deep fashion so that instructional designers can overcome the challenges and the learning experiences can be maximized. This dissertation serves as one of a few studies exploring the phenomenon of instructional designers' conducting professional learning using social media from the lens of SRL. From the perspective of SRL, the study findings will also allow me to find further research gaps and offer insights regarding future research opportunities intersecting professional learning and the application of SRL within social-media supported learning environments.

Second, the findings of this study will help improve the emerging practice of using social technologies for professional purposes. Existing literature has highlighted the importance of suggesting recommendations for working professionals, such as tips on how to select suitable social technologies, social media spaces, as well as strategies to regulate professional learning using social media (Dabbagh et al., 2015; Luo et al., 2020; Luo & Hostetler, 2020). As using social media has become a norm, practical recommendations will benefit instructional designers so that their informal learning using social media can be enhanced. Additionally, educational programs and instructors teaching prospective instructional designers may consider applying the practical implications to help learners gain relevant skills by scaffolding SRL skills and utilizing social-media-supported learning simultaneously.

Third, this study's findings also provide insights to employers and professionals with supervisory roles. Because informal learning can help professionals meet the just-in-time learning needs, employers are likely to support it. More working professionals are likely to use social media to seek and share resources, therefore, those with administrative or supervisory roles may consider supporting the use of social media for informal learning. After all, continuous professional development, including informal learning opportunities, that enhance the

professionals' knowledge, skills, and abilities can contribute to the overall organizational performance (Carliner, 2018; Yanchar & Hackey, 2015).

# CHAPTER II

# METHODOLOGY

The purpose of this study was to discover how SRL phases occurred within instructional designers' experiences pursuing professional learning by incorporating social media and explore their experiences in supporting their SRL through the use of social media within this learning context. The study findings expanded the body of literature on the intersection of professional learning, social media, and SRL. Building upon the findings, practical and future research recommendations would be proposed to support the use of social media for professional learning and SRL enhancement simultaneously.

This chapter includes a description of the research design, information regarding participants and their contexts, instrumentations, and procedures during the study. Finally, I recognized the study limitations at the end of the section in this chapter.

## Research Design

Three research questions guided this study:

- Research Question (RQ) 1: How were instructional designers' SRL experiences conducting professional learning in a social media environment?
- RQ2: How did instructional designers support their SRL by using social media?
- RQ3: What challenges did instructional designers experience when conducting professional learning using social media?

The research questions above focused on exploring instructional designers' experiences utilizing social media for professional learning. This study would also describe the phenomenon related to instructional designers' experiences supporting their SRL in social-media-supported professional learning.

Based on the purpose of the study and research goals, a phenomenological approach was selected. A phenomenological approach allowed me to acquire insights based on the participants' experiences (Goulding, 2005); notably, this dissertation study focuses on the participants' experiences conducting professional learning in social media environment. As described in the literature review, using social media has become a ubiquitous phenomenon. Essentially social media are "omnipresent in their [learners'] day to day life experiences" (Dabbagh et al., 2015, p. 178). Furthermore, by employing phenomenology, I could gain an in-depth comprehension regarding the phenomenon under study "from the perspective of people [or participants] involved" (Welman & Kruger, 1999, p. 189), as well as according to their experiences (Groenewald, 2004). In this dissertation, the phenomenon under study centered on the instructional designers' experiences in conducting professional learning using social media, explored through the lens of SRL.

The phenomenological approach was suitable for exploring how an application of SRL occurred within instructional designers' experiences in using social media for professional learning, particularly to address the research questions of this study. There were already existing studies utilizing phenomenology in the instructional design and technology field. For example, Hsu et al. (2009) examined students' SRL experience in web-based learning environments, revealing the SRL strategies that supported students' learning achievement (e.g., the strategies related to planning by using a calendar, monitoring learning progress by using gradebook, sustaining motivation by taking advantage of multimedia features, adjusting their study habits, taking notes, and seeking help). Additionally, Pecay (2017) explored K-12 professionals' (science teachers') experiences in incorporating YouTube into classroom activities, noting

teachers' motives, such as finding teaching resources helpful in enhancing their instruction and creating and sharing instructional materials.

### My Positionality

The phenomenological approach could guide an exploration of instructional designers' experiences conducting professional learning and applying SRL within social media environment, especially given my positionality. Positionality is "the social locations of the researcher and participants" (Hays & Singh, 2012, p. 186). In the context of this study, my positionality would revolve around my professional experiences, point of view regarding the application of SRL, and my belief in the effective use of technology for enhancing learning. Specifically, I have more than ten years of instructional design experience, has been applying SRL phases in her learning process, and is an active user of social media for professional learning. I might have pre-conceptions related to instructional-design professional learning, social-media-supported learning, and the benefits of SRL for enhancing learning. In addition, my experiences with practicing instructional design, applying SRL, and using social media have been taking place in the U.S. Therefore, I might have a lack understanding of what it was like to be an instructional designer living overseas with limited access to social media or how instructional design was practiced differently outside the U.S. However, the phenomenological approach guided me in prioritizing the participants' insights, stories, and experiences (Hays & Singh, 2012), assisting me in setting aside my own pre-conceptions.

## Participants

Purposive sampling was suitable for phenomenology particularly when the prospective participants had relevant experiences in the phenomenon under study (Groenewald, 2004). Therefore, after receiving approval (exempt status) from the Old Dominion University Education

Human Subjects Review Committee (project number 1802175-1), I recruited prospective participants from Facebook and LinkedIn groups joined by thousands of instructional designers. The call for research participation included an online form (see Appendix A), followed by a description of the study, information regarding the protection of human subjects, contact information, consent form, and a short questionnaire to determine their participation eligibility and allowed them to sign up for an interview session (see Appendix B). In the description of the study, I informed the participants that participating in this study would allow them to receive a $15.00 Amazon e-gift card. Additionally, the eligibility criteria for recruiting suitable participants were developed; instructional designers participating in this study must have held an instructional design job position for at least one year and used social media for professional purposes.

There were 17 participants involved in this study. This number of participants was not to simply determine the minimum number of participants; however, it was initially to help me to approximate the sufficient number of participants to attain data saturation, wherein new perspectives stopped emerging (Boyd, 2001; Groenewald, 2004). The participants were instructional designers working for various sectors (e.g., corporate, government, non-profit, self-employed, and higher education) globally and with various job titles (e.g., instructional designer, curriculum specialist, learning analyst, learning solutions manager, CEO, or founder). All instructional designers, except two of them, were located in the U.S. While the participants had various job titles, they expressed that they primarily conducted instructional design processes as their daily tasks. For example, regardless of the sectors, the participants reported they had conducted the instructional design stages. The stages included a wide range of design activities, such as analyzing performance gaps, identifying learning objectives while aligning them with the

curriculum or competency standards, conducting needs analysis, designing courses or learning solutions and performing design iterations, developing learning solutions by using authoring tools (although the solution might take form of non-learning formats such as job aid), coaching others (including teaching an informal course and providing consultation and training to faculty), collaborating with stakeholders, managing projects, assisting in the implementation, and conducting evaluation.

The participants were at various career levels, ranging from an entry to expert level, and diverse in their ages. Collecting data from the participants with diverse backgrounds (e.g., sectors, career levels, and job titles) could serve as a triangulation tactic in which I could contrast data with different meanings and validate those with similar meanings (Arksey & Knight, 1999; Bloor, 1997; Groenewald, 2004; Holloway, 1997). Table 4 provides the participants' information to include their pseudonym, their academic degree and level of education, the sector in which they were currently employed, types of social media used, and their interactivity level with social media.

**Table 4**

*The Participants' Relevant Information*

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Abigail | Master's | Self-employed | 11-15 years | *Daily:* cloud-based technologies, social network sites, media sharing, project management tools<br><br>*Weekly:* podcasts, social bookmarking<br><br>*Rarely:* blogs | *Level 2:* cloud-based technologies, project management tools<br><br>*Level 3:* blogs, podcasts, social bookmarking, social networks, media sharing |
| Angela | Master's and doctoral coursework | Higher education | 6-10 years | *Daily:* cloud-based technologies, social network sites, media sharing<br><br>*Monthly:* blogs, project management tools<br><br>*Rarely:* podcasts | *Level 2:* blogs, podcasts, cloud-based technologies, social network sites, media sharing, project management tools |
| Ari | Master's | Higher education | 0-5 years | *Daily:* cloud-based technologies, social network sites, media sharing, project management tools | *Level 2:* cloud-based technologies, social network sites, media sharing, project management tools |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Emilio | master's | Higher education | 6-10 years | *Daily:* RSS feeds, cloud-based technologies, social network sites, media sharing<br><br>*Weekly:* blogs, project management tools<br><br>*Monthly:* wikis, podcasts, social bookmarking sites<br><br>*Rarely:* avatar-based virtual worlds | *Level 1:* podcasts, social bookmarking, avatar-based virtual worlds<br><br>*Level 2:* project management tools<br><br>*Level 3:* blogs, wikis, RSS feeds, cloud-based technologies, social network sites, media sharing |
| Gwen | Master's and doctoral coursework | Higher education | 0-5 years | *Daily:* social network sites, media sharing<br><br>*Weekly:* blogs, cloud-based technologies<br><br>*Rarely:* wikis, podcasts, social bookmarking, project management tools | *Level 1:* blogs, wikis, podcasts, social bookmarking, project management tools<br><br>*Level 2:* cloud-based technologies, media sharing<br><br>*Level 3:* social network sites |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Jin | Master's | Higher education | 6-10 years | *Daily:* blogs, social network sites, media sharing, project management tools<br><br>*Monthly:* cloud-based technologies.<br><br>*Rarely:* wikis, podcasts | *Level 2:* cloud-based technologies<br><br>*Level 3:* blogs, wikis, podcasts, social network sites, media sharing, project management tools |
| Jovina | Master's | Higher education | 6-10 years | *Daily:* cloud-based technologies, social network sites, media sharing, project management tools<br><br>*Rarely:* podcasts | *Level 2:* cloud-based technologies, social network sites, media sharing, project management tools |
| Kelsey | Master's and doctoral coursework | Corporate | 6-10 years | *Daily:* social networks<br><br>*Weekly:* social bookmarking, cloud-based technologies, media sharing<br><br>*Monthly:* podcasts<br><br>*Rarely:* blogs, project management tools | *Level 1:* blogs, social bookmarking, project management tools<br><br>*Level 2:* cloud-based technologies, media sharing<br><br>*Level 3:* podcasts, social network sites |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Kiara | bachelor | Higher education | 0-5 years | *Daily:* RSS feeds, cloud-based technologies, media sharing, project management tools<br><br>*Weekly:* blogs, wikis, podcasts, social bookmarking, avatar-based virtual worlds<br><br>*Monthly:* social network sites | *Level 1:* podcasts, avatar-based virtual worlds, RSS feeds, social network sites, media sharing<br><br>*Level 2:* wikis, social bookmarking, cloud-based technologies, project management tools<br><br>*Level 3:* blogs |
| Ning | Master's | Corporate | 0-5 years | *Daily:* blogs, cloud-based technologies, social network sites, media sharing<br><br>*Weekly:* podcasts, social bookmarking, project management tools | *Level 1:* blogs<br><br>*Level 2:* podcasts, social bookmarking, cloud-based technologies, social network sites, media sharing, project management tools |
| Pam | Doctoral | Self-employed | 6-10 years | Daily: cloud-based technologies, social network sites, media sharing, project management tools<br><br>Monthly: blogs (in some cases, weekly)<br><br>Rarely: podcasts, avatar-based virtual worlds | *Level 1:* podcasts<br><br>*Level 3:* blogs, avatar-based virtual worlds, cloud-based technologies, social network sites, media sharing, project management tools |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Payton | Doctoral | Higher education | 6-10 years | *Daily:* cloud-based technologies, social network sites<br><br>*Weekly:* podcasts, media sharing, project management tools<br><br>*Monthly:* social bookmarking, avatar-based virtual worlds<br><br>*Rarely:* blogs, wikis, RSS feeds | *Level 1:* blogs, wikis, podcasts, social bookmarking, avatar-based virtual worlds, RSS feeds<br><br>*Level 3:* cloud-based technologies, social network sites, media sharing, project management tools |
| Prisca | Master's | Corporate | 6-10yr | *Daily:* blogs, cloud-based technologies, social networks, project management tools<br><br>*Weekly:* podcasts, media sharing<br><br>*Monthly:* wikis | *Level 1:* wikis<br><br>*Level 2:* cloud-based technologies, social network sites, media sharing, project management tools<br><br>*Level 3:* blogs, podcasts, social network sites |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Pru | Doctoral | Higher education, governmental, self-employed | 16-20 years | *Daily:* cloud-based technologies, social network sites.<br><br>*Weekly:* blogs, media sharing.<br><br>*Monthly:* podcasts.<br><br>*Rarely:* avatar-based virtual worlds, RSS feeds | *Level 1:* podcasts, avatar-based virtual worlds, RSS feeds.<br><br>*Level 2:* cloud-based technologies.<br><br>*Level 3:* social network sites, media sharing |
| Sari | Master's and post-master certificate | Corporate | 6-10 years | *Daily:* social bookmarking, cloud-based technologies, social network sites, media sharing, project management tools<br><br>*Rarely:* blogs, wikis, podcasts | *Level 1:* blogs, wikis<br><br>*Level 2:* social bookmarking, cloud-based technologies, media sharing<br><br>*Level 3:* podcasts, social networks |
| Tamara | Master's | Higher education | 6-10 years | *Daily:* cloud-based technologies, social network sites<br><br>*Weekly:* media sharing<br><br>*Monthly:* podcasts<br><br>*Rarely:* blogs, social bookmarking | *Level 1:* blogs, podcasts<br><br>*Level 2:* social bookmarking, cloud-based technologies, media sharing, project management tools<br><br>*Level 3:* social network sites |

Table 4 (continued).

| Pseudonym | Academic Degree/ Education | Sector | Years of Experience | Social Media Used | Interactivity Level with Social Media |
|---|---|---|---|---|---|
| Whitney | Master's | Non-profit | 6-10 years | *Daily:* cloud-based technologies, social network sites, media sharing, project management tools<br><br>*Monthly:* social bookmarking<br><br>*Rarely:* avatar-based virtual world | *Level 1:* social bookmarking, avatar based virtual worlds, cloud-based technologies, project management tools<br><br>*Level 2:* media sharing<br><br>*Level 3:* social network sites |

## Instruments

I used two instruments in this study: a qualifying questionnaire and a semi-structured interview. The qualifying questionnaire captured the participants' demographic and contextual information. The questionnaire included two items that asked the participants to self-report how frequently they used social media. Because the aim of phenomenology is to gain an in-depth understanding of the phenomenon under study based on the participants' experiences, it was essential to carefully select participants with direct experiences using social media for professional learning and supporting SRL within this context. The second instrument was a one-on-one semi-structured interview (see Appendix C for the interview guide). Because a phenomenological approach was employed in this study, I conducted each interview conversationally, combining the semi-structured characteristics and flexibility to encourage deep insights (Smith et al., 2013). I developed the interview questions while closely paying attention to the research questions and frameworks (e.g., SRL and ways to support SRL), which could later assist me in conducting the theory-driven (deductive) coding during the data analysis phase. Additionally, it could promote the alignment of my notes or the summarized key points taken during the interview with the research questions and frameworks.

The questionnaire items and interview questions went through a review conducted by a colleague with a terminal degree in educational technology leadership. This colleague is a senior-level instructional design practitioner with over nine years of experience, a faculty member who teaches graduate coursework related to adult education topics (e.g., adult learning theory and methods), and has experience conducting qualitative research. While reviewing, the colleague paid close attention to the clarity and relevance to the research purpose.

## Data Collection Procedures

Data were collected or gathered through in-person, semi-structured interviews using a web conferencing tool called Zoom. Although the qualified participants had noted an agreement to participate in the qualifying questionnaire, I began each interview session by briefly describing the study purpose and asking a consent again before recording. As suggested by Peoples (2021), providing an introduction and description of the study before starting the interview would set the tone regarding the focus and scope of the study. Therefore, the participants would be able to provide stories regarding their lived experiences relevant to the research purpose.

All interview sessions mostly took place in a natural and casual conversation to allow the participants to be comfortable sharing stories and experiences. Additionally, the natural conversation style allowed for an engaging dialogue between the researcher and participant, which could serve as a way to bracket the researcher's pre-perception (Groenewald, 2004). To further acquire rich insights from the participants, I used a funneling approach when formulating the interview questions; general questions were initially asked, and probing questions were then used to garner detailed information. Therefore, the participants were able to describe and elaborate on their stories, and I was able to gain a deep understanding of participants' lived experiences (Smith & Osborn, 2008; Smith et al., 2013).

Additionally, I hand-wrote descriptive notes during the interview, which summarized the key points garnered from the interview. After the interview, I typed the notes using Word processor to enhance my understanding of the participants' experiences. The Zoom web-conference tool provided an auto-transcription feature for the recorded interview. For the interviews with the first five participants, I downloaded the auto-transcripts and reviewed them

again while listening to the recording. Simultaneously, I corrected any errors in the transcripts, especially the participants' spoken words. For the interviews of the remaining participants, I used the transcription service provided by Rev.com through professional transcriptionists to better ensure the accuracy of the transcripts and transcription efficiency. To protect the anonymity and confidentiality of the participants, I ensured that no identifiable information was mentioned and displayed in the recording before using Rev.com. After receiving the completed transcripts from Rev.com, I reviewed them while listening to the recording to double-check the transcript accuracy.

The next step I conducted was sending a thank-you email to participants and including the transcript and summary of the key points identified from notes I took during the interview. At this point, I conducted a member check. Member-checking, one of the triangulation tactics, allowed the participants to review, add, and clarify insights in the transcript, in addition to verifying the accuracy of my understanding of the participants' key points expressed during the interview prior to the data analysis phase (Miles & Huberman, 1990; Maxwell, 2005; Peoples, 2021). After the participant returned the transcript and my notes, and provided feedback, I offered a $15 Amazon e-gift card to express appreciation.

## Data Analysis

This study used Braun and Clarke's (2006) thematic analysis (TA) technique. TA, an analysis technique for capturing "something important about the data in relation to the research question, and [representing] some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82), was suitable for detecting the emerging themes resulting from participants' lived experiences (Van Manen, 1997). For example, Hsu et al. (2009) employed this combined technique—using thematic analysis in a phenomenological study—to examine

students' SRL experience in a web-based learning environment. Hycner (1999) suggested that the phenomenological researchers should consider the context under study as a whole when analyzing data. Performing TA could help me follow Hycner's (1999) suggestion because TA provided guidelines for "analyzing meaning across the entire data set" (Braun & Clarke, 2012, p. 58). There were six phases of TA, as suggested by Braun and Clark (2006) (see Table 5). While conducting the six phases of TA, I also followed the 15-point checklist of criteria for conducting good thematic analysis (see Appendix D).

**Table 5**

*Thematic Analysis Phases Adapted from Braun and Clarke (2006)*

| Phase | Description |
|---|---|
| 1. Familiarizing with data | Transcribing, reading the data repeatedly, and taking notes of any initial ideas. |
| 2. Generating initial codes | Conducting an initial coding across the entire data and grouping data relevant to each code.<br>• Using both theory-driven (deductive) coding and data-driven (inductive) approaches.<br>• Using in vivo or verbatim coding technique to prioritize and honor the participants' voices.<br>• Manually coding using data analysis software called Dedoose, Excel spreadsheet, and digital highlighters to mark potential patterns. |
| 3. Searching for themes | Reviewing codes and clustering them into potential themes. |
| 4. Reviewing themes | Reviewing the themes through two levels and developing a thematic map to display the relationship of the themes and their codes.<br>• Level 1: Reviewing themes in relation to the coded extracts<br>• Level 2: Reviewing themes in relation to the entire data set. |
| 5. Defining themes | Reviewing the themes repeatedly to define and name or rephrase the themes. |

Table 5 (continued).

| Phase | Description |
|---|---|
| 6. Producing the report | Finalizing the analysis and associating the analysis results with the research questions and literature. |

*Note.* Six phases of thematic analysis. Adapted from "Using Thematic Analysis in Psychology," by V. Braun and V. Clarke, 2006, *Qualitative Research in Psychology, 3*(2), p. 87. Copyright 2006 by Taylor and Francis.

**Familiarizing with Data (Phase 1)**

Hycner (1999) reminded the phenomenological researchers to bracket or limit their own biases and perspectives so that the essence of participants' lived experiences could be fully understood in-depth. Familiarizing myself with the data or participants insights and immersing in the data assisted me to bracket her existing bias or perspective (Hays & Singh, 2010), wherein the first phase of TA (i.e., transcribing, reading the data repeatedly, reviewing my notes taken at the interview) was helpful in this regard. In addition, Hycner (1999) highlighted the importance of summarizing each interview, validating it, modifying the summary or notes necessarily to ensure accuracy. Following this suggestion, I took notes and summarized the key points during the interview. After the interview, the handwritten notes were transformed into digital notes using a Word processor, which allowed me to review the handwritten notes and listen to the interview again. Then, the participants had an opportunity to review the transcript and my notes; this technique served as a member-check tactic, allowing them to validate these documents (see Appendix E for the questions asked to participants for guiding them to member-check). Below is an example excerpt from the notes taken during an interview with a participant:

> She gave an example that she changed her job role from knowledge management to content development. Sometimes, she had questions while navigating her new role. Reaching out to people on social media was helpful because the support/resources from

work might not always be available. Learning from others on social media could enhance her soft skills. But, of course, the content/conversations on social media had to be relevant to her context. For example, if it was immediately applicable, it could be implemented and thus enhance her soft skills.

**Generating Initial Codes (Phase 2)**

Codes garnered from TA should capture the qualitative richness of the phenomenon" (Boyatzis, 1998, p. 31) and represent "the bulk of the data" (Joffe, 2012, p. 226). When conducting the second phase, generalizing initial codes, I therefore employed two coding approaches: theory-driven or deductive coding and data-driven or inductive coding. Utilizing both approaches assisted me in reviewing and analyzing the data comprehensively (Xu & Zammit, 2020).

During the second phase of TA, the theory-driven (deductive) coding was conducted to address the first research question. I developed a coding scheme based on Zimmerman's (2000) three phases of SRL: (1) forethought activities, represented by participants' experiences regarding how they planned goals and identified the sources of motivation; (2) performance activities, represented by experiences regarding how participants determined, executed, and monitored their strategies; and (3) self-reflection activities, represented by experiences regarding how they self-evaluated their performance and planned to adopt/adapt a better strategy for improving the next learning event. In the professional learning context, the forethought phase might entail thought processes wherein learners familiarized themselves with the task context and requirements and set the goals and plans to select suitable strategies (Siadaty et al., 2016). The performance phase was when learners conducted the task while engaging in using suitable strategies as well as continuously monitoring and revising the strategies. The self-reflection

phase was when learners actively evaluated their progress and compared it with others' while reflecting upon and sharing their own experiences. When coding the data, I paid attention to the three phases of SRL and made associations with this professional learning context.

The second research question was also addressed through the deductive coding approach in the second phase of TA. I developed another coding scheme; this coding scheme was based on Dabbagh and Kitsantas' (2012) framework describing the three levels of using social media to support SRL. This coding scheme consisted of: (1) Level 1: personal information management, represented by participants' experiences regarding how they initially used social media to achieve personal goals; (2) Level 2: social interaction and collaboration, represented by experiences regarding how participants started to interact with others in social media, such as sharing a post, commenting on a post, and reacting to a post or comment; and (3) Level 3: information aggregation and management, represented by experiences regarding how they curated and aggregated information attained from social media and conduct a self-reflection regarding the aggregated information or the use of social media. When conducting the deductive coding approach to address the second research question, I paid heed to this framework and mirrored it with the professional learning context.

Additionally, I employed the data-driven (inductive) coding approach to address the third research question. Data analyzed to address the third question were not based on the predetermined categories. Instead, I extracted codes based on what emerged from the data itself, coming from the participants' experiences. Some example codes conducted through in vivo coding approach inductively to address RQ 3 included "the abundance of information," "too much information," people would look and find mistakes," "our actions are tracked," "internet

access is a problem," "limited access to social media," "imposter syndrome," and "stakeholder's buy-in on social media."

Additionally, performing in vivo (or verbatim) coding technique—using participants' verbatim words or phrases as codes—was helpful in honoring and prioritizing participants' voices and minimizing the researcher's preconceptions (Saldaña, 2013). For that reason, I selected in vivo or verbatim coding during the deductive and inductive coding processes. Notably, the in vivo coding was also suitable for phenomenology (Saldaña, 2013). Some example codes conducted through in vivo coding approach deductively to address RQ 1 using the coding scheme based on Zimmerman's (2000) three phases of SRL included:

- Forethought phase: "aspire to be a leader," "helped me more confident," "how to better myself"
- Performance phase: "find people to ask questions," "put people's tips in your design," "tweak my strategy," "manage timeline"
- Self-reflection phase: "what I've done in the past is not always effective," "consider many circumstances," "[after reflecting,] help others who are new"

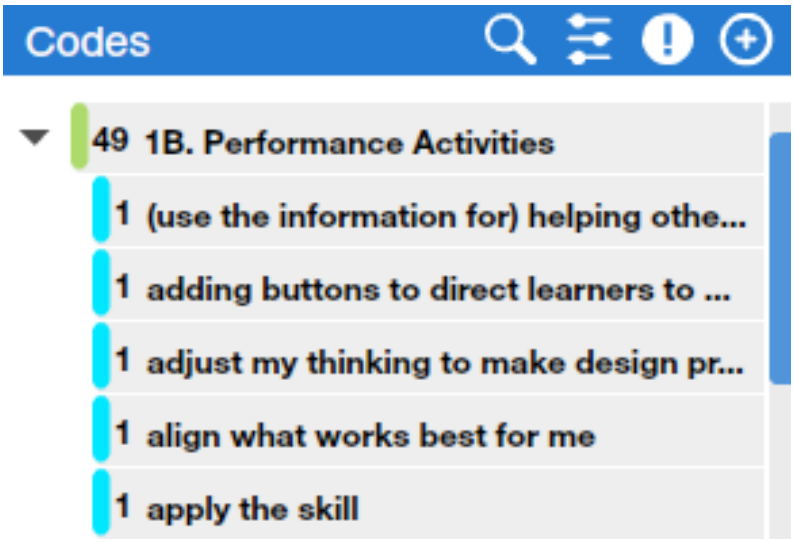
Some other example codes conducted through in vivo coding approach deductively to address RQ 2 using the coding scheme based on Dabbagh and Kitsantas' (2012) framework included:

- Level 1: "first-time personal use," "observing and read[ing] posts," "consume as much information as possible," "use it for my own gain in terms of learning"
- Level 2: "ask questions back and forth," "we formed a relationship," "joining those groups and collaborating there"
- Level 3: "go back to it [the curated information], read, and annotate," "structure and connect different information," "make reference in meetings"

I took advantage of data analysis software called Dedoose, where I coded all transcripts. Within Dedoose, all codes could link to a particular participant and quote, wherein this association was usually challenging to manage in manual coding. Then, I exported all codes to Microsoft Excel spreadsheets for performing the subsequent analysis phase. Figure 2 is a screenshot taken in Dedoose displaying deductive (in vivo) codes related to the first research question aligned with the SRL-based coding scheme. Figure 3 is a screenshot taken in Dedoose displaying inductive (in vivo) codes related to the third research question.

**Figure 2**

*A Screenshot Taken in Dedoose Displaying Deductive (In Vivo) Codes Related to the First Research Question*




*Note*. Each code is accompanied by a number of codes, wherein all of them showed they had an accompanying number 1 in front of the code as a result of the in vivo or verbatim coding. *49 1B. Performance Activities* means there are 49 codes within the coding scheme called *1B. Performance Activities* or phase.

**Figure 3**

*A Screenshot Taken in Dedoose Displaying Deductive (In Vivo) Codes Related to the Third Research Question*


*Note*. Several codes were within *Challenges* category. Each code is accompanied by a number of codes, wherein all of them showed they had an accompanying number 1 in front of the code as a result of the in vivo or verbatim coding.

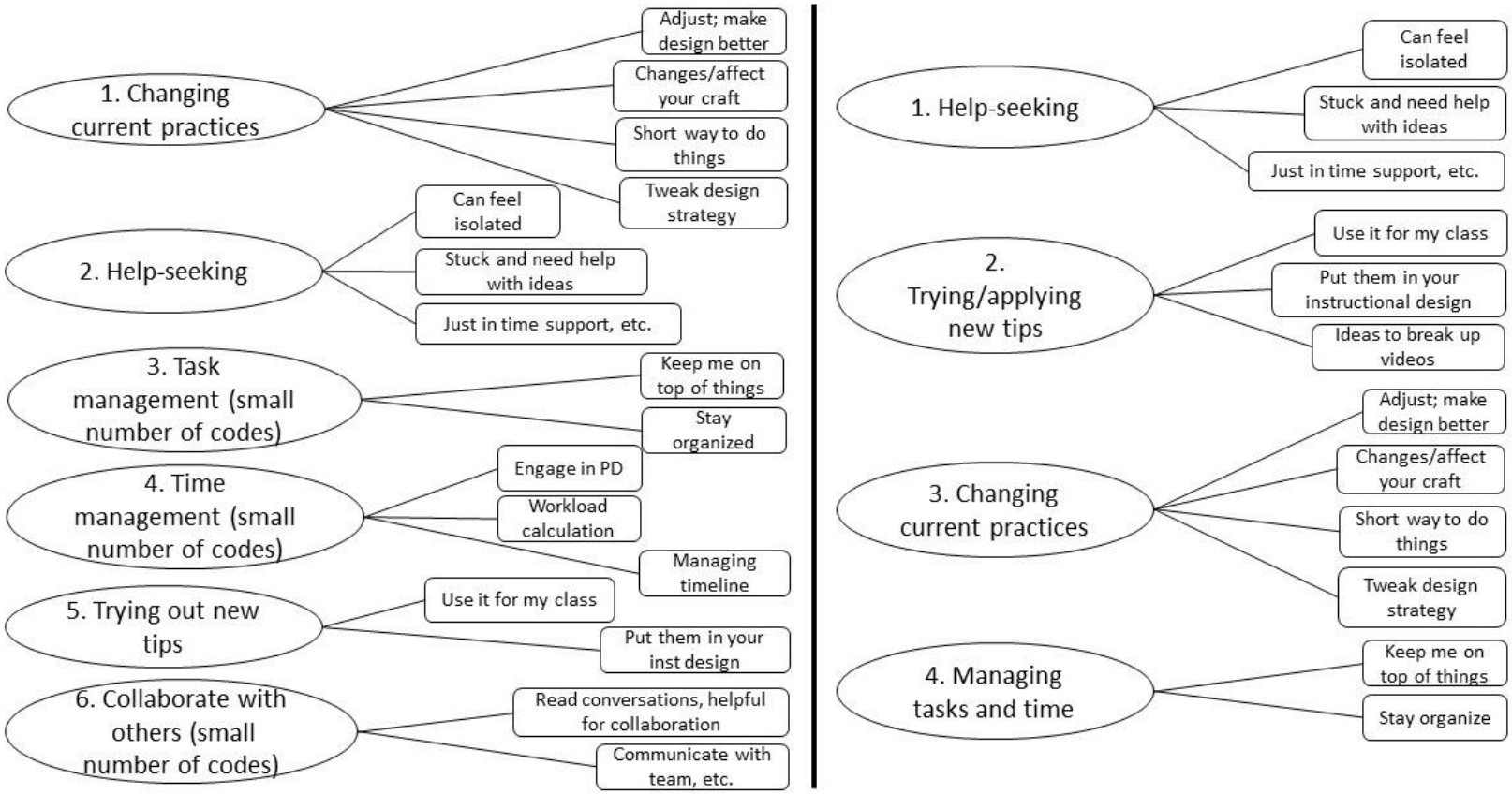
**Thematizing: Searching, Reviewing, and Defining Themes (Phases 3, 4, and 5)**

When searching for themes, the third phase of TA, I reviewed codes and clustered them into potential categories. At this point, all codes were already exported from Dedoose to Microsoft Excel. Specifically, the pattern coding technique was employed during this phase to assist me in searching for emergent themes. According to Miles and Huberman (1994), pattern codes are "ones that identify an emergent theme, configuration, or explanation" (p. 69). Pattern coding is a way to group codes with similarities or commonalities, suitable for further analyzing the in vivo or verbatim codes, and can be combined with a TA approach (Saldaña, 2013). In Microsoft Excel, I highlighted the codes representing similarities or commonalities with the same color.

Reviewing the themes, the fourth phase, took place through two levels by developing a thematic map to display the relationship of the themes and their codes in each level. In Level 1 of the fourth phase, I reviewed the themes "at the level of the coded data extracts" (Braun & Clarke, 2006, p. 91) by searching for a coherent pattern among these data extracts. Creating an initial thematic map was helpful in visualizing the relationships among the data extracts and discovering any coherent patterns. If data extracts did not seem to display a coherent pattern, I revisited the theme and determined whether those data extracts belonged to another existing theme, a new theme, or whether it should remain as an individual theme. In Level 2, I reviewed the themes while considering "the validity of individual themes in relation to the data set" (Braun & Clarke, 2006, p. 91). Another visual thematic map was developed so that I could perceive the relevance of the themes with the entire data set or study context and catch any data I might have missed during an earlier coding phase. Figure 4 displays an example of two visual thematic maps generated in the fourth phase of TA.

**Figure 4**

*An Example of Visual Thematic Maps Generated in Phase 4*




*Note*. When re-reviewing the relationship between themes and codes, the themes *task management* and *time management* were combined. *Collaborate with others* was combined with a theme that addresses RQ2, especially because the codes overlapped with a theme in RQ2.

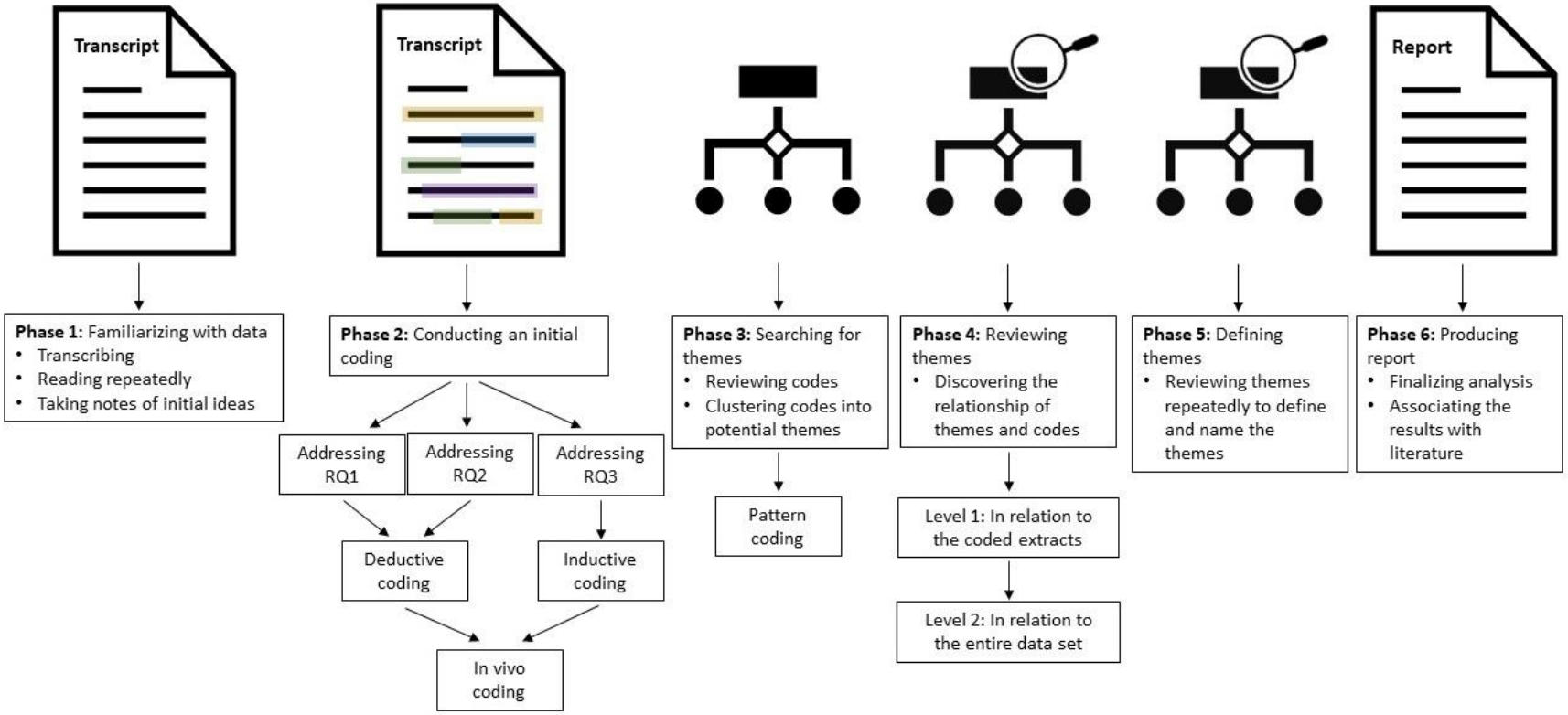
Defining theme, which was the fifth phase of TA, was achieved by carefully reviewing the themes. The goal of this phase was to determine a proper name for the themes. Paraphrasing the themes was conducted while considering what was "of interest about them and why" (Braun & Clarke, p. 92). I also identified how these themes fit the respective research question. If necessary, I created sub-themes to break down a complex theme and identify any "hierarchy of meaning" within the complex theme (Braun & Clarke, p. 92).

**Producing the Report (Phase 6)**

Phenomenology is about understanding *what it is like* to experience such a phenomenon under study (Leedy & Ormrod, 2016). Therefore, it was necessary to report the results coherently and logically, including presenting evidence through themes and clear examples from the participants' stories (Braun & Clarke, 2006). Providing a thick description was necessary for producing the report; it was also imperative to provide an argument and/or justification related to each research question when reporting the findings. Figure 5 displays a summary of the six phases of TA used in this dissertation study.

**Figure 5**

*The Summary of Six Phases of Thematic Analysis Used in this Study*




*Note*. This figure displays a visual representation of the six phases of TA as described in Table 5.

## Trustworthiness of the Study

This study utilized a phenomenological approach, combined with TA for the data analysis to enhance the trustworthiness of the study. Additionally, I performed multiple levels of coding and thematizing. The procedure of the study method was compatible with the trustworthiness criteria for qualitative studies, such as credibility, transferability, dependability, and confirmability. Simultaneous data collection and analysis were conducted to display the credibility of the study (Hays & Singh, 2012).

Performing multiple steps of data analysis and providing rich description of the study findings in Chapter 3, were helpful in increasing the transferability (Hays & Singh, 2012). The transferability criterion was to help readers decide the applicability of the study to their settings (Hays & Singh, 2012). One of the steps conducted in this dissertation study was acquiring an external reviewer by asking an experienced instructional designer with a relevant terminal degree and expertise in adult education to serve as a peer researcher (Hays & Singh, 2012). Particularly in a dissertation study wherein a doctoral student is a sole researcher, involving a neutral colleague or another researcher would be helpful in promoting the trustworthiness, such as by reviewing the research process or method, data analysis, and results (Creswell & Poth, 2017). The external reviewer involved in this dissertation study has experience conducting qualitative research and reviewed the following information:

- Introduction
- Summary of the literature review
- Summary of methods
- Invitation to participate in a study
- Qualifying questionnaire

- Interview guide
- Identified themes along with the coded data extracts, the thematic visual maps generated in the fourth phase of TA, and how I paraphrased the themes as a result of re-reviewing the themes in the fifth phase of TA

The external reviewer specifically provided recommendations regarding the recruitment invitation, qualifying questionnaire, and interview guide.

Additionally, the external reviewer reviewed the identified themes and provided recommendations in case the theme did not consist of relevant coded data extracts. The external reviewer agreed with most of the themes and the coded data extracts—the only disagreement from the external reviewer was regarding one code that could be moved into a different theme. It was related to Ari's experience below, which I initially included it in a potential theme called "collaborate with others."

> So, about Trello, [here is how I use it]. We [Ari and a faculty member that he assisted] talk about the analysis, the course the design development, implementation and evaluation. The evaluation is so critical; this is where I have that conversation. [… .] You know, [we] talk about having timeline in place. [… .] So, we set up dates and weeks, and the materials. I can look it over, get it done.

However, the external reviewer disagreed with the potential theme ("collaborate with others"). While Ari was working with a faculty member, the performance that Ari conducted was intentionally to manage the timeline and the required tasks to complete the course design project. Therefore, the external reviewer suggested that I considered moving it to other potential themes: "time management" and "task management." To resolve the disagreement, I had a discussion with the external reviewer to gain a better understanding of her perspective. After discussing, re-

reviewing the transcript of Ari's interview and further thinking of Ari's context on this specific example, I agreed to follow the reviewer's suggestion by moving it into the "time management" and "task management" themes.

The additional feedback from the external reviewer was that some of the codes could also be included in another theme; in other words, some themes included overlapping codes. The external reviewer recommended me to additionally include the following codes in another theme:

- the "mitigate issue I am having" code that I included in the "trying or applying tips suggested by other" theme was suggested by the external reviewer that it also fit the "seeking help from others" theme;
- the "having others […] is helpful, because it can feel isolated" code that I included in the "help-seeking" theme was suggested by the external reviewer that it additionally fit "collaborate with others" theme; and
- the "spread the word about event" code that I included in the "offer information to others" theme was suggested by the external reviewer that it additionally fit the "engaging and networking with others."

To follow up on the feedback and suggestions from the external reviewer, I reanalyzed the overlapping codes, re-read the excerpts in the transcripts, thought of the participant's context again, re-reviewed all themes, added the overlapping codes to another respective theme, and provided an update to the external reviewer regarding this action.

I addressed the dependability or the consistency of study findings in several ways. One was by conducting multiple member-checks, resonating with Lincoln and Guba (1989). Another way involved an external reviewer who served as a peer reviewer, as described above. I

triangulated by recruiting diverse participants to attain multiple perspectives and integrating TA into the phenomenological approach.

The confirmability displayed how well the study findings reflected the participants' voices (Lincoln & Guba, 1985). In this study, I addressed the confirmability through multiple ways, including note-taking performed during or immediately after interviews, member-checking phases that led to prolonged engagement with the participants, and the involvement of an external reviewer/a peer researcher. Table 6 displays the procedures used in this study that were compatible with the trustworthiness criteria of qualitative studies.

**Table 6**

*Procedures Compatible with Trustworthiness Criteria*

| Action | Credibility | Transferability | Dependability | Confirmability |
|---|---|---|---|---|
| Note-taking during or immediately after interviews | ● | | | ● |
| Simultaneous data collection and analysis | ● | | | |
| Multiple steps of data analysis | | ● | | |
| Rich or thick description | | ● | | |
| Member-checking with participants | | | ● | ● |
| Triangulation (e.g., diverse participants and combined approaches for the method) | ● | ● | ● | |
| External reviewer or peer reviewer | | ● | ● | ● |

*Note*. The symbol ● in a table cell represents how the trustworthiness criterion was addressed.

# CHAPTER III

# RESULTS

## RQ1: Instructional Designers' SRL Experiences While Conducting Professional Learning Using Social Media

I adopted the theory-driven (deductive) coding approach for analyzing the data and answering RQ1. The answers were divided into three sections, according to the three phases of Zimmerman's (2000) model: (1) forethought phase, (2) performance phase, and (3) self-reflection phase.

### Forethought Phase

I detected several themes for the forethought phase, such as sources of motivation, proximal goals (i.e., short-term goals and long-term goals), task analysis, and strategic planning. Table 7 shows the participants' experiences within the forethought phase and the number of mentions. The examples of in vivo codes and quotes are integrated into the description of the results.

**Table 7**

*Participants' Forethought Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Sources of motivation | Proximal goals: long-term goals | Proximal goals: short-term goals | Task analysis | Strategic planning |
|---|---|---|---|---|---|
| Abigail | ● | ● | ● | | ● |
| Angela | ● | | ● | | ● |
| Ari | ● | | ● | ● | |
| Emilio | | | ● | | |

Table 7 (continued).

| Pseudonym | Sources of motivation | Proximal goals: long-term goals | Proximal goals: short-term goals | Task analysis | Strategic planning |
|---|---|---|---|---|---|
| Gwen | ● | | ● | | ● |
| Jin | ● | ● | ● | ● | ● |
| Jovina | ● | | ● | ● | ● |
| Kelsey | ● | ● | ● | ● | |
| Kiara | | | ● | ● | |
| Ning | ● | ● | ● | ● | ● |
| Pam | ● | | ● | | |
| Payton | | | ● | | |
| Prisca | ● | ● | ● | ● | ● |
| Pru | | | ● | ● | ● |
| Sari | | | ● | | |
| Tamara | ● | | ● | | ● |
| Whitney | ● | | ● | | ● |
| Number of mentions | 23 | 9 | 89 | 15 | 16 |

*Note*. The symbol ● shows that the respective participant's experience supported the theme.

### *The Sources of Motivation*

The instructional designers mentioned reasons why they conducted professional learning using social media. I discovered experiences about asking for advice and insights from other colleagues regardless of the location and time boundaries. Furthermore, staying connected with other instructional design professionals outside local peers at work could provide fresh ideas

beyond the typical design strategies conducted by the team to better themselves. Ning noted the value of acquiring multiple perspectives: “It’s really healthy to have different perspectives beyond your workplace coworkers.” Their reasons for pursuing professional learning using social media seemed to be driven by a source of motivation (*n* = 12). For example, Jovina said that her motivation encouraged her to improve her soft skills. Likewise, Tamara believed that pursuing professional learning through social media could increase her self-efficacy which “helped me [become] more confident, then could play into my own performance and work.”

### *Proximal Goals*

**Long-Term Goal.** When sharing experiences about using social media, some instructional designers tended to include a description of their long-term goals (*n* = 5), including their career aspirations. For example, Kelsey aspired to be a learning and development (L&D) leader. Therefore, she actively created podcast episodes to engage in relevant conversations that could assist other instructional designers in getting to know more about L&D. Jin aspired to have expertise in UX (user experience) research because he perceived the importance of enhancing his design strategies from the UX lens in the future. As the relevant resources were scarce at his workplace, he engaged with the UX design and research experts on social media, learned from them, and practiced using xAPI and JavaScript. Although there were no tasks requiring the application of UX research at the current moment, Jin said, “I get better prepared before that task comes.” Meanwhile, Abigail and Pam, who ran her own freelancing business, actively shared relevant topics, and initiated conversations about design practices. By doing so, they learned from the discussion that reflected colleagues’ multiple perspectives. They also displayed their knowledge and skills and gradually increased their visibilities to attract potential clients in the long run.

**Short-Term Goal.** Another goal that instructional designers had in mind was a short-term one related to what *they needed to achieve at the current moment* (as represented by the experiences of all participants; $n = 17$). Ning, for example, recalled a time when she was working on a project requiring her to use Camtasia. Her goal at that moment was to develop multimedia assets in Camtasia and thus needed to know specific steps. She then accessed LinkedIn, which included trustable professional networks who might know Camtasia, and searched the feed. One time, Abigail and Whitney had questions about creating engaging materials using Articulate. Abigail noted, "[…], I'll go out there [Articulate group] to learn more and ask the questions, see if someone has had the same challenge, and how they've solved it." Likewise, Whitney reached out to the e-Learning Heroes Community to seek solutions posted by the members and help regarding ways to approach the challenge differently; she stated, "I was able to develop what I actually wanted." Meanwhile, Prisca needed to acquire multiple perspectives regarding innovative online learning strategies that differed from what she learned in the formal instructional design program. She reached out to and sought expertise from her professional networks, especially because she could not ask her supervisor. Kelsey needed to address a challenge related to dealing with difficult coworkers, which was deemed sensitive to discuss with local peers. She said, "I'll go to somewhere like Reddit where you can be anonymous and post […]. I posted about asking for advice."

### *Task Analysis*

When analyzing the participants' experiences, I found an SRL-related activity *that took the form of task analysis* to figure out what entailed in a project ($n = 8$). Some instructional designers encountered new tasks due to a change at work (e.g., new job title) or new project assignments related to an unfamiliar subject. Ari had come from a non-instructional design field

and then transitioned to instructional design. While he was still a new instructional designer and received a new project, he never said, “I didn’t know.” Instead, he assured his supervisor, “I will figure it out.” Ari took advantage of LinkedIn, particularly the LinkedIn Learning feature, to learn about the required tasks and how to conduct them (e.g., basic web programming and using Storyline) to complete the project. Meanwhile, Pru was involved in projects related to the physics discipline, and it required some content knowledge at her end. She gained ideas regarding “interactive sort of games and activities” and took a LinkedIn Learning course “to gain some additional content” knowledge suitable for a particular discipline. Likewise, Kiara had been assigned to a project related to supply chain management. Because she needed to address her knowledge gap about the new topic, she “had to go to YouTube and watch the videos, and […] video is a good instructional medium of communication. […]. So, it's good for understanding [a new topic].”

***Strategic Planning***

Instructional designers felt the need to conduct continual professional learning or development and find non-traditional learning resources *as part of their strategic planning* (*n* = 10). For instance, Pam gave a reminder:

> You constantly have to develop yourself. […] . I'm in a bunch of communities, I'm using Instagram, I'm using Facebook, I'm using LinkedIn, I'm using blogs, all to try to learn more and figure out how to better myself as a designer.

Ari’s experience supported Pam’s statement, “I knew there was no excuse […]. They would ask me how you stay current.” Connecting with other instructional designers and learning from others were also a form of strategic planning for professional learning. For instance, Tamara, a new instructional designer, explained that her primary social media uses were LinkedIn and

Facebook groups for "finding who might be able to mentor" her regarding the tools that could be used to promote learning engagement. Meanwhile, Angela accessed social media so that she would be aware of innovative strategies related to facilitating online learning that others had been conducting, such as "what interactions they use within the courses… [and] what makes it more engaging."

**Performance Phase**

Several themes related to the performance phase emerged, such as seeking help from colleagues, applying tips suggested by colleagues, changing or tweaking current practices, and managing tasks and time. Table 8 displays the participants' experiences in the performance phase and the number of mentions.

**Table 8**

*Participants' Performance Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Seeking help from colleagues | Trying and applying tips suggested by colleagues | Changing current practices | Managing tasks and time |
|---|---|---|---|---|
| Abigail | ● | ● | ● | |
| Angela | | ● | | |
| Ari | | ● | | ● |
| Emilio | ● | | ● | |
| Gwen | ● | ● | ● | |
| Jin | ● | | ● | |
| Jovina | ● | ● | ● | ● |
| Kelsey | ● | ● | | |
| Kiara | | ● | ● | |

Table 8 (continued).

| Pseudonym | Seeking help from colleagues | Trying and applying tips suggested by colleagues | Changing current practices | Managing tasks and time |
|---|---|---|---|---|
| Ning | ● | | ● | |
| Pam | ● | | | |
| Payton | | ● | ● | |
| Prisca | ● | ● | ● | |
| Pru | ● | ● | ● | |
| Sari | ● | ● | ● | |
| Tamara | ● | | ● | ● |
| Whitney | ● | ● | ● | |
| Number of mentions | 20 | 12 | 25 | 10 |

*Note*. The symbol ● shows that the respective participant's experience supported the theme.

### *Seeking Help from Colleagues*

Instructional designers mentioned using social media tools to ask questions and seek insights and advice from fellow instructional designers. Most of the time, they ($n$ = 13) asked questions and solicited suggestions because they were seeking help. Tamara worked with a team at work, but she performed some tasks independently. She noted, "[…] it can feel sometimes isolating. So, having others out there [to seek insights from] is helpful." Similarly, Gwen told a story that she had only one instructional design peer at work. Reaching out to colleagues beyond the workplace provided her with just-in-time support. She said, "I can't figure out how to do this thing I want to do, or I need an idea to bounce off people." Emilio gave an example that he could look "to social media for help for technical pieces." Meanwhile, Sari sometimes saw people who

"were stuck for ideas, and they were able to get help with ideas, such as how to reformat their resume, interview help, […] creative solutions to develop e-learning or ideas for instructor-led training […]."

### *Trying and Applying Tips Suggested by Colleagues*

Instructional designers ($n$ = 12) reported applying the tips suggested by colleagues on social media. Instructional designers found that learning about "what's worked well" for their peers could assist them in completing their tasks successfully. For instance, Kiara, an instructional designer who lives outside of the U.S., read conversations on social media to understand how international instructional designers conducted the design process. She learned about Bloom's taxonomy from international peers, and it promoted her understanding of formulating assessment questions aligned with the curriculum standards. Particularly in her country, there were several levels of national qualification framework. She could better understand "how to structure my questioning, [and] my task words […]" by applying Bloom's taxonomy to align with the levels of national qualification framework used in her country. She confirmed, "Just a few tips that people give, and you know you just put them in your instructional design, and you know it works." Meanwhile, although Angela's primary role was as an instructional designer, she also taught a class during the pandemic. She found some humorous ideas posted by colleagues on social media, including funny videos and memes, and "even used some of the techniques in my [her] class" to engage her students during the difficult pandemic time.

Those (i.e., Ari, Angela, Gwen, and Payton) who worked in the higher-education setting passed along ideas and tips for the faculty members to try and apply in their courses. Ari attained ideas from TikTok on creating engaging, short videos and chunking down topics into multiple

videos, and recommended similar ideas to faculty. Angela "suggest[ed] more ideas" to faculty to try various tools to engage students, which she found on social media conversations. Payton utilized social media himself to allow him to "help model a strategy for faculty."

### *Changing Current Practices*

Instructional designers (*n* = 13) shared that learning from colleagues and resources on social media had influenced their current practices. It either had *changed their practices or inspired them to tweak their strategies*. For example, Whitney used the suggestions or ideas and adjusted how she worked to "make either design or developing process better or smoother." Tamara, who had just started to work as an instructional designer, confidently shared that she now could "talk more fluently or converse better professionally among my team." According to Pru, if the resources shared on social media were aligned with the context of the current design project, they would be applicable. Pru added that they could "influence my [design] methodology." To Kiara, the resources shared by peers on social media made "a world of difference" in her work quality. Her team members now hardly inquired for clarification about her storyboard. Meanwhile, Sari found and used "a shorter way to do things," confirmed by Abigail, who noted, "[…] when I realized if there's quick […] shortcuts […] in Storyline, and things like that; those are things that I end up applying. So, that does change my behavior." Essentially, she reported that she "tweaked" her design strategy.

### *Managing Tasks and Time*

A few instructional designers (*n* = 3) conducted tasks and time management using social media tools. Tamara reported that as an instructional designer, she needed a tool "for me to keep on top of the things." Notably, she worked with other team members, including faculty. She felt it was her responsibility to help the team member keep track of their tasks. Meanwhile, Jovina,

who held a lead role in her design team, shared that managing tasks and timelines for the projects was one of her primary responsibilities. When she led her design team, she managed all projects, the team members of each project, and the tasks of each project. When she worked on her own individual projects, she organized media files and feedback related to each course design phase, provided space for faculty members to upload course design updates, and even included workload calculations. Similarly, Ari worked with faculty to design courses. To communicate the tasks and the required time needed to complete a design project, he listed the course duration and mapped the design process of each project. He also projected a timeline so that faculty members had a good sense of how long they were required to accomplish a course design. Ari shared, "So, we set up dates and weeks and the material. […]. I can look it over, [and] get it done."

**Self-Reflection Phase**

I discovered several themes, such as open-mindedness to prepare for the reflection on one's performance and progress, reflecting on the information gained from social media (consisting of three sub-themes), and sharing learning experiences with others. Table 9 shows participants' experiences within the self-reflection phase and the number of mentions.

**Table 9**

*Participants' Self-Reflection Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Open-mindedness | Reflecting on the information (consisting of three sub-themes) | | | Sharing learning experience |
|---|---|---|---|---|---|
| | | 1. Checking the information | 2. Selecting the information | 3. Reacting to the information | |
| Abigail | ● | ● | ● | ● | ● |
| Angela | ● | ● | ● | | |
| Ari | | ● | ● | | |
| Emilio | ● | | ● | | ● |
| Gwen | ● | ● | ● | ● | |
| Jin | | ● | ● | ● | ● |
| Jovina | ● | | | ● | |
| Kelsey | ● | ● | ● | | |
| Kiara | ● | | | | |
| Ning | ● | ● | | ● | |
| Pam | | ● | ● | ● | |
| Payton | ● | ● | ● | | ● |
| Prisca | | | | ● | ● |
| Pru | | ● | ● | | |
| Sari | | | ● | ● | |
| Tamara | ● | ● | ● | | |
| Whitney | | ● | ● | ● | ● |
| Number of mentions | 14 | 20 | 22 | 11 | 9 |

*Note*. The symbol ● represents the respective participant's experience supported the theme.

### *Open-Mindedness to Prepare for the Reflection Activities*

Instructional designers ($n$ = 10) were open-minded that could help them reflect on their current work performance and progress. For example, Kelsey recognized her "knowledge and skill gaps." Then, once knowledge and skill gaps were recognized, the information, resources, and conversations generated by colleagues on social media could engender an open-mindedness to achieve better. Ning noted:

> […] the way that I've done things in the past is not always the most effective way. […but,] I always want to keep improving. […]. And so, by keeping an open mindset and looking for different solutions, I can continue to make my personal instructional design process better or my learning solution, make it more effective.

Open-mindedness was also highlighted in instructional designers' experiences through a willingness to adjust their perception or thinking process to approach a problem (i.e., Jin, Whitney, and Emilio. This type of open-mindedness, according to Angela, was associated with self-regulation:

> […] it takes self-awareness and reflection to be open to other ideas. I think when there is no this openness and self-awareness, it can be potentially a barrier. I think that relates to self-regulation because self-awareness and reflection is part of it.

The participants of this study associated open-mindedness with their self-reflection activities. In the Discussion chapter, I will include an interpretation and a discussion of how this result is associated with the existing literature and where it may occur in an SRL cycle.

### *Reflecting on the Information Gained from Social Media*

Instructional designers reflected not only on their performance and progress but also on the information gained from social media. I discovered three sub-themes: (1) checking the

information accuracy, (2) selecting information based on the relevance of the information to their own contexts, (3) reacting to the results of the information checking and selection.

**Checking the Information Accuracy.** Instructional designers (*n* = 12) checked the information accuracy before considering applying it, mainly because not all information was helpful. For example, Ning saw a conversation about a theory, wherein people gave their own "spin" on it; for this reason, she took "everything with a grain of salt and [… and used] critical thinking skills to see if something's valid or not." Also, Pru "run it through my own diagnostic to see what makes the most sense." She would question herself whether the information was factually accurate. One way to attain correct information was by going to a trusted community. Abigail engaged in a community that she knew "everybody has been in the industry for a long time and they've dealt with a lot of different types of clients […]." I heard a similar experience from Ari: "I check their [posters'] background before I take their advice." Ari added, "So, it's important to really make sure that whatever someone's claiming […] is actually legitimate […]." He usually tested the information first by trying it himself before sharing it with others. Meanwhile, Payton took some time to analyze and delve into the information.

**Selecting the Information Based on the Relevance.** If the instructional designers could ensure the accuracy of the information, they (*n* = 13) then selected the information based on the relevance to their contexts. There was a manifestation of a no-one-size-fits-all belief when instructional designers selected which information to apply. For instance, Abigail knew there were usually "many circumstances or other factors" around the information shared on social media. Therefore, Sari questioned herself when selecting the information, "Does it work for me? Does it fit me?" According to Tamara, if a piece of advice did not work, then "maybe it didn't fit this context." In addition to context relevance, Angela selected the information based on her

design philosophy. However, Jin combined several pieces of information from multiple platforms to make an alignment with his context, such as by synthesizing information from an "infographic found on a LinkedIn post and the knowledge […] learned from LinkedIn Learning."

**Reacting to the Results of Information Checking and Selection.** Instructional designers had their ways of reacting to information checking and selection (*n* = 9). If the information was not aligned with their contexts or design philosophies, they would continue finding further resources. Gwen, Pam, and Whitney would look for new or more advice. Ning would try multiple platforms, which Gwen and Prisca also did. For instance, if the answer someone provided on LinkedIn did not work, she would go to YouTube or blogs and use the search feature. Meanwhile, Prisca would ask again by rephrasing her question.

If the information did not fit the context, instructional designers still saved the information or kept that in mind. Just because they had a particular context at that moment, it did not mean the information would not work in a different context in the future. For instance, Sari believed, "I could use it to apply to something else I've got going on at work." Likewise, Pam thought the information was still useful because "maybe it worked for someone else." Otherwise, they could save the information to help other instructional design peers. Gwen, for instance, said, "I think someone will be asking us this question." Sari gave a further example; she found the information still helpful in the future "not only get my answers that changes my professional development, but sometimes when I provide answers and help to others."

### *Sharing Learning Experiences with Others*

When instructional designers discovered useful information and gained learning experiences, they did not keep it to themselves. They shared the information and experiences with others (*n* = 6). One reason was that sharing information and learning experiences with

others might have promoted metacognition. In turn, instructional designers could achieve further learning gains through sharing. Payton's comment provided a good example; by sharing with others on social media, "you're growing by sharing information about the topic […], you're also growing in your knowledge […]." Additionally, sharing a learning experience allowed instructional designers to reflect on their learning journey. For instance, Abigail created YouTube videos to share helpful tips regarding challenges she had faced in the past in hopes of helping other instructional designers to overcome similar challenges. Abigail specifically told me:

> I think a lot of the beginning instructional designers, and all the questions I had in the beginning trying to navigate that role, and trying to navigate what all that looks like when you're just starting out and you don't necessarily have colleagues to turn to for help.

### RQ2: Instructional Designers' Experiences Supporting their SRL Using Social Media

I adopted a deductive coding approach for analyzing the data to answer RQ2. The answers were divided into three levels, according to Dabbagh and Kitsantas' (2012) framework of supporting SRL by using PLE that includes social media tools. By conducting a deductive coding approach, I discovered ways how instructional designers self-supported their SRL within the context of professional learning. The framework includes the following three levels that are ordered according to the usage interactivity of social media technologies: (1) Level 1: personal information management; (2) Level 2: social interaction and collaboration; and (3) Level 3: information aggregation and management.

#### Level 1: Personal Information Management

Three themes were detected within Level 1: (a) personal before professional use, (b) reading information only, (c) developing individual learning goals (see Table 10).

**Table 10**

*Participants' Level 1 Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Personal before professional use | Reading information only | Developing individual learning goals |
|---|---|---|---|
| Abigail | ● | | ● |
| Angela | ● | ● | |
| Ari | ● | ● | |
| Emilio | ● | | ● |
| Gwen | | ● | |
| Jin | | | |
| Jovina | ● | ● | |
| Kelsey | ● | ● | |
| Kiara | ● | ● | |
| Ning | ● | ● | |
| Pam | ● | ● | |
| Payton | | | ● |
| Prisca | ● | | |
| Pru | ● | ● | ● |
| Sari | ● | ● | ● |
| Tamara | ● | | |
| Whitney | ● | ● | |
| Number of mentions | 19 | 16 | 7 |

*Note*. The symbol ● represents the respective participant's experience supported the theme.

### *Personal Before Professional Use*

Most instructional designers ($n$ = 14) used social media for personal use before professional use. Their experiences with social media began numerous years ago when social

media usage was different. For instance, it was either for trying new technology or following the trend (e.g., Angela, Emilio, Jin, and Kiara). Jin and Kiara shared that "when everybody started using it, and then you get on to it, and then you just follow the crowd," and "it was just hype behind Facebook." Another example of instructional designers' early experiences with social media was maintaining social connections with family and friends (e.g., Ari, Emilio, Jovina, Kelsey, Kiara, Ning, Pam, Prisca, Sari, Tamara, and Whitney). As Jovina said, she used AOL instant messenger and MySpace years ago "to connect with my friends at school in a different setting, like sharing pictures [and] talking to each other."

As social media technologies developed, some instructional designers recognized the purpose for achieving personal learning gains. Payton described, "[…], people are going to use YouTube for personal gain long before they use it professionally. And even when they use it professionally, they still use it personally." Pru's experience provided another example: she had taken advantage of social media to learn about home improvement and parenting tips as part of her personal learning. However, it was noted that personal learning sometimes benefited career or professional growth. For instance, Emilio's personal learning gains made him "more prepared or more effective [... at] work." He could use the knowledge in the future, such as when his team of faculty members needed it.

### *Consuming the Information Only*

More than half of instructional designers ($n$ = 11) either started with reading or observing the information only. Jovina called it "lurking," because "it's more of like viewing other people's posts or asking questions of my own." Angela and Whitney had been a "passive consumer" because they were mostly "reading people's posts and […] feedback." In addition, we can recall Kelsey's early experience, who had transitioned from another field to instructional design. While

transitioning, she used social media "to consume as much information as possible" to understand the knowledge and skills needed to be an instructional designer. Coherently, Whitney had a similar experience: "[…] when I started, I didn't share much. I was just observing and then just reading people's posts and people's feedback on things."

Some participants (*n* = 7), however, provided a reminder. According to Pam, using an SM tool did not always start by consuming information only; "it depends on the use case." For example, some tools existed to function as project management or collaboration tool. When using this type of tools, instructional designers naturally used them accordingly. Using such tools would have typically been categorized as Level 2.

***Developing Individual Learning Goals***

Examples provided by nearly half of the participants (*n* = 5) revolved around using social media to assist them in developing individual learning goals. These individual learning goals might include an intent to learn a particular topic personally, but the topic might be related to the instructional design field. Payton found that "social media is a great place to get ideas for professional development." That was possible because instructional designers could find the latest topics and trends in the field, such as promoting equity through instructional design (e.g., mentioned by Gwen, Emilio, and Payton). The individual learning goals might include big and small (or chunked) learning goals. According to Pru, these goals were achievable through various learning activities. In LinkedIn Learning, she could review a big topic, including multiple chapters or sections, at once. However, because the topic was chunked into small segments, she could choose to review only one or a few sections or skip some sections.

**Level 2: Social Interaction and Collaboration**

When analyzing instructional designers' experiences based on the Level 2 of Dabbagh and Kitsantas' (2012) framework, I discovered the following themes: (a) sharing knowledge with others, (b) engaging and networking with others, (c) inspiring and managing collaborative activities, and (d) facilitating a learning community. Table 11 shows the participants' experiences in Level 2 and the number of mentions.

**Table 11**

*Participants' Level 2 Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Sharing knowledge with others | Engaging and networking with others | Inspiring and managing collaborative activities | Facilitating learning community |
|---|---|---|---|---|
| Abigail | ● | ● | ● | |
| Angela | ● | ● | ● | |
| Ari | | | ● | |
| Emilio | ● | ● | | ● |
| Gwen | ● | ● | | ● |
| Jin | | | ● | |
| Jovina | ● | ● | | |
| Kelsey | | ● | | |
| Kiara | ● | | | |
| Ning | ● | | | |
| Pam | | ● | | |
| Payton | ● | ● | ● | |
| Prisca | ● | ● | | |

Table 11 (continued).

| Pseudonym | Sharing knowledge with others | Engaging and networking with others | Inspiring and managing collaborative activities | Facilitating learning community |
|---|---|---|---|---|
| Pru | ● | ● | | |
| Sari | ● | ● | ● | |
| Tamara | | ● | ● | ● |
| Whitney | ● | | | |
| Number of mentions | 19 | 25 | 9 | 5 |

*Note*. The symbol ● shows that the respective participant's experience supported the theme.

### ***Sharing Knowledge***

Once instructional designers were more comfortable using social media, they (n = 12) shared knowledge with others by providing answers, insights, and advice. Jovina was willing to help other instructional design colleagues: "there are times when I comment […]. People are asking a particular question; I know I have the answer to it, or I'm able to help." Ning and Sari took it further; they were happy to share their curated resources to help others find answers. In addition to simply answering questions, these instructional designers shared their insights. Ning and Kiara wrote articles related to instructional design. Kiara particularly shared her insights from her experience as an instructional designer and provided examples beyond the instructional design field by writing blog articles. Abigail and Pam also actively generated posts, articles, or short videos sharing quick tips with fellow instructional design professionals. Abigail particularly called it "putting out ideas and thoughts." Another way to share knowledge was by providing feedback on project progress through a social media tool, as mentioned by Jovina.

Using a project management tool, Jovina's team could provide project updates, and she could review the updates. Then, Jovina would "give feedback, and then […] finalize it."

### *Engaging and Networking*

More than half of instructional designers (*n* = 12) engaged and networked with colleagues on social media. One way was through crowdsourcing collective knowledge of their peers in their networks. When Kelsey had a question or needed help with a project, she knew "that they [professional networks] are going to […] help […] using their expertise." Prisca's experience supported the crowdsourcing idea. She collected information for "mostly […] finding or inspiring myself or the team with new ways of doing things." Another way to engage and network with colleagues on social media was by gradually forming a professional relationship. Instructional designers could meet colleagues on social media and engage in conversations that led to collaborative activities even before they met in person. For example, Pam started a conversation with a colleague and slowly increased her engagement level. One conversation led to collaborative activities (e.g., getting involved in a podcast episode and co-facilitating a workshop session), and the next thing she knew, they "formed a relationship." Similarly, Tamara "met people through those [social media] groups," and Jovina eventually met the "people in person at conferences." Sari's story could sum this up; she had "become friend with a lot of other instructional designers."

### *Inspiring and Managing Collaborative Activities*

Instructional designers (*n* = 7) used social media technology to inspire future and manage collaborative activities. For example, Sari, who joined several professional groups on social media relevant to her professional development, interacted with the members of those groups and collaborated with them when there was an opportunity. Meanwhile, Abigail once interacted in

conversations related to emerging technology "like VR, AR, gamification [that] can be very costly" and might not be convincible to stakeholders due to the cost factor. She noted, "So, things like that I'm finding helpful for collaboration."

A small number of instructional designers ($n$ = 3) purposely used tools like Trello and Wrike to manage collaborative activities with the team members. Tamara's workplace used Wrike to keep everyone in the team updated. Ari and Jovina used Trello to ensure everyone in the team stayed on task and on time. Ari particularly utilized Trello to lay out the course design process, brainstorm the design strategies with faculty members, and list the timeline needed for the entire process. Likewise, Jovina took advantage of Trello features so that the team could provide updates and feedback to each other.

### *Facilitating Learning Community*

A minority of instructional designers ($n$ = 3) facilitated a learning community on social media. One common way was by administering a group on social media. Tamara, for example, had created a professional group before she worked as an instructional designer. Therefore, engaging in a learning community on social media was not new to her. Emilio had facilitated professional engagement on Facebook groups and Twitter. In addition, Emilio had prior experience in starting "a departmental blog to kind of be a space for conversations, a space for sharing out new resources, [and] reminders" that the faculty could join. Likewise, Gwen administered a learning group for her institution, especially for engaging the faculty members.

## Level 3: Information Aggregation and Management

The following themes were detected within Level 3: (a) curating information or resources, (b) organizing and managing the curated information, and (c) referencing to the

curated information. Table 12 shows the participants' experiences in Level 3 and the number of mentions.

***Table 12***

*Participants' Level 3 Experiences, Number of Mentions, and Examples of In Vivo Codes*

| Pseudonym | Curating information or resources | Organizing and managing the curated information | Referencing to the curated information |
|---|---|---|---|
| Abigail | ● | ● | ● |
| Angela | ● | | |
| Ari | | | |
| Emilio | ● | ● | |
| Gwen | ● | ● | ● |
| Jin | | | |
| Jovina | ● | ● | |
| Kelsey | ● | | |
| Kiara | ● | | ● |
| Ning | ● | | |
| Pam | ● | ● | |
| Payton | ● | ● | ● |
| Prisca | ● | | |
| Pru | | ● | |
| Sari | ● | ● | |
| Tamara | ● | ● | |
| Whitney | ● | | ● |
| Number of mentions | 30 | 14 | 5 |

*Note*. The symbol ● shows that the respective participant's experience supported the theme.

### *Curating Information or Resources*

Instructional designers (*n* = 14) curated the information and resources. Curating information or resources seemed to fall within Level 1 of Dabbagh and Kitsantas' (2012) framework. However, I detected a self-reflection activity when instructional designers curated information. Most instructional designers did not simply collect information from social media. However, they constantly analyzed the information and reflected upon the contexts before deciding whether to include the information in their curated lists. For this reason, the theme would be suitable for Level 3. For example, Pru is "a fan of a good spreadsheet." According to her, a good spreadsheet was not simply to list all resources she visited or found. Instead, the curated resources in her spreadsheet had gone through a "real-time decision matrix."

Curating information or resources could take place by bookmarking and categorizing them. Instructional designers emphasized that they did not simply bookmark the information. When they used bookmarking tools (e.g., browser bookmarking or other tools such as Digg), they created folders and/or sub-folders based on the topics they thought appropriate. Another way was by using Google Docs to add notes and share them with colleagues. Other tools such as Feedly, Mendeley, OneNote, Pinterest, Trello, and Zotero were also helpful to curate resources. Payton said using these tools also allowed him to "annotate," and Gwen said she could "share it [the resources] with another curriculum specialist" at work.

### *Organizing and Managing the Curated Information*

More than half of the instructional designers (*n* = 9) organized and aggregated the curated information. Beyond revisiting their curated information, they read again, sorted, re-categorized, removed, and connected multiple sources of information. For example, Payton said, "I'll go back to it sometime in the next few days and actually read through it and annotate it for its connection

to some other articles" as well as conducting a regular sorting, clean-up, and organization in Zotero and Mendeley. Pam organized her curated resources in a project management tool. Hence, when she worked on her project, she could "remember to check them [pieces of information] out […]." Jovina provided a unique example. She curated resources and notes from her professional development (e.g., webinars and conferences) on her Trello boards. She revisited them to read again, re-organized the professional development topics, and be inspired.

Two out of the nine instructional designers shared a distinctive way to aggregate the information. The curated information was not usually linear to be simply listed on a page. Therefore, Emilio used coda.io to write his reflective thoughts—in his words, it is "just my own journal"—and then connect different information found on various pages and subpages. Likewise, Prisca used tools such as Obsidian and Remnote. Prisca, who reportedly absorbed the information in a non-linear way, preferred to "create links between different pages and different articles and different works, and kind of create a big network of information." Although it might look messy initially, it represented her thought process. She referred to an analogy of "leaves growing on trees" to represent her aggregated knowledge.

### *Referencing to the Information*

A minority of instructional designers ($n$ = 5) shared that they made references to the aggregated information while at work. For instance, Whitney referenced the information when presenting an innovative idea to the team members and attempting to convince them. This innovative idea might be a technique that was unusually conducted by the team. Likewise, Kiara would "make reference to it in meetings" to present an idea to her team. Gwen also made a reference to the information when answering a question. She said, "Oh, I think I have things about how to do active learning on Zoom. So, let me go find those."

## RQ3: Challenges Experienced When Conducting Professional Learning Using Social Media?

I discovered several themes: (a) information overload, (b) ethical and privacy concerns, (c) issues encountered individually, and (d) stakeholder buy-in regarding social-media-supported learning. Table 13 shows the participants' challenges and the number of mentions.

**Table 13**

*Participants' Challenges, Number of Mentions, and Examples of the In Vivo Codes*

| Pseudonym | Information overload | Ethical and privacy concerns | Issues encountered individually | Stakeholder buy-in |
|---|---|---|---|---|
| Abigail | ● | ● | ● | |
| Angela | | ● | | |
| Ari | | | | ● |
| Emilio | ● | ● | ● | |
| Gwen | ● | ● | | |
| Jin | ● | | | ● |
| Jovina | ● | | | |
| Kelsey | ● | ● | | |
| Kiara | | ● | ● | |
| Ning | ● | | | |
| Pam | ● | | | |
| Payton | | | ● | ● |
| Prisca | ● | ● | ● | |
| Pru | ● | ● | ● | |

Table 13 (continued).

| Pseudonym | Information overload | Ethical and privacy concerns | Issues encountered individually | Stakeholder buy-in |
|---|---|---|---|---|
| Pru | ● | ● | ● | |
| Sari | | ● | ● | |
| Tamara | ● | | | |
| Whitney | ● | ● | | |
| Number of mentions | 24 | 14 | 12 | 5 |

*Note*. The symbol ● shows that the respective participant's experience supported the themes.

**Information Overload**

Most instructional designers ($n$ = 12) mentioned the information overload on social media. In Kelsey's words, "there is so much noise out there […]." Pru agreed because she found similar questions and answers being posted on various social media platforms and the same poster who repeatedly post the same information. Within the abundant information, there might be inaccurate information. Gwen remembered receiving bad advice. Ning noted, "There's also people who don't know what they're talking about." Therefore, instructional designers attempted to filter the information. However, finding the time to sift through the abundant information was also challenging. In addition, they could not access social media all the time because they had a day job or were busy. They might have missed useful information when they were not on social media. When they could access social media, the useful information might be buried among the overwhelming posts. Jovina provided an example: "So, if people are posting all day, by the time you get to it, maybe you missed something you would have found super useful, but now it's gone." Prisca added, "[…] you turn around for one second, and you have a ton of posts."

**Ethical and Privacy-Related Concerns**

Instructional designers (*n* = 11) reported their ethical and security concerns. Because there were many social media users, it was not easy to ensure that everyone had appropriate ethics regarding using social media. For example, instructional designers encountered colleagues who did not apply good netiquette, such as trolling behaviors. Kelsey had met "haters, […] disrespectful people […] who just want to argue." Angela encountered people who "would look and find mistakes." According to Tamara's experience, some people would be "gatekeeping" and criticizing other people's insights based on their backgrounds, for example, by saying:

> […] if you don't have this experience, you're not a quote, unquote true instructional designer. Or, if you don't have this degree or if you haven't gone through this program, you're not an instructional designer […].

Tamara added, "[…] it feels like there are some people trying to discourage new instructional designers because they didn't do or come into the field in a particular way." Sari encountered "somebody with a snarky attitude" toward new instructional designers. When new instructional designers asked basic questions, this snarky individual would respond, "Well, that's a dumb question! […]. A real instructional designer would know this or that […]."

Instructional designers also had privacy concerns. They worried about the data being collected and tracked on social media. Kiara was concerned, "[…] that privacy line keeps getting blurry when you use social media because they know. They actually keep track of all the activities." Emilio shared a similar concern: "Our actions are tracked beyond for the purposes of selling us more things […]. Some seem to be fairly harmless; some seem to be nefarious purposes […]."

**Issues Encountered Individually**

Some instructional designers (*n* = 7) included stories regarding issues encountered individually. For example, instructional designers located outside the U.S. sometimes experienced limited access to reliable internet. When I interviewed Kiara, the internet connection dropped. Kiara also emphasized the limited access to social media sites, including those requiring a paid subscription. Even within the U.S., the social-media access limitation might still exist. Payton shared that some institutions and school districts might block specific sites, including social media sites. According to him:

> Some people may only be able to access it at home on a phone or whatnot. […] then, you get home, and then your personal life takes over, and you might not come back to it right away. Or you're not in the headspace to do it.

A minority of instructional designers (*n* = 4) mentioned that they had a fear of judgment when posting questions. Abigail, Kelsey, Prisca, and Sari mentioned that imposter syndrome sometimes crept in when they wanted to ask questions or offer insights. They seemed to worry if colleagues might misinterpret their instructional design knowledge and skills just because they asked questions. Prisca stated, "[…] let's face it, I don't want to appear stupid […] asking my question."

Two instructional designers mentioned a challenge in regard to separating the use of social media personally and professionally. Sari provided an example: "sometimes I may only want to go on there for professional reasons, but I'm also seeing […] other social things that people may be sharing that I don't really want to see when I'm going professional." Emilio encountered a similar challenge. Even if someone attempted to maintain the balance between personal and professional uses of social media, the algorithms existed. Someone might be

reading on social media for professional purposes, but it might also show other information based on previous personal interests. Emilio noted:

> They [social media tools] are going to know about you, and that's going to inform what they show you. So, you can never really delineate the two, which means [...] even if you're using it for one purpose, you are going to inevitably encounter things that are related to you in your personal life.

**Stakeholder Buy-in on Social-Media-Supported Learning**

A few instructional designers ($n$ = 3) reported that the society might not accept social-media-supported learning positively yet. Particularly in academia, information acquired from social media might not be deemed credible enough. Payton specifically said, "[…] it's kind of like gray literature." However, these resources might have provided practical examples. Therefore, these resources could have been overlooked if people did not perceive them as credible resources. Jin, who worked in a higher education setting, confirmed this. He did not receive sufficient stakeholder buy-in regarding using information acquired from social media. According to him, there might be people with 30 years of working experience who shared their valuable experiences on social media. Unfortunately, academic stakeholders might not take their insights as openly because they were not peer-reviewed.

# CHAPTER IV

# DISCUSSION

Overall findings suggest an application of SRL phases occurring within instructional designers' experiences using social media for professional learning. In addition, instructional designers' reported use of social media tools suggested self-support activities in developing self-regulation. The discussion of the dissertation findings is expounded below, followed by the practical implications, limitations and future research recommendations, and conclusion.

## Applying SRL Phases in Social-Media Supported Professional Learning

According to the literature review, learners applying SRL commence their learning event by being mindful of their sources of motivation and setting goals, followed by the execution of strategies and continuous adjustment of the strategies to improve learning (Bembenutty, 2011). This application of SRL takes place in three recursive phases: forethought, performance, and self-reflection (Zimmerman, 2000a). The three phases can be seen in the application of SRL in the professional context (Siadaty et al., 2012). In the forethought phase, working professionals analyze a task, set a goal, and make a plan (Siadaty et al., 2012). When performing a task (in the performance phase), they select and apply suitable strategies and revise them (Siadaty et al., 2012). In the self-reflection phase, they self-evaluate and reflect on their performance and share their learning experiences with colleagues (Siadaty et al., 2012). Carefully associating the results with the literature review related to SRL application, I expounded the discussion into three key points below.

### Perceiving Motivation and Social Learning Nature as Catalyst of Forethought Activities

The present study's findings align with the literature review regarding the three phases of SRL. Forethought activities include task analysis (i.e., learners identify the tasks that need to be

performed), goal-setting, and plan-making that require motivation (Zimmerman, 2002). Instructional designers participating in this study shared their experiences regarding their motivation in using social media. They seemed to perform a metacognitive thought process to understand where they were and where they wanted to be in terms of performance quality. When they were aware of a need to learn more and fill in a gap, whether to improve soft skills or acquire ideas on various design strategies, they were motivated to set goals and make plans. Even when they did not perceive a knowledge gap, they were proactive in acquiring new knowledge because they wanted to be prepared in case a future project required a different design practice or strategy. This self-motivation serves as a starting point in the forethought phase, which can potentially lead to a high quality of SRL application in the subsequent phases (Zimmerman, 2022).

The findings suggested that the participants had goals in mind (i.e., long-term and short-term goals) with using social media. The fact that some participants had thought of a long-term goal suggested that the use of social media was part of their strategies to help them gradually achieve such a goal. In addition, working professionals seek learning opportunities to keep up with job demands, stay abreast with the profession, and ensure successful job performance (Littlejohn, 2017). Therefore, it was expected that all participants in this study had a short-term goal behind their social media usage (e.g., to help them accomplish the current task at that moment).

According to the SRL@Work model, within the forethought activities, learners—who are working professionals in this context—analyze the task context and identify the requirements to complete the task (Siadaty et al., 2016a, 2016b). Also, they set goals and plans (Siadaty et al., 2016a, 2016b). From the instructional design participants' experiences, I heard stories about how

they analyzed and assessed what a task would entail. If it entailed activities that they had never performed before or needed an improvement of soft skills, instructional designers would set a short-term goal to obtain just-in-time knowledge and resources by taking advantage of social media affordances.

Furthermore, instructional designers followed up their short-term goal(s) through strategic planning, such as participating in virtual professional development opportunities that offer time flexibility and learning from colleagues' strategies and techniques—all were feasible through using social media. These experiences were expected; according to Littlejohn (2017), working professionals tend to seek and adopt the strategies from colleagues who have been in similar tasks and completed such tasks successfully. If the strategy works for other colleagues, it will potentially work for them as well. Therefore, self-regulated working professionals are likely to believe in the collective knowledge gained from their peers (Littlejohn et al., 2012; Siadaty et al., 2016b).

The experiences of instructional designers also resonate with social-based learning theories. For example, learners tend to be eager to learn about socially modeled actions from those who are more proficient (Schunk & DiBenedetto, 2020). The competent models may be peers who have successfully performed a similar task. While observing, learners gradually develop a belief; if others can perform it successfully, then they will potentially be able to do so (Schunk & DiBenedetto, 2020). The instructional designers' experiences in the forethought phase indicated the imperative role of social nature in a learning process (e.g., learning through observations and modeling), echoing Bandura's work (1971, 1978). For instance, they visited social media with a goal in mind: to ask others about strategies, observe the conversations, or even observe the more experienced instructional designers. Also, it seems that the task analysis

and strategic planning performed by instructional designers in the forethought phase can catalyze successful professional learning because learning happens as a result of learners' interactions with others, which can further yield knowledge creation and sharing (Brieger et al., 2020; Slootweg et al., 2013).

**Modifying Current Strategies**

The motivation and social learning nature of a social-media-supported learning environment, as mentioned above, can serve as a catalyst for the forethought activities. According to the literature review, high-quality initial SRL activities potentially lead to the successful selection of strategies, resulting in a strong regulation of learning effort (Dabas et al., 2020; Yamada et al., 2017; Zimmerman, 2002). The experiences of the instructional designers participating in this study included the performance activities in the form of trying and applying tips suggested by colleagues and changing the current practice. Instructional designers seemed to be willing to adapt their current strategies for a better or smoother design process.

Such a strategy-adaptation process may begin with help-seeking. According to the SRL-related studies conducted in the formal education setting, help-seeking is a crucial self-regulatory strategy, positively linked with learning achievement (Bembenutty & White, 2013; Karabenick & Newman, 2006; White, 2011). Therefore, when guiding students to acquire SRL skills, teachers encourage students to seek help from their more proficient peers to understand a challenging topic (Charoenwet & Christensen, 2016). One explanation is that help-seeking may involve one's awareness of their own knowledge and an understanding that others' knowledge can serve as a learning source (Milligan & Littlejohn, 2016). Milligan and Littlejohn (2016) additionally found that working professionals perceived the experiences of others were valuable to broadening knowledge even if they did not participate in the online discussion. In other words,

they could find help either by reading the existing posts or asking questions. The results of this present study are coherent with the existing literature. The instructional designers sought help when they felt a need to find ideas for better design strategies. Also, there could be times when they needed to bounce off ideas, especially when they had limited on-site colleagues or resources. Taking advantage of the social media affordances, instructional designers could search previous conversations or post a question to crowdsource ideas from professional networks. These participants' experiences further suggested that there occurred an application of SRL. Notably, learners with SRL skills do not hesitate to ask for help when they need to identify strategies to enhance their learning (Chao et al., 2018; Cheng & Tsai, 2011). In addition, these experiences indicated the presence of the community of practice, wherein people with similar goals and interests can solve a problem together, request information or resources, and seek others' experiences in dealing with a problem, among others (Wenger & Wenger-Trayner, 2015).

According to Zimmerman (2002), a successful performance phase of SRL requires self-control and self-observation. Learners take control of which strategies to experiment, use, monitor, and adjust while attempting to achieve a learning goal (Siadaty et al., 2016a; Zimmerman, 2002). In this study, instructional designers changed their practices or were inspired to tweak their strategies after learning from others. They adjusted the way they worked, modified design methodology, and adopted more efficient use of authoring software. One instructional designer now could present and discuss the relevant terms, theories, and principles more fluently. Another instructional designer had improved the quality of her storyboards; her team now hardly asked questions and clarifications when using her storyboards. These experiences suggested that instructional designers took charge of the strategies to try, apply, monitor, and adjust, resonating with Siadaty et al. (2016a) and Zimmerman (2002).

In previous research, using social media may be perceived as a distraction; thereby, it sometimes may not help enhance time management (Dabbagh et al., 2012; Dabbagh & Kitsantas, 2013; Dabbagh et al., 2015). However, a few instructional designers under study reported using social media tools specifically designed for time management to manage tasks and timelines. Some participants consistently shared that the tools such as Wrike, Box, and Trello could help them stay on task and on time on both individual and team projects. These social media technologies, specifically designed to assist project and time management, might not have existed or were probably still in an infancy stage years ago. Therefore, this specific present finding suggested the relevance of this dissertation study and potentially contributed to the instructional design profession and literature.

**Being Open-minded to Promote the Readiness of Self-reflection**

SRL-related studies have highlighted the critical role of self-reflection (Dabbagh & Kitsantas, 2012; Siadaty et al., 2012; Siadaty et al., 2016a, 2016b; Zimmerman, 2000). The self-reflection phase occurs when learners evaluate their performance, reflect upon their learning experiences, and plan to adopt or adapt a better strategy for improvement (Siadaty et al., 2016a; Zimmerman, 2000). Beyond self-evaluating, the self-reflection phase involves causal attribution—learners' beliefs regarding the cause of a failure or success (Zimmerman, 2002). Learners with SRL skills tend to attribute a failure to an unsuitable strategy instead of a fixed ability and are likely to be motivated to adjust the strategy (Zimmerman, 2002). The present study suggested that instructional designers' open-mindedness would play an essential role in self-reflection activities. According to the participants under study, being open-minded enhanced their self-awareness about their performance. They noted that, without exercising an open-

mindedness, there might have been barriers to the self-reflection phase, and it could lead to inappropriate causal attributions.

A few SRL-related studies in the formal education context include a discussion on open-mindedness, which is related to motivation toward changes (Fokkens-Bruinsma et al., 2021; Hooshyar et al., 2019; Russell & Warner, 2017). In addition, conducting a metacognitive activity requires open-mindedness (Russell & Warner, 2017). I detected the keywords such as motivation and metacognition in this regard. The open-mindedness the participants reported might possible be occurring before their self-reflection phase. This open-mindedness topic deserves further exploration to expand SRL-related literature that intersects with professional learning within social media. This current dissertation highlights the key role of open-mindedness and provides insights regarding future research opportunities, such as exploring where and how open-mindedness can take place in an SRL cycle.

### Developing Self-Regulated Learning in the Professional Learning Context

Through addressing RQ1 above, I discovered findings in which the experiences of instructional designers suggested an application of SRL within social-media-supported professional learning. However, how the application of SRL developed over time deserves an exploration, wherein RQ2 addressed such an exploration. The affordances of social media allow learners to customize their own learning, in both personal and social learning spaces, whereas the development and application of SRL skills are essential to promote self-directive learning characteristics (Dabbagh & Kitsantas, 2012; Dabbagh & Kitsantas, 2013; Dabbagh et al., 2015). Guided by Dabbagh and Kintsantas' (2012) framework, I explored the experiences of instructional designers self-supporting the development of SRL.

### Bridging Personal and Professional Learning

Instructional designers' initial use of social-media-supported learning highlighted the importance of learner-centeredness and personal learning goals, aligned with the Level 1: Personal Information Management of Dabbagh and Kitsantas' (2012) framework. As expected, most instructional designers started utilizing social media for personal before professional uses. For example, they tried out new social media platforms, explored the features of the platforms, simply connected with close friends and relatives, and achieved personal learning goals. These experiences seemed to represent the creation of personal learning space, echoing existing relevant studies (Dabbagh & Kitsantas, 2012; Dabbagh & Kitsantas, 2013; Dabbagh et al., 2015; Martindale & Dowdy, 2010). For instance, I found examples from the instructional designers' experiences, such as acquiring knowledge for personal fulfillment that may also address future learning needs in a professional context. These findings can be contrasted with SRL-related studies within the formal education context. In the formal education context, the learning process is more structured than informal learning, guided by specific course objectives, curriculum, or standards (Littlejohn, 2017). However, in the informal learning context (e.g., social-media-supported professional learning), unintentional learning can occur (Eraut, 2000), partially because it is not limited by curriculum and schedule (Muljana et al., 2021; Ritcher et al., 2011). Thus, it was expected to hear from the instructional designers that their personal learning goals, initially intended to achieve personal fulfillment, might result in the construction of knowledge and skills usable for completing a future task at work.

### Providing a Venue for Social Interaction Fostering SRL

Instructional designers shared that consuming the information and asking questions on social media (e.g., reading people's posts and comments) were their tactics in conducting Level 1

activities. These activities can be associated with learning in a Community of Practice (CoP). According to the literature review, CoP resonates with Bandura's (1971, 1999) social learning theory emphasizing the role of observing and modeling other people's activities as part of a learning process. Learning in a CoP occurs through social interaction and knowledge sharing (Wenger, 1998), especially in an informal setting (Lave & Wenger, 1991). Learners who are new to learning through interactions with others can start as peripheral participants (Lave & Wenger, 1991) and slowly increase their participation as they become familiar with the community (Lai & Chen, 2014). The present study findings resonate with such existing literature. The fact that instructional designers' strategy in Level 1 was related to *only* asking for and reading information suggested that they might be aware of a strategy to regulate knowledge-seeking by gradually increasing their social interactions (Romero-Hall et al., 2020).

The experiences of the instructional designers regarding Level 2 indicated the activities in increasing interactions within social-media-supported learning environments. Associating the findings with both Dabbagh and Kitsantas' (2012) framework and Wenger's (1998) CoP concept, I found the participants to be more comfortable with social-media-supported learning at this point. The participants expressed that they were happy to share knowledge, engage, and network with others; this suggested an expansion of the learning space from personal learning to social learning space (Dabbagh & Kitsantas, 2012, 2013; Dabbagh et al., 205; Martindale & Dowdy, 2010).

Interacting (e.g., engaging, networking, collaborating, and sharing) in the social learning space might have provided opportunities for the instructional designers to self-support their SRL development through self-monitoring their own strategies. For example, while instructional designers monitored their task strategies, they might perceive a need to adjust the strategies or

find a better strategy. In this case, they then reached out to colleagues through social media platforms to seek help or ideas. Activities such as sharing knowledge or successful strategies in social media might also be an outcome of self-monitoring. For instance, if instructional designers found a strategy that worked for them, this could mean they had monitored their own performance and thereby recognized the value of sharing it with others. Without monitoring their own performance, they might not have found which strategies worked and which did not.

Using Wenger's (1998) CoP lens, Eaton and Pasquni (2020) highlighted a research gap questioning how the knowledge learned and resources gained from social-media-supported CoP might translate into professional practice. The present study findings related to Level 2 seem to suggest a potential answer. As instructional designers concurrently developed SRL skills, the self-monitoring actions that motivated them to engage, collaborate, and share knowledge with others inspired them to translate the new information into design practices. Notably, the instructional designers under study shared their experiences that they either adjusted or tweaked their design strategies as they decided to apply the information, insights, and/or resources provided by their peers in social-media-facilitated communities. Furthermore, I heard from the instructional designers' experiences that they referred to the curated or aggregated information acquired from social media as necessary. For instance, they referenced it at a meeting attempting to convince their design team to adopt an alternative design strategy or practice.

**Promoting the Cyclical Process of Self-Regulated Learning**

Zimmerman postulated that SRL process is cyclical (Zimmerman, 2008). As learned from the literature review, Zimmerman's (2000) SRL model consists of three recursive phases: (1) in the forethought phase, learners set a goal and identify the sources of motivation; (2) in the performance phase, learners determine, execute, and monitor their learning strategies; and (3) in

the self-reflection phase, learners self-evaluate their performance and plan to adopt and/or adapt a better strategy for improving their learning process. By reviewing the outcomes of the self-reflection phase, learners are likely to be motivated to move to the next cycle of SRL process, which will start with a new forethought phase (Zimmermann, 2008; Zimmerman & Kitsantas, 1999). It was not a surprise that I found a self-reflection activity (usually conducted in Phase 3 of SRL) when instructional designers curated information for individual purposes (typically categorized as Level 1 in Dabbagh and Kitsantas' (2012) framework). They might be conducting Level 3 and Level 1 activities almost concurrently. In other words, instructional designers might be evaluating and reflecting on their own needs and contexts when they gathered information from social media. Another possible explanation is that as adult learners and working professionals, instructional designers might have already developed a certain level of SRL skills during their professional journey. An SRL phase they were conducting at that moment might be a causal result of an earlier SRL phase. As Zimmerman (2008) mentions, the variables within each SRL phase are correlated, and there are "causal influences of SRL processes across phases" (p. 178). Therefore, the overlapping codes in the results of the present study appear to suggest the interconnections among the three phases of SRL.

The participants of this study are instructional design practitioners. Therefore, the characteristics of the design process they typically perform could not be overlooked and could possibly be associated with their SRL experiences. In the real-world setting, instructional designers conduct a design process iteratively (Meléndez et al., 2014; Muljana et al., 2020b; Roytek, 2010; Tracey & Boling, 2014). There is a possibility that conducting iterative activities regularly may influence instructional designers on other aspects, such as in applying SRL strategies. As conducting SRL phases should occur cyclically (Zimmerman, 2008), the

instructional designers participating in this study—once again, possibly getting used to performing the iterative design activities—might have been able to smoothly adopt the SRL phases in a cyclical manner. Such a phenomenon deserves a future in-depth exploration.

## Overcoming the Challenges

The challenges shared by the instructional designers were overall coherent with existing research. Carpenter and Harvey (2019) explored the educational professionals' challenges of using social media for professional learning through the lens of the social ecology model, wherein intrapersonal and interpersonal factors were included within the model. Intrapersonally, keeping up with the information influx would require time at the professionals' ends (Carpenter & Harvey, 2019; Eaton & Pasquini, 2020; Luo et al., 2020) and a balance between personal and professional uses (Carpenter & Harvey, 2019). The instructional designers under study shared similar experiences. They encountered an overwhelming influx of information while being on social media. Most of them worked full-time, and they barely had time to access social media, read the information, and interact with others there. When they had time, the information was already buried among other abundant information. They might not be able to catch up with all information.

Interpersonally, professionals are grateful to have colleagues within their networks; however, they also see irrelevant posts and self-marketing messages from their networks (Carpenter & Harvey, 2019). Also, information on social media may include mis- and disinformation (Greenhalgh et al., 2020). It was not surprising that the instructional designers in the present study encountered similar challenges. They pointed out the abundant information that was not always valuable or relevant to their contexts. Sometimes, there were disrespectful comments made by peers, especially toward new instructional designers. However, the findings

from this study suggested that the development and application of SRL might potentially help overcome these challenges. For instance, instructional designers participating in the present study shared the use of critical thinking to check and select the information instead of simply absorbing and applying it. There seemed to be an information filtering system conducted through the forethought and self-reflection phases. It was possibly due to a self-awareness about their own individual goals and contexts. Some instructional designers found a strategy by taking advantage of the existing features on social media. For example, they could filter and sort the information using specific keywords relevant to the topic they were searching specifically. This suggested that applying SRL strategies might have helped the instructional designers overcome some challenges.

Dabbagh et al. (2015), who studied social-media-supported learning, reported that their participants mentioned cyberbullying and rude behaviors occurring in social media spaces. Another study also validated this, wherein disrespectful behaviors, such as displayed in defensive and offensive comments within provoking discussions, can happen (Carpenter & Harvey, 2019). Such behaviors may occur, especially since social media platforms are not highly-controlled (Luo et al., 2020), and “there is no referee on social media” (Carpenter & Harvey, 2019, Section 5.4. Online Educator Communities). Unfortunately, the instructional designers in this study also encountered similar situations. They saw rude comments toward new instructional designers and snarky remarks in argumentative discussions. Unsurprisingly, some instructional designers had a fear of judgment or self-confident issues when deciding to post questions or comments. However, the advantage of applying SRL within social-media-supported learning may potentially outweigh such a challenge. For example, learners who have developed a strategic forethought phase might be able to use their source of motivation in the form of self-efficacy.

According to the literature review, if learners have strong self-efficacy beliefs and clear goals, they can acknowledge their own capabilities (Schunk, 1991) using positive self-talk (Xu, 2013). In turn, they can potentially remain focused on only the relevant information while interacting on social media for professional learning purposes (Muljana et al., 2021). In addition, some participants of this study noted the importance of generating thoughtful questions and comments because their posts were public. Such awareness might help them monitor their own posts generation so that it would stay relevant and professional, which may suggest an application of self-monitoring within the performance phase. Such a topic is worth a future investigation.

Additionally, the challenges such as privacy issues and data surveillance deserve in-depth explorations. Such challenges appear in existing literature (Dabbagh et al., 2016; Marín et al., 2021; Nathan et al., 2014; Waycott et al., 2017). The instructional under study expressed similar concerns and acknowledged that some privacy-related issues might be beyond their control. It seems that the solution is not simple. It potentially needs efforts from multiple entities, such as institutions adopting appropriate data-privacy policies (Rosenberg et al., 2021) and educators promoting learners' data literacy skills (Marín et al., 2021). Intersecting such a research topic with SRL may garner relevant scholarly and practical implications. Notably, executing SRL strategies may promote learners' critical thinking skills and raise awareness of data privacy and surveillance issues.

## Implications for Practice

### For Instructional Designers

#### *1. Setting Goals and Determining Motivation*

Instructional designers participating in this study shared the benefits, challenges, and strategies of applying SRL to maximize their social-media-supported professional learning.

While they perceived the benefits of utilizing social media in the professional context, they also faced challenges. However, because they were goal-driven and had motivation to learn, they could focus their efforts and strategies. There is abundant, overwhelming information and resources on social media. When instructional designers focus their social media activities around their goals and motivation, they are likely to select relevant information and resources.

In addition, developing self-efficacy, plays an important role, especially for those who are new to the instructional design field. Self-efficacy is associated with prior experience and task familiarity (Zimmerman, 2000b). New instructional designers can reflect on their prior knowledge, skills, and abilities to the instructional design job context and focus on how to further amplify these transferable strengths to increase self-efficacy. Social-media-mediated CoPs facilitated online (e.g., Reddit and Facebook) can provide anonymity so people can ask sensitive questions without revealing identifiable information.

***2. Supporting the Development of SRL Skills***

SRL skills are established over time. Therefore, in the context of the formal education setting, learners are not likely to become self-regulators without training and practice opportunities (Dabas et al., 2021). However, working professionals are adult learners, and their learning needs are typically driven by job demands instead of course objectives (Littlejohn, 2017). Adult learners tend be more autonomous and motivated to learn (Tong et al., 2020). Instructional designers can use this strength as a foundation to self-scaffold the development of SRL skills while they learn and practice to become self-regulators. The experiences of this study's participants suggest Dabbagh and Kitsantas' (2012) framework supports the development of SRL skills.

Instructional designers can start at the basic level of interactions with social media and gradually increase their interactivity. For example, they can start by using social media to explore the features, think of the relevant information for professional development topics, develop individual learning goals, collect and manage the information and resources for personal and professional purposes, and observe how colleagues interact on social media. As they feel more comfortable, they can strengthen their interactions through knowledge-sharing and collaboration. Through interaction, they can simultaneously promote the identification and execution of suitable strategies relevant to their job demands. Additionally, instructional designers may want to self-reflect on their job performance and career progress. In addition, an open-minded self-reflection activity can be conducted to evaluate the information and resources gained from social media and its relevance to their job contexts.

Exercising critical thinking is an example of fostering SRL and may lead to positive outcomes in online learning environments (Broadbent & Poon, 2015). Critical thinking is helpful when learners engage with others, such as in peer or collaborative learning, where they must consider multiple perspectives (Cascolan, 2009). Both learning contexts (i.e., online and collaborative learning environments) align with the characteristics of social-media-supported professional learning. In addition, people encounter an influx of information when accessing social media, including mis- and disinformation. Therefore, critical thinking skills helps instructional designers check the information accuracy and credibility of the source, select relevant and useful information and resources, and consider multiple perspectives. Instructional designers may concurrently question whether the information (a) aligns with their goals, (b) resonates with their current contexts, and (c) echoes their design philosophy.

The implications above are specifically recommended for instructional designers who intend to pursue social-media-mediated professional learning and apply SRL simultaneously. They are based on the participants' experiences and aligned with existing SRL-related frameworks. Working professional from other fields may consider these implications with a careful translation of how the implications may apply to their own relevant job contexts, needs, and demands in their field.

**For Instructional Design Educational Programs**

Qualifications like knowledge of productivity software, soft skills (e.g., time management, persistence, collaboration, communication), and the ability to collaborate with diverse stakeholders frequently appear in instructional-design-related job announcements (Wang et al., 2021). Working independently is also among the highest-mentioned abilities (North et al., 2021). Additionally, capabilities to conduct lifelong learning and take ownership of professional development driven by self-motivation, self-directive learning initiative, and self-reflection have appeared in standards and model recommended by relevant professional organizations (Association for Talent Development, 2020; Piña et al., 2017). These qualifications highlight important keywords such as working independently, self-directive learning, productivity, and time management related to SRL, and other keywords—i.e., collaboration and communication—which can be achieved through strategies by taking advantage of social technologies.

Instructional design programs may consider continuing to promote the abovementioned qualifications to the learners and manifesting them in the curriculum. It is worth infusing SRL guidance into course activities to promote collaboration, communication skills, productivity, and time management skills like the facilitation of team-based project assignments in instructional-design related courses. While the instructor guides learners in collaboration and communication

aspects, instructional guidance providing SRL practice opportunities can be integrated to promote the team productivity and time management skills. Learners can start by staying focused on the project goal, then determine the strategic steps to accomplish the goal, and increase team productivity, which may include a way to manage the project timeline. Learners can explore and choose productivity and time management techniques. It is also worth adding an individual reflective assignment to allow learners to self-evaluate their own performance and contribution to the team project. These practice opportunities could be useful in the future when the learners enter the workforce (e.g., working with a design team, collaborating with various stakeholders, interacting with clients, documenting the design process and lesson learned for future improvement).

**For Employers and Professionals with Supervisory Roles**

Working professionals are likely to be motivated to pursue professional learning, especially when they encounter new tasks requiring new procedures (Littlejohn, 2017). Therefore, informal learning may be suitable to help them meet the just-in-time learning needs because it is not bounded by a specific curriculum and timeline. Instructional designers can reach out to their colleagues on social media professional groups to ask questions regarding how to tackle a task challenge and exchange best strategies (Muljana & Luo, 2021).

Because informal learning potentially addresses the just-in-time professional development needs, employers are likely to support it. Notably, it can assist employees in expediting the product development cycles (Carliner, 2018). Also, employers are aware that this type of informal learning can enhance the employee's performance, and in turn, it potentially contributes to the overall organizational performance (Yanchar & Hackey, 2015). Therefore, it may be worthwhile for employers to promote informal learning opportunities facilitated through

social media. Employers and professionals with a supervisory role may review their current organizational and departmental goals and whether any performance gaps can be addressed by informal learning supported through social media. If there is a performance gap (e.g., a need to increase the efficiency of a product development cycle), testing a procedure regarding the use of social media at work may be an idea worth considering. A team leader may initiate a pilot test of a productivity tool (e.g., Trello, Asana, or Wrike) to promote strong collaboration, communication, and time-management strategies. A small group may start using the tool first, then share how they use it to manage project updates, tasks, timelines, and collaboration in regular team meetings. Lessons learned can inform the actual future adoption to potentially boost efficiency and productivity.

## Limitations and Future Research Recommendations

Integrating the thematic analysis approach into the phenomenological study, I could garner the patterned response (Braun & Clarke, 2006) based on the participants' experiences (Van Manen, 1997). However, there are a few limitations in this study that revolve around the number of participants and qualitative self-report instrumentations. The participants recruited for this study consist of 17 working professionals with an instructional design role. While I attempted to include diverse participants from various work sectors and educational backgrounds, there might be underrepresented individuals (e.g., participants from additional countries with different cultures where social media access is limited). A story related to an experience with the phenomenon under study might be deemed necessary by one participant and, thus, was reported by the respective participant. However, other experiences could have been acquired if more or different instructional designers had participated in the study. I attempted to lessen this limitation by achieving data saturation, wherein new perspectives stopped emerging

from the participants' stories (Boyd, 2001; Groenewald, 2004). In addition, I used qualitative self-report instrumentation. Therefore, the study findings were primarily derived from the participants' perceptions, opinions, and stories. Each participant might have individual interpretation and judgment while deciding which experiences they wanted to share during the interview. This individualized decision might suggest that participants' own contexts influenced the reported experiences. One way to minimize the effect of this limitation was performed by recruiting participants with various job titles and duties to acquire multiple perspectives. In this study, I could analyze multiple perspectives by contrasting data with different meanings and validating those with similar meanings (Arksey & Knight, 1999; Bloor, 1997; Groenewald, 2004; Holloway, 1997).

While I addressed the abovementioned limitations through data saturation and recruiting instructional designers from various sectors to acquire multiple perspectives, future research may consider involving multiple data sources beyond self-report instrumentations. For example, a quantitative study approach to analyze the digital traces (e.g., posts, comments, and reactions) in social media may be suitable for examining working professionals' interactions and contributions. Particularly, employing digital traces allows researchers to explore the behaviors on social media in a natural manner (Lee et al., 2017) by investigating "a moment-by-moment picture of interactions over extended periods of time" (Lazer et al., 2009, p. 722). The digital traces can be analyzed deductively (using a coding scheme based on an existing SRL-related theoretical framework) to further address how an SRL application may occur in social-media-supported learning. The digital traces may also be analyzed inductively to find out what the professional learning needs and trending topics are. Because mining the digital traces can result in an enormous amount of data, a quantitative data analysis approach using machine learning is

helpful in conducting both deductive and inductive coding. The findings will potentially expand the SRL-related literature in the context of social-media-supported professional learning and inform educators in the instructional design field regarding the knowledge, skills, and abilities relevant to the real world.

As described in the Results chapter, I found some codes that fit in two or more themes. I postulated that the overlapping codes might be related to the interconnections across the SRL phases. According to Zimmerman (2008), there are correlations between the variables in each SRL phase, and "causal influences of SRL processes across phases" (p. 178) can occur. A forthcoming study may employ a quantitative research design to further explore the interconnections across the SRL phases. Employing an advanced statistical analysis (e.g., structural equation modeling) is helpful in exploring how a variable influences another variable in each SRL phase and how an SRL phase influences another phase, especially in the context of instructional designers' SRL experiences participating in social-media-supported professional learning.

## Conclusion

The instructional design field is dynamic (Sharif & Cho, 2015; Wang et al., 2021). Instructional designers constantly respond to this dynamic field through continual, just-in-time professional learning (Carliner, 2018) not constrained by geographical, time, and funding limitations (Muljana et al., 2020; Muljana et al., 2021). Such timely professional learning supports the instructional designers in staying adept in their profession, especially in continually improving their knowledge, skills, and abilities (Sharif & Cho, 2015; Ritzhaupt & Martin, 2015). The affordances of social media tools are beneficial in this regard. The omnipresent social media has influenced how people communicate, learn, and collaborate (Barnes et al., 2018; Lewis et al.,

2010). In the context of instructional designers' professional learning, reaching out to remote colleagues, finding ready-to-implement best practices, and searching for relevant, timely information are feasible through utilizing social media.

Conducting continual professional learning, however, needs proactive, strategic plan and action, wherein SRL plays an important role (Littlejohn et al., 2012; Littlejohn, 2017; Siadaty et al., 2016a, 2016b; Siadaty et al., 2012). Unfortunately, not all working professionals are aware of the strategies to promote SRL skills (Siadaty et al., 2016a, 2016b). In addition, using social media may pose challenges, e.g., distraction, cyber-bullying, self-confidence issues in asking questions, and posting insights, among others (Carpenter & Harvey, 2019; Dabbagh & Kitsantas, 2013). Furthermore, because many SRL-related studies were mostly conducted in a formal education environment (Dabbagh & Kitsantas, 2012; Järvelä et al., 2015; Laru & Järvelä, 2015; Matzat & Vrieling, 2016), this has called for exploration in the professional learning context, particularly at the intersection with SRL and social media. After all, recent systematic reviews have suggested that the practices of social-media-supported professional learning deserve an in-depth exploration (Luo & Hostetler, 2020; Luo et al., 2020).

This phenomenological study was aimed to address the following research questions: (1) How were instructional designers' SRL experiences conducting professional learning in a social media environment? (2) How did instructional designers support their SRL using social media? (3) What challenges did instructional designers experience when conducting professional learning using social media? I employed semi-structured interviews and thematic analysis using multiple coding approaches. According to the study findings, instructional designers appeared to apply SRL strategies while using social media for professional learning. Instructional designers seemed to be motivated by the need to develop their professional knowledge, skills, and abilities

continuously. They were willing to adapt and tweak their current design practices and strategies, highlighting a metacognitive thinking process that may lead to the open-mindedness to reflect on any knowledge and skill gaps and search for and execute ways to improve themselves. The instructional designers' experiences shared in this study also suggested the development of SRL skills through using social media, validating Dabbagh and Kitsantas' (2013) three-level framework. Although the challenges of using social media for pursuing professional learning existed, instructional designers seemed to be able to address some of the challenges by applying SRL strategies.

This dissertation serves as one of several studies exploring the phenomenon of instructional designers' professional learning in a social media environment from the lens of SRL. Notably, such a research-topic intersection is still limited. Findings also support the emerging practices of using social media professionally, informing (a) instructional designers and working professionals from other fields who pursue continuous professional development, (b) educational programs and instructors who educate prospective instructional designers regarding promoting relevant skills by utilizing social-media-supported learning and scaffolding SRL skills simultaneously, and (c) employers and those with supervisory roles who support staff members' informal professional development efforts.

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# APPENDIX A

## INVITATION TO PARTICIPATE IN A STUDY

Calling all instructional designers! You are invited to participate in a study to explore instructional designers' experiences in using social media for professional learning.

Through an individual interview, this qualitative study will explore instructional designers' (1) experiences using social media for professional learning from the lens of self-regulated learning; (2) experiences supporting their self-regulated learning by using social media within the professional learning context; and (2) challenges experienced while utilizing social media for professional learning and supporting self-regulated learning. Interviews will take approximately 45 to 60 minutes of your time. If more information is needed, a request will be made for a follow-up 30-minute interview. Please note, responses are confidential and will be aggregated in the report. Upon completion of the research participation, you will be gifted with a $10 Amazon gift card.

If you would like to participate, please follow the link below.

Yes, I agree to participate [link to the qualifying questionnaire is embedded here]

Clicking "Yes, I agree to participate" will take you to a qualifying 5-minute survey allowing you to give me consent, answer several demographic and contextual questions, and sign up for an individual interview. Form submission will be received by Pauline Muljana from Old Dominion University at pmulj001@odu.edu.

# APPENDIX B

QUALIFYING QUESTIONNAIRE

*Several items were adapted from Dabbagh and Kitsantas (2013) and Dabbagh et al. (2015)*

## Section 1

## INFORMED CONSENT DOCUMENT
## OLD DOMINION UNIVERSITY

**PROJECT TITLE:** An Exploration of Instructional Designers' Experiences in Using Social Media for Professional Learning

**INTRODUCTION**

You are invited to participate in a research study to explore how you experience using social media for professional learning and support your self-regulated learning using social media within this context, as well as any challenged you experience. The purposes of this form are 1) to give you information that may affect your decision whether to say YES or NO to participation in this research, and to 2) record the consent of those who say YES.

**RESEARCHERS**

**Responsible Principal Investigator**

Tian Luo, PhD, Associate Professor, Darden College of Education and Profession Studies, Department of STEM Education and Professional Studies: Instructional Design and Technology Program

**Investigators:**

Pauline Muljana, Doctoral Student in Instructional Design and Technology (corresponding investigator)

**DESCRIPTION OF RESEARCH STUDY**

Technology has been rapidly developing, allowing people to produce, share, and consume information (Gretter & Yadav, 2016; Kumar & Pande, 2017; van Laar et al., 2019). These advances in technology availability have further allowed people to connect to one another in the spirit of information seeking and sharing. Today, social media has become a ubiquitous phenomenon. For example, Facebook gained more than 2.5 billion global monthly active users by the end of 2019 (Clement, 2020a). Twitter gained 302 million users by 2015 (Peters et al., 2015), and there have been about 152 million monetizable daily active users by 2020 in Twitter (Clement, 2020b). YouTube is not merely a repository of amateur videos anymore; it also hosts corporate-generated and individual user-generated content, such as music and videos, including those for educational purposes (Tankovska, 2021). The fact that by 2019 the YouTube app has been downloaded over 17.3 million times from mobile app stores indicates its widespread mobile usage (Tankovska, 2021). One possible reason of the ubiquity of social media use is that social media provides real-time, up-to-date wealth of information, even from trusted sources (Le et al., 2019).

Although social media offer several benefits, the barriers of using social media effectively also exist. Working professionals may have concerns about cyber safety and privacy issues, as well as shaming and cyberbullying (Dabbagh et al., 2015), highlighting a need to study the use of social media for professional purposes in an effective manner. Although the benefits of social media for enhancing learning have been discussed in existing literature, the practices of using them for professional purposes need further exploration (Luo & Hostetler, 2020).

This qualitative study focuses on instructional designers' experiences in using social media for professional learning and how it may support their self-regulated learning (SRL) within such a context. Study findings

will make an important contribution to the body of literature and practices in regard to using social media to promote the effective professional learning and potentially enhance SRL.

If you decide to participate, you will be asked to complete a short qualifying survey with 7 questions (should take less than five minutes) and participate in an interview through Zoom web conference tool that may take between 30 to 60 minutes. At the end of the qualifying survey, you will be asked to sign up for an interview.

**RISKS AND BENEFITS**

RISKS: As with any research, there is a possibility that you may be subject to risks that have not yet been identified. There may be a risk of the release of confidential information. However, any documented information and responses will be secured and confidential. These documents will be destroyed once the data have been aggregated and the study has ended.

BENEFITS: Your participation will help expand the Instructional Design and Technology field, particularly on the important role of social media, social interaction, and SRL for professional learning. The study findings will make implications about best practices on effective facilitation of professional learning using social media and enhancement of SRL within this context.

**COSTS AND PAYMENTS**

There will be no costs and no payments to you for participation in this research study. Upon completion of the research participation, you will be gifted with a $15 Amazon gift card.

**NEW INFORMATION**

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

**CONFIDENTIALITY**

All information about you participating in this study is confidential unless disclosure if required by law. All documentation will be saved in a password-protected drive that only researchers have access to. Upon completion of the study, these documents will be destroyed permanently.

The results of this study may be used in reports, presentations, and publications; but the researchers will not identify you.

**WITHDRAWAL PRIVILEGE**

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation.

**VOLUNTARY CONSENT**

By signing this form, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

- Dr. Tian Luo, tluo@odu.edu
- Pauline Muljana, pmulj001@odu.edu

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should contact Dr. Laura Chezan, IRB Director, Darden College of Education and Professional Studies, Old Dominion University, at 757-683-7055 or lchezan@odu.edu.

If you would like to participate in this study, please indicate your consent below. By clicking "I consent, begin the study" you are telling the researchers YES, that you agree to participate in this study. Survey submission will be received by Pauline Muljana from Old Dominion University.

Your name: _____

Your email address: _____

Do you agree to participate in this study? By clicking "Yes," you agree to grant a consent and you will be forwarded to the next questions. Clicking "No" will end the form and you will not be contacted regarding the study.

a. Yes
b. No

**Section 2**

Are you a working professional in an instructional design role? Clicking "Yes" will take you to the next questions. Clicking "No" will end the form. Thank you for your willingness to participate. However, this study is targeting working professionals with an instructional design role.

a. Yes
b. No

**Section 3**

1. What is your gender?
    a. Female
    b. Male
    c. Non-binary
    d. Prefer not to answer

e. Other: _____

2. What is your highest academic degree?

    a. Certificate (nine to 30 credits)

    b. Diploma (30 to 72 credits)

    c. Associate degree (two-year college degree)

    d. Bachelor's degree (four-year college degree)

    e. Post-baccalaureate certificate

    f. Master's degree

    g. Post-master's certificate

    h. Doctoral degree

    i. Other: _____

3. In which of the following sector(s) are you currently employed? You may select more than one option if you are affiliated with multiple sectors.

    - K-12
    - Corporate
    - Non-profit
    - Military
    - Higher education
    - Self-employed (e.g., freelancer)
    - Other: _____

4. What is your current job title?

    _____

5. How many years of experience do you in an instructional design role?

a. Less than 5 years

b. 6 to 10 years

c. More than 10 years

**Section 4**

1. How frequent do you use the following social media tools?

| Social Media Tools | 1. Daily | 2. Weekly | 3. Monthly | 4. Rarely | 5. Never |
|---|---|---|---|---|---|
| 1. Blogs | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. Wikis | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. Podcasts | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. Bookmarking tools (e.g., del.icio.us) | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5. Avatar-based virtual worlds (e.g., Second Life) | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6. RSS feeds | ☐ | ☐ | ☐ | ☐ | ☐ |
| 7. Cloud-based technologies (e.g., DropBox, Google Drive, or OneDrive) | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. Social networks (e.g., Twitter, Facebook, LinkedIn, or Reddit) | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9. Media sharing technologies (e.g., Flickr, Pinterest, or YouTube) | ☐ | ☐ | ☐ | ☐ | ☐ |

| Social Media Tools | 1. Daily | 2. Weekly | 3. Monthly | 4. Rarely | 5. Never |
|---|---|---|---|---|---|
| 10. Project management technologies (e.g., Asana, Trello) | ☐ | ☐ | ☐ | ☐ | ☐ |

2. If you use any other social media tool(s) not listed above, please type the name of the tool(s) below and indicate your frequency of use?

   _____

3. What is the level of social interactivity that you engage in with the following social media tools?

| Social Media Tools | Level 1: Personal, private use | Level 2: Sharing with selected people or groups | Level 3: Open, global sharing | If your answer is Level 2 or Level 3, is the interactivity level have increased sequentially? (Answer "Yes" or "No") |
|---|---|---|---|---|
| 1. Blogs | ☐ | ☐ | ☐ | |
| 2. Wikis | ☐ | ☐ | ☐ | |
| 3. Podcasts | ☐ | ☐ | ☐ | |
| 4. Bookmarking tools (e.g., del.icio.us) | ☐ | ☐ | ☐ | |
| 5. Avatar-based virtual worlds (e.g., Second Life) | ☐ | ☐ | ☐ | |

| Social Media Tools | Level 1: Personal, private use | Level 2: Sharing with selected people or groups | Level 3: Open, global sharing | If your answer is Level 2 or Level 3, is the interactivity level have increased sequentially? (Answer "Yes" or "No") |
|---|---|---|---|---|
| 6. RSS feeds | ☐ | ☐ | ☐ | |
| 7. Cloud-based technologies (e.g., DropBox, Google Drive, or OneDrive) | ☐ | ☐ | ☐ | |
| 8. Social networks (e.g., Twitter, Facebook, LinkedIn, or Reddit) | ☐ | ☐ | ☐ | |
| 9. Media sharing technologies (e.g., Flickr, Pinterest, or YouTube) | ☐ | ☐ | ☐ | |
| 10. Project management technologies (e.g., Asana, Trello) | ☐ | ☐ | ☐ | |

4. If you use any other social media tool(s) not listed above, please type the name of the tool(s) below and indicate the level of social interactivity you engage in? If your answer is Level 2 or Level 3, is the interactivity level have increased sequentially?

   _____

**Section 5**

Please provide your name and email address. You will receive an email to schedule an in-person interview using a web conference tool called Zoom. Please note, your name and email address will remain confidential.

_____

# APPENDIX C

## INTERVIEW GUIDE

*A few items were adapted from Dabbagh et al. (2015)*

Participant Code Name: _____ (e.g., Participant A)
Interview Date: _____
Interview Start Time: _____

**Consent:**

Thank you for agreeing to participate. I will record this interview session. Therefore, I would like you to turn off your camera and change your name into "Participant [insert a letter here]" in order to protect your anonymity and the confidentiality of this interview. When asking the interview questions, I will not say your name. Thank you for your understanding.

Are we now ready? I am about to start recording now.

**Interview:**

1. Purpose of Study and Consent Confirmation
    a. I would like to describe the purpose of the study again. The purpose of this qualitative study is to explore instructional designers' self-regulated learning experiences using social media for professional learning. By interviewing instructional designers, this study will also describe the phenomenon of the instructional designers' experiences of supporting their SRL in social-media-supported professional learning.
    b. I would like to confirm that I still have your informed consent. Your participation is voluntary, and you may withdraw at any time. I have received your signed consent form [showing the signed consent without revealing any identifying information], indicating that you have read the study description and what entails in this study. It

also indicates that you agree to participate in this study. Would you please confirm your agreement?

2. Demographic Information
    a. Showing and asking the participant to confirm the information they had entered in Section 2 and Section 3 of the qualifying questionnaire, without mentioning any identifiable information.
3. General Information

    Preamble: As you know, I am exploring instructional designers' instructional designers' experiences of utilizing social media for professional learning from the perspective of self-regulated learning (SRL). The purpose of this interview is to collect information about your experience(s) using social media for professional learning or professional development, how an application of SRL occurs in your experience, how you support SRL using social media and any challenges experienced within this context.

    a. As a way of getting started, please tell me a little bit about your work. (Probes, as needed: What sort of tasks do you do in a typical day? Has your role changed over time? For example, has there been any new type of tasks emerging at work? Please give me some examples.)
    b. You volunteered to participate in this study because you identified yourself as an individual with an instructional design role who have used social media tools for professional learning or professional development. Please give some examples from your experience wherein you had to use of social media tools for work purposes (Probes: Which social media tools do you use? How frequently do you use it? What is the purpose of those tools?).

4. Components of Research Question (RQ) 1
    a. Category 1 (forethought component of SRL): To follow up on the previous answer, describe the goal you had in mind when using social media tools? (Probes: In other words, what did you intend to achieve by using social media in the context of your example or story? – e.g.: “When encountering a design problem, I wanted to ask for advice from colleagues in social media so that I can perform a new task at work.?” What was an example of the advice you ask?)
    b. Category 2 (performance phase of SRL): How did you use the information you gained from social media at work? (Probes: If you received advice from colleagues in social media: How did that help you to do well in performing any task at work? How did it change any of your current strategies in performing your task? How did it inform and/or change your current design practice? Please give an example.)
    c. Category 3 (self-reflection phase of SRL): What happened when you found out the advice or information gained through social media did not help you perform the task successfully? (Probes: If it did not help, how did you reflect on it? If it helped, what did you do next? Give an example of a time when you reflected on your social media use, whether it helped your professional development or not.)
5. Components of RQ 2
    a. Category 1 (personal information management): Beyond the professional context, how did you get started with using social media? (Probes: For example, what was your first-time experience using social media like? Please provide some examples of the social media tools you used as a starter. Please describe the purposes of the use of social media at that time.)

b. Category 2 (social interaction and collaboration): Tell me about your experience of how you started to use social media to engage in information-sharing and collaborative activities? (Probes: Provide an example about when you shared information in social media, commented on someone's work or post, or collaborated with colleagues using social media. How did being engaged in information-sharing and/or collaborative activities using social media tools help you to enhance your own work performance? How did being engaged in information-sharing and/or collaboration activities using social media make any changes in your design practice?)

c. Category 3 (information aggregation and management for self-reflection purposes): Give an example of a time when you aggregate and manage the information you gained from social media. (Probes: Please tell me how you revisited your social media usages to reflect on enhancement in professional learning and development, and time planning and management; please provide an example.)

6. Component of RQ3

    a. In your experience, what are the barriers to the use of social media that hinder the opportunities for you to pursue professional learning and development?

7. Closing

    a. Is there anything else that you would like to add to your responses?

Interview End Time: _____
Length of Interview: _____
Recording File Name: _____

# APPENDIX D

## A 15-POINT CHECKLIST OF CRITERIA FOR GOOD THEMATIC ANALYSIS

*Adapted from Braun and Clarke (2006)*

| Process | Checklist Number | Criteria |
|---|---|---|
| Transcription | 1 | Transcribing interviews and checking the accuracy of the transcript. |
| Coding | 2 | Giving equal attention to each data item during the coding process |
| | 3 | Conducting the coding process thoroughly, inclusively, and comprehensively, instead of jumping to generating themes from participants' examples. |
| | 4 | Collating all relevant extracts for all each theme. |
| | 5 | Checking the themes repeatedly against each other and the original data set. |
| | 6 | Ensuring that themes are internally coherent, consistent, and distinctive. |
| Analysis | 7 | Analyzing the data, instead of paraphrasing. |
| | 8 | Matching the analysis and data. |
| | 9 | Ensuring that the analysis tells a convincing and well-organized story about the data and topic. |
| | 10 | Maintaining a balance between analytic narrative and illustrative extracts. |
| Overall | 11 | Managing sufficient time to complete all phases of TA. |
| Written report | 12 | Explicating the assumptions about and approach to TA clearly. |

| | | |
|---|---|---|
| | 13 | Describing the TA approach conducted in the study consistently. |
| | 14 | Aligning the language and concepts used in the report with the epistemological position of the analysis. |
| | 15 | Serving as an active researcher during the study. |

*Note*. From “Using Thematic Analysis in Psychology,” by V. Braun and V. Clarke, 2006, *Qualitative Research in Psychology, 3*(2), p. 96. Copyright 2006 by Taylor and Francis.

# APPENDIX E

## QUESTIONS TO THE PARTICIPANTS FOR MEMBER-CHECKING TRANSCRIPT AND SUMMARY OF INTERVIEW

1. Please review the transcript. Do you have anything to add or clarify?
2. Please review the notes. Is there anything that needs correction?

# VITA

**Pauline Salim Muljana**

Department of STEM Education and Professional Studies
Darden College of Education and Professional Studies
Old Dominion University

## Education

**PhD** Old Dominion University 08/2022
Program: Instructional Design and Technology

**MA** California State Polytechnic University, Pomona 06/2005
Program: Educational Multimedia

**BA** Widya Mandala Catholic University, Surabaya, Indonesia 02/1999
Program: Teaching English as a Foreign Language, Teacher Training and Education

## Selected Professional Experience

**Director of Continuous Improvement** 04/2022 – Present
Lumen Learning

**Instructional Designer & Learning Management System Specialist** 12/2005 – 09/2017
California State Polytechnic University, Pomona (Cal Poly Pomona)

## Selected Teaching-Related Experience in University/Professional Setting

**Guest Teaching Assistant** 09/2021 – 10/2021
EWS 4250 Gender, Identity, and Technology; Cal Poly Pomona

**Guest Course Lecturer** 11/2019
EMM 5400/L Instructional Design for e-Learning; Cal Poly Pomona

**Faculty Workshop and Summer Institute Facilitator** 12/2005 – 09/2017
Cal Poly Pomona

| Research Impact | Selected Professional Development | Skills |
|---|---|---|
| 16+ academic publications | 1. Simple collection & powerful analysis | Focus groups |
| 1 book chapter | of Twitter data using R | Interviews |
| 45+ presentations & workshops | 2. Innovators in online learning: | Surveys |
| 7+ research awards & grants | Strategies & tips for teaching online | Empathy map |
| 5 media mentions | 3. Write effective policies & procedures | User persona |
| Ad-hoc reviewer for 5 journals | 4. Applying Quality Matters rubrics | Project management |