Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.7, No.33, 2016

Instant Messaging as Digital Discourse Socialization in the Context of English for Academic Purposes

Christiaan Prinsloo*
Faculty of Liberal Education, Building 3 Room 212, Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul 08826, South Korea
E-mail: christiaan@snu.ac.kr

Kyungmin Nam
Department of Economics, College of Social Sciences, Building16, Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul 08826, South Korea

Joonboh Shim
College of Business Administration, Building 58, Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul 08826, South Korea

Abstract
Digital interaction in higher education is becoming increasingly ubiquitous. However, the effects that such digital interaction has on the lived experiences of students and teachers within the traditional classroom should be illuminated from different perspectives to inform pedagogy adequately. Therefore, the purpose of this paper is to investigate the use of instant messaging (IM) as an educational and communicative tool in the context of a multidisciplinary English for Academic Purposes (EAP) presentation course. To achieve the purpose, a phenomenological methodology and qualitative content analysis method were used to describe and reflect on the lived experiences of the research participants. As a result, three main themes were identified that characterize the lived experiences, namely interpersonal relations, pedagogic concerns, and psychosocial influences. The integration of these themes with relevant pedagogic theories and a tailored research design led to three main contributions: (1) the operationalization of a creative qualitative research design within a digital setting; (2) the theorization of IM-mediated education; and (3) the development of principles for academic discourse socialization through IM. The paper proposes critical research directions that probe the blatant digitization of education.
Keywords: instant messaging, digital discourse socialization, English for Academic Purposes, phenomenology, social fatigue, Confucianism

1. Introduction

With blended learning approaches proliferating across disciplines, various digital platforms continue to permeate educational settings in an attempt to facilitate and advance instructional experiences in higher education (Vaughan, 2007). Digital platforms, such as Active World, Facebook, Google Hangouts, Kakao Talk, Second Life, Skype, and Twitter utilize different interfaces to enable digital interaction through instant messaging (IM), video conferencing, notice boards, and file sharing, for instance (Duncan, Miller, & Jiang, 2012). Ample scholarship reports on the advantages and disadvantages of using digital platforms or social network services (SNS) in educational settings (Davis, Deil-Amen, Rios-Aguilar, & Canche, 2012; Duncan et al., 2012). For example, four years after the founding of Facebook, Griffith and Liyanage (2008) began to explore the potential educational applications of SNS. In an ethnographic study, Harrison and Thomas (2009) found that SNS contributes to the creation of new social relations in education. Yet, in a rigorous literature review of the field, Tess (2013) reserves judgment on the successful transference of the personal benefits of SNS to educational contexts. These studies maintain broad views that consider most of the interfaces, such as e-mail, IM, and video conferencing provided by social media.

Instant messaging belongs to this larger networking paradigm called social media. Social media can be defined as media that "[…] allow the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010, p. 61). We define IM as the real-time sending and receiving of textual and/or visual digital messages through the use of a common Internet or cellular network-based software application. The social network application Kakao Talk was used for this study and is described by the service provider as "[…] a social networking service, bulletin board system service, online contents service, and location-based service" (http://www.kakao.com). Instant messaging is an integral part of social network applications and occurs through synchronous and/or asynchronous communication because messages can be read and responded to in real-time or after the fact. The nature and versatility of IM contribute to its proliferated use primarily for social purposes and to a lesser extent within pedagogic contexts.

Research about the use of IM suggests its utility as a communicative and pedagogic tool that "provides

continuous opportunities for interaction" (Contreras-Castillo, Perez-Fragoso, & Favela, 2006, p. 216). Consequently, social relationships are improved as IM creates a sense of community among students (Contreras-Castillo et al., 2012; Vrocharidou & Efthymiou, 2012). Contreras-Castillo et al., (2006) provide a credible empirical point of departure that confirms the successful integration of IM in educational settings. They justify the continued use of IM based on its ability to enhance interaction and students' willingness to take courses that incorporate IM. While the empirical nature of their project contributes to identifying advantages of using IM, it negates a deeper level of understanding of the pedagogic and communicative dimensions of IM in academia. Recognizing the limitations of a quantitative survey analysis, Vrocharidou and Efthymiou (2012, p. 615) call for qualitative research to consider their findings from a more "in-depth interpretive methodological view."

The purpose of this article is to understand the deep pedagogic and communicative dimensions of IM through a qualitative investigation by reflecting phenomenologically on our lived experiences during the course of a multidisciplinary English for Academic Purposes (EAP) presentation class. The combination of theories and tailored research design lead to three main contributions: (1) the operationalization of a creative qualitative research design within a digital setting; (2) the theorization of IM-mediated education; and (3) the development of principles for academic discourse socialization through IM. To realize the contributions, the article assumes the following arrangement: the subsequent section (part two) provides a transparent account of the research design by describing the underlying epistemology, phenomenological methodology, and tailored qualitative content analysis method. The results of the investigation are presented as a co-constructed narrative in part three and deliberated in part four. The article concludes with a summary of the findings, a critical reflection on the limitations of the project, and future research directions in part five.

2. Research design

Drawing on the theoretical underpinnings and our experiences, we conceptualized a research design that would overcome the limitations of quantitative investigations, identify the peculiarities of IM in education, and contribute to a deep understanding of pedagogic theory and communicative practice in the context of EAP.

As the research design developed during the research process and in collaboration among the authors, it became evident that a new (or at least a hybrid) data collection and analysis strategy emerged. It became necessary to critique illustrative methodologies and methods in relation to our emerging design. We reflect critically on the research practices of three illustrative studies with similar research foci on the use of IM (or social networking) in educational settings as a means to tailor and justify our research design. Firstly, Fouser (2010) used a case study methodology and questionnaire data collection technique in "From CMS to SNS: Exploring the Use of Facebook in the Social Constructivist Paradigm" (Fouser, 2010, p. 221). The research design achieved its purpose, but the author neglected to contextualize digital interaction within the theoretical underpinnings of social constructivism as the title of the article explicitly claims. Secondly, Hershkovitz and Forkosh-Baruch (2015) used semi-structured interviews to collect data and direct content analysis to determine student-teacher relationships in Facebook. The study claims to present a student perspective, yet students were only involved as interviewees; therefore, they remained removed from the study by a degree of methodological separation. Finally, Teclehaimanot and Hickman (2011) used a survey to determine what students found appropriate regarding student-teacher interactions on Facebook. The study overtly instructed participants to "[…] *assume* their professor had a Facebook account" (Teclehaimanot & Hickman, 2011, p. 22).[1] Therefore, responses were based on assumptions or imaginary scenarios that render the findings hypothetical.

The critical reflection on the three illustrative studies emphasizes three important considerations: (1) the research topic needs to be situated in the proposed theoretical framework; (2) if a student- perspective is presented, then perhaps the student voice could be accommodated more overtly; and (3) the reliability of research findings can be increased through the real use of the SNS application under investigation instead of an assumption-based inquiry. In this project, we address these challenges by implementing a custom data collection technique that was also compatible with the phenomenological methodology. The following three subsections elaborate on the research setting as epistemology, hermeneutic phenomenology as methodology, and hybrid data collection and analysis method.

2.1 Research setting as epistemology

The epistemological assumptions of this project derive from the research setting; that is, our common understanding of the nature of knowledge consists of elements of the course description and teaching philosophy of this particular EAP course. *Advanced English: Academic and Professional Presentations* is an elective, credit-based course in the Faculty of Liberal Education at Seoul National University. It is offered to undergraduate students with English proficiency at level C1 or higher on the Common European Framework of Reference for Languages or approximately 95 or higher on the TOEFL iBT. Because the course is open to students from

[1] Own emphasis added.

different majors, the syllabus necessarily takes on a multidisciplinary, inclusionary stance toward academic registers (such as business or technical English) and oral genres (such as the elevator pitch or academic conference presentation).

The primary objective of *Advanced English: Academic and Professional Presentations* is to prepare students to successfully compose communicative genres to engage with the academic and professional discourse communities. Because the course objective is situated in genre and literacies pedagogy, the epistemology is a considered integration of the following theoretical underpinnings: sociocultural pedagogy, relational social constructionism, and critical pedagogy. The sociocultural underpinnings support a theory of learning that draws on real-world communicative language learning and an exposure to discourses and genres in social contexts. The relational social constructionist underpinning ponders how participants in this course create meanings intersubjectively through their embodied and digitized dialogical activities. The critical dimension of the teaching philosophy of the course entails the recognition of learning as the social construction of privileged and underprivileged notions of knowledge, and multiple intelligences need to be embraced because effective communication depends on more than just linguistic intelligence (Prinsloo, 2014).

These epistemological principles are operationalized through the syllabus and classroom interaction. A genre approach is used to scaffold oral genres throughout the semester with increasing structural complexity and linguistic demands. Literacy studies approaches motivate student empowerment and liberation through active discovery-oriented learning, while the teacher assumes a facilitative role that is negotiated with individual students. Consequently, through the functional use of oral genres, students acquire communicative autonomy to become members of their different disciplinary and professional (digital) discourse communities.

2.2 Methodology

The research setting as epistemology modified the conceptualization of the methodology so that the methodology could justify and guide the design of the data collection and analysis methods. As such, a hermeneutic phenomenological methodology was pursued. Hermeneutic (interpretive) phenomenology can be described as a process through which "lived experiences of individuals" and relationships among people can be understood beyond their apparent interpretations (Creswell, 2014, p. 14). Such sagacious interpretations surface when thick descriptions of the qualitative data are presented.

Such think descriptions can be achieved by applying four foundational tenets of hermeneutic phenomenology, namely *lifeworld*, *situated freedom*, *presuppositions*, and *co-constitutionality* (Lopez & Willis, 2004). *Lifeworld* is a term used by Heidegger to refer to the ontological connection between reality and the worlds that humans inhabit. Because human existence is inseparable from the world, a hermeneutic phenomenological inquiry goes beyond mere description as it seeks the latent meanings of experiences. Instead of merely identifying descriptive categories derived from the application of the data collection method, *situated freedom* entails the description of the meaning of participants as "being-in-the-world and how these meanings influence the choices they make" (Lopez & Willis, 2004, p. 729). Such interpretations are not made from a *tabula rasa*-perspective, as the *presuppositions* of the researchers as participants contribute to the generation of meaning. While *co-constitutionality* traditionally refers to the blending of interpretations of participants and researchers, in this study, such blending is inevitable as the participants *are* the researchers and vice versa.

To give effect to the concept *lifeworld* through the data collection method, we described our lived experiences of the use of IM in the educational setting in three personal essays. *Situated freedom* affected our method after the initial data analysis, which entailed the identification of significant themes in the essays. While the initial data analysis is part of the research results, situated freedom informs the discussion section. In accordance with the relational social constructionist epistemological underpinning that recognizes intersubjective meaning-making among class participants, the methodology recognizes the *presuppositions* with which the researcher-participants as authors approached the project. As undergraduate student-researchers, Kyungmin and Joonboh may have been influenced by their respective disciplinary majors, namely economics and business. As researcher-teacher, Christiaan approached the project from research experience in education and applied linguistics. Being born in the mid-1990s, Kyungmin and Joonboh could be described as Millennials, and being born in the mid-1970s, Christiaan identifies with Generation X. Millennials grew up the notion that information is readily available through the Internet for "virtually their whole lives" (Bohl, 2008, p. 779). In contrast, members of Generation X are digital immigrants who grew up with paper-based texts and face-to-face interaction. Along with the psychosocial influences identified during the data analysis procedure, the generational differences may also be indicative of the external presuppositions and situated freedom that we brought into the project. While we contributed equally to the data collection through individual essays, we drew on individual strengths to contribute to different parts of the research output. Consequently, *co-constitutionality* gained effect as we relied on individual interpretations and the negotiation of meaning in the discussion section of this paper.

2.3 Data collection and analysis methods

What does the hermeneutic phenomenological methodology entail for the data collection and analysis methods? "Phenomenological research uses the analysis of significant statements, the generation of meaningful units, and the development of […] an essence description" (Creswell, 2014, p. 196). To put the phenomenological methodology into practice, a tailored method was devised to collect and report the qualitative data. The method consisted of five phases that we devised a priori:

- An introspective data collection method of "written protocols" was used (Dörnyei, 2007, p.147). As a research team, we decided to write retrospective, narrative-style essays of approximately 500 words on the topic "My experience using Kakao Talk for the advanced presentation course." The essay topic was formulated to be sufficiently specific to be on-topic, yet it was general enough to allow authorial freedom. We did not exchange additional ideas about essay content so as to liberate authors in their descriptions of their lived experiences and foster diverse responses that would enrich the data. Together we decided to eliminate references in our essays to possible solutions because these were part of the collective co-authoring effort of the discussion section of this paper. The three essays constituted the primary qualitative data and could be seen as a "co-constructed narrative" of our individual/collective experience (Ellis, 2008, p. 85).
- The second phase consisted of a collective qualitative content analysis. We exchanged our essays on a rotational basis with the purpose to identify shared and individual meaningful themes or essential descriptions by highlighting keywords and phrases in each other's essays. The meaningful themes were derived inductively as we coded the essays.
- The third phase consisted of an individual coding procedure. One author/participant synthesized the keywords and phrases identified in phase two by clustering them together as themes.
- The coding procedure was followed by an auditing procedure to increase the credibility or "qualitative validity" of the findings (Creswell, 2014, p. 201). Auditing was conducted by the remaining authors/participants who confirmed the initial analysis, suggested additional themes, and/or recommended the synthesis of themes. For example, the three initial themes (usefulness, side effects, and conditions and format) evolved through discussion and reanalysis into more comprehensive, main themes (interpersonal relations, pedagogic concerns, and psychosocial influences). Keywords and phrases that were grouped under a particular main theme originated verbatim from the essays and in a semantic context that associates the word or phrase with the main theme.
- Finally, the meaningful themes that we identified and developed through the data analysis afforded the substance for the discussion section, which in turn was influenced by interpretations infused with the hermeneutic phenomenological methodology. In terms of qualitative content analysis, this final phase entailed latent level analysis or the making of interpretations (Dörnyei, 2007).

3. Result analysis

The qualitative data (written protocols) constitute a co-constructed narrative that comprises the three essays that reflect on our personal experiences of the use of IM for academic discourse socialization. The results section reports on the combined analytic outcome of phase three (individual coding procedure) and phase four (auditing procedure) of the research method. The results section is divided into three main parts that assume a Gestalt/deductive logic by first describing the whole and then identifying the constituting parts or rings of the radial matrix. Firstly, a holistic perspective of the data is provided in a visual format as a radial matrix in Figure 1. This is followed by a description of the themes of the rings of the radial matrix. The primary findings are reported in three sections based on the three main themes of the radial matrix, *viz*. interpersonal relations, pedagogic concerns, and psychosocial influences. This comprehensive description of the qualitative results gives effect to "thick descriptions" encouraged by the hermeneutic phenomenological methodology.

3.1 Holistic perspective of the data

As the data analysis method was applied, a matrix of meaningful themes surfaced that was sequenced in a radial pattern, from most encompassing at the center to most specific and descriptive toward the periphery. The sequence of themes should not be considered as a hierarchical taxonomy, but it could rather be conceived of as a three-dimensional sphere that nurtures thematic overlap as subthemes and tributary themes extend beyond their originating main themes. Figure 1 attempts to apprehend in two dimensions the plasticity of the themes of the qualitative content analysis.

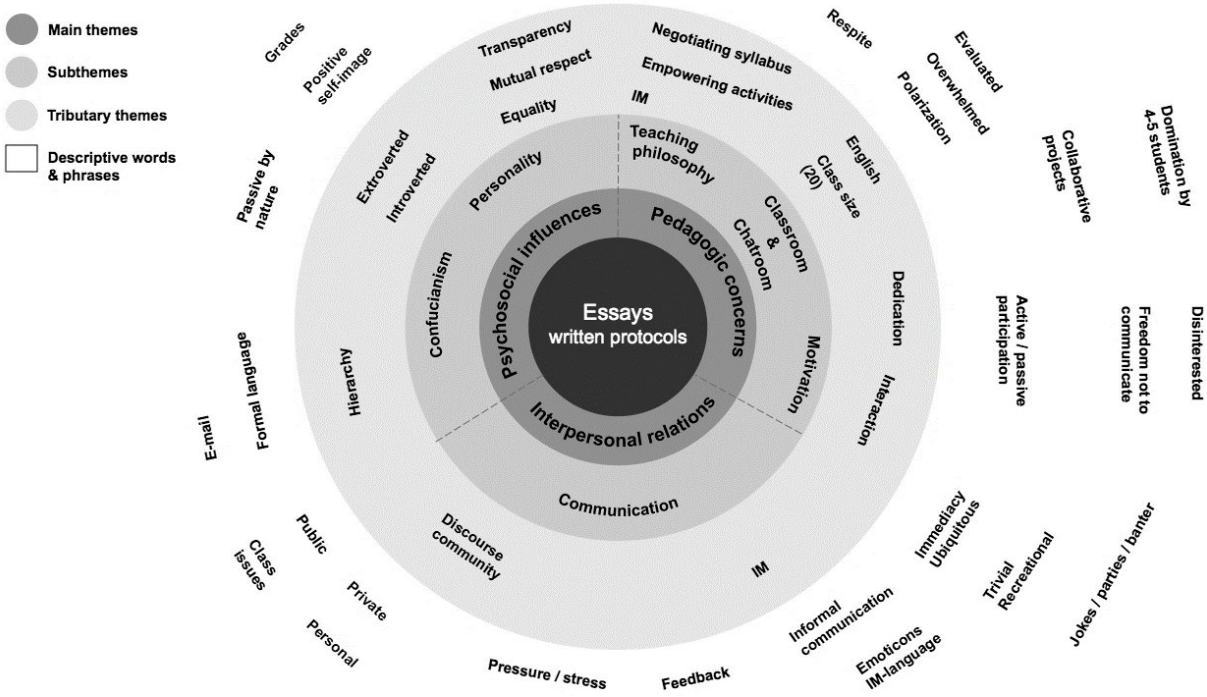

Figure 1. Qualitative data analysis results as thematic radial matrix

3.2 Rings of the radial matrix

The radial matrix consists of four rings of themes: (1) main themes, (2) subthemes, (3) tributary themes, and (4) descriptive words and phrases. The data analysis delivered three main themes in the first ring of the matrix that were identified through the thesis statements and substantial discussion space dedicated to each theme in the written protocols (see Figure 1). The three main themes include *interpersonal relations*, *pedagogic concerns*, and *psychosocial influences*. The three main themes did not appear verbatim in the essays, but they were synthesized as groups of related subthemes, tributary themes, and descriptive words and phrases that were clustered together. Although the main themes appear as discrete entities, they describe different dimensions of the same phenomenon, namely the IM infused EAP presentation course. The close association among the main themes is affirmed by interthematic connections facilitated through the extremities of the radial matrix.

Subthemes manifested in the second ring. The seven subthemes (along with the tributary themes and descriptive words and phrases) appeared verbatim in the essays. Subthemes determined the overall configuration of the matrix as tributary themes and descriptive words and phrases were aligned according to their hermeneutic contexts in the essays with the subthemes. Tributary themes (in the third ring) continue to provide specificity as they connect subthemes with more specified descriptive words and phrases. The tributary themes are most productive in facilitating intrathematic connections that contribute to dense, complex understandings of academic discourse socialization through IM. The descriptive words and phrases in the outer expanse of Figure 1 can be grouped together as situated particulars and examples that illuminate the three main themes.

3.3 Interpersonal relations

Because of the research setting and focus, the qualitative content analysis revealed that interpersonal relations in the context of an IM infused EAP presentation course resulted as a direct consequence of communication among members of the discourse community. Within this context, the discourse community was initially defined in terms of its role as a public forum to facilitate academic discourse socialization. However, as interpersonal relations developed and because of the nature of IM, the discourse community assumed personal functions associated with language socialization. Kyungmin studiously describes the interthematic evolution of the personal relationships in conjunction with the changing roles of the IM chatroom (see Figure 2, Line 1). Her line of reasoning departs from IM as articulated by the teaching philosophy and terminates with prospering personal relations.

> At the start of the semester, Christiaan asked us to create a Kakao Talk chatroom for the purpose of choosing debate topics and continuing discussions outside class, if necessary. At first, we said hello to each other, and that was all. We used the chatroom only in relation to the class; we exchanged ideas about debate topics and let others know when a class member was going to be late for or absent from the class. Using the chatroom in this way was very convenient in that I

didn't have to privately send messages to the professor, which is very often inconvenient. The chatroom facilitated better communication among students and the professor and thus enhanced the efficiency of the class; it is irrefutable that it served its purpose better than expected.

Private talks started to dominate the chatroom as we got familiar with each other. We congratulated each other on birthdays, made jokes, and invited others to various events to enjoy together. For special occasions, we planned parties and decided to hang out at a pub in celebration of the successful completion of the presentation course.

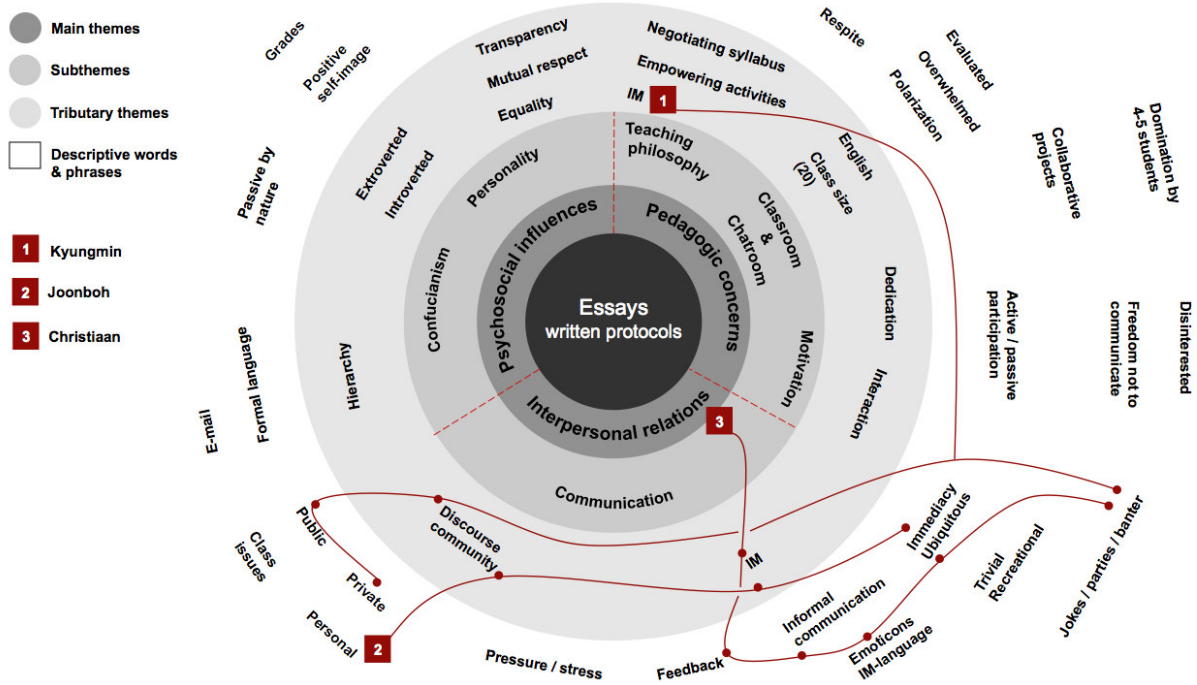

Figure 2. IM as tool for language and academic discourse socialization

Joonboh and Christiaan used the characteristics of IM to describe the associations among IM and personal communications and relations. Together with a close reading of Kyungmin's essay, the intrathematic characteristics of IM are summarized in Table 1. The summary of characteristics reveals that IM is primarily regarded as an informal communicative platform, used for both public and private conversations. The informal character of IM is closely associated with the use of emoticons and IM-language or textese. Instant messaging is used ubiquitously and is immediately available, and its informal nature invites jokes, banter, and other trivial usages. Students used emoticons only after the teacher used them first, which is indicative of students' reliance on the teacher to set the personal/professional tone for the chatroom. Such "respect" for the teacher's "domain" seems to contradict the effect of IM as it challenges traditional hierarchies (see Table 2). This challenge is interpreted in more detail in the discussion as psychosocial influence related to Confucianism and pedagogic theory building.

Table 1. Characteristics of IM

		Researcher-participants		
Characteristics of IM		Kyungmin	Joonboh	Christiaan
Informal communication	Public	✓	✓	✓
	Private	✓	✓	✓
Emoticons / IM-language				✓
Immediacy / Ubiquity			✓	✓
Trivial recreational		✓		
Jokes / parties / banter		✓		✓

The characteristics of IM had certain positive and negative effects on the chatroom community (see Table 2). Positive effects include increased interaction, immediate feedback, and a challenge of conventional psychosocial and linguistic hierarchies. However, the negative consequences of IM seem to be a direct result of its positive increase in interaction. Because IM is ubiquitous, Kyungmin and Joonboh felt "pressured" and "stressed" to continuously respond to messages resulting in feelings of social fatigue. Christiaan felt "overwhelmed" by the amount of messages, and Joonboh is of the opinion that the chatroom became polarized because certain students dominated through excessive messaging. As a member of Generation X, it is

understandable that Christiaan felt overwhelmed by approximately 300 messages on some days. Similarly, even as Millennials who were born with a sense of perpetual digital connectivity, Kyungmin and Joonboh's experience of pressure and stress (communicative and pedagogic) accentuates the encumbrances of blended learning approaches on students.

Table 2. Effects of IM in the EAP environment

Effects of IM			Researcher-participants		
			Kyungmin	Joonboh	Christiaan
Positive	Interaction		✓	✓	✓
	Feedback				✓
	Challenge the hierarchy		✓	✓	✓
Negative	Pressure / stress / overwhelmed	Communicative	✓	✓	✓
		Pedagogic		✓	✓
	Polarization			✓	

3.4 Pedagogic concerns

The second main theme consists of three pedagogic concerns: the teaching philosophy, the classroom and chatroom, and motivation. Of the three subthemes, motivation was discussed prolifically in the essays as it branches into interaction and dedication, which can be either active or passive. This section reports on the lines of reasoning as they all depart from pedagogic concerns and traverse interthematically across the radial matrix. Although the lines of reasoning run independently, Kyungmin and Joonboh share certain similarities; however, Christiaan's perspective as the teacher provides an alternative perspective on interaction.

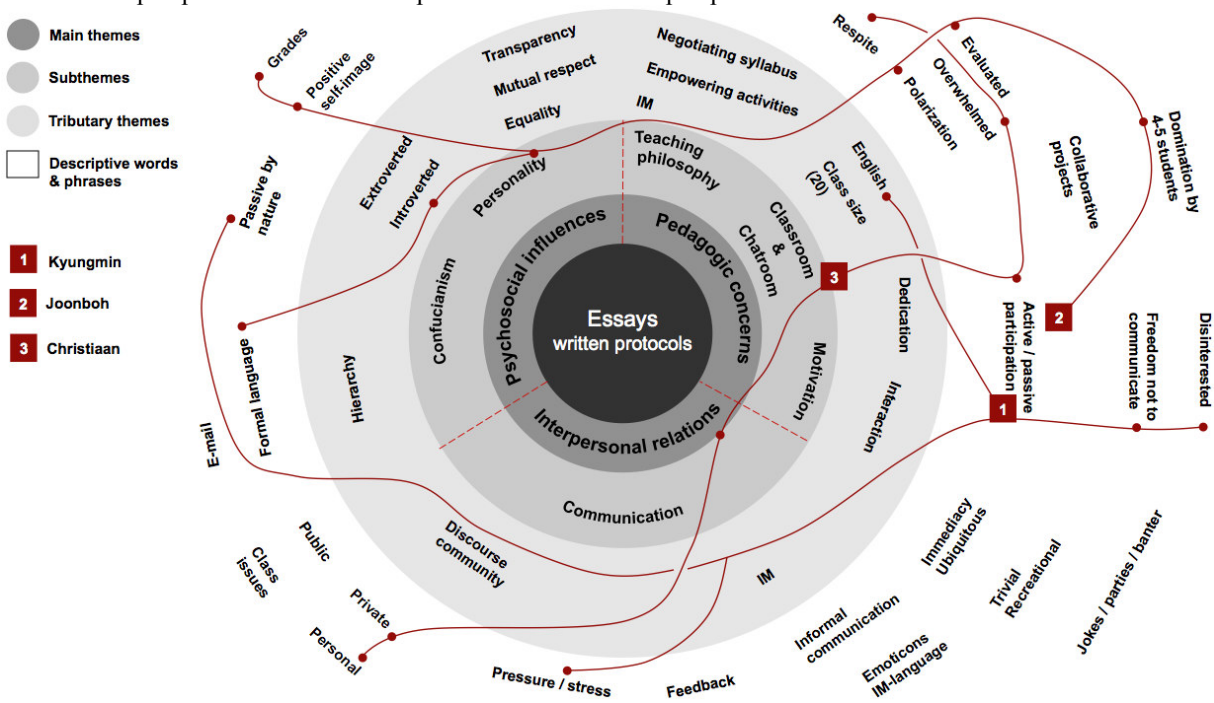

Figure 3. Reasons for active and passive chatroom interaction

As someone who initially observed the chatroom passively as a "trivial" forum for "recreational" purposes, the sharing of personal information in the chatroom created an "easy-going" atmosphere that enticed Kyungmin to participate more actively. Kyungmin provides the following five reasons why certain students remained passive: (1) students may be disinterested in the course; (2) students may consider the chatroom as an infringement on their freedom not to communicate; (3) students may not be comfortable with English; (4) chatroom (over)activity could induce stress or fatigue; and (5) students could be passive by nature (see Figure 3, Line 1).

While passivity in the chatroom is considered undesirable, Joonboh's critical insider perspective reveals that interaction may also cause polarization. Polarization is caused when passive students become ostracized because of (over)active students (see Figure 3, Line 2). Joonboh argues that extroverted personalities may be cognizant of the effects of a positive self-image in the chatroom on grades; the personas created by students in the chatroom might affect eventual grade allocation. Scholarship confirms that grades have become a primary academic objective in Korean higher education (Sorensen, 1994). In contrast with extroverted personalities,

Joonboh contends that introverted personalities may be more comfortable with formal, e-mail interaction that maintains a traditional teacher-student distance.

Christiaan's reflection on interaction is situated in his pedagogic perspective of the physical classroom and the digital chatroom. The "immediacy" and "ubiquity" of IM caused him to feel "overwhelmed" by the necessity to follow and respond to hundreds of text streams. However, "the physical classroom became a respite where the limitations of one-on-one human interaction" countered the overwhelming number of digital responses (see Figure 3, Line 3). Yet both the classroom and chatroom contributed through private and personal communication to enhance interpersonal relations that improved the pedagogic experience and interaction.

3.5 Psychosocial influences

The psychosocial dimensions identified in the written protocols include personality traits and Confucianism. Personality traits were addressed together with motivation as a pedagogic concern. The radial matrix indicates that three elements of the teaching philosophy (transparency, mutual respect, and equality) also fit within psychosocial influences. In this section, our attention turns to Confucianism, the hierarchy that it supports, and the three factors that challenge the hierarchy.

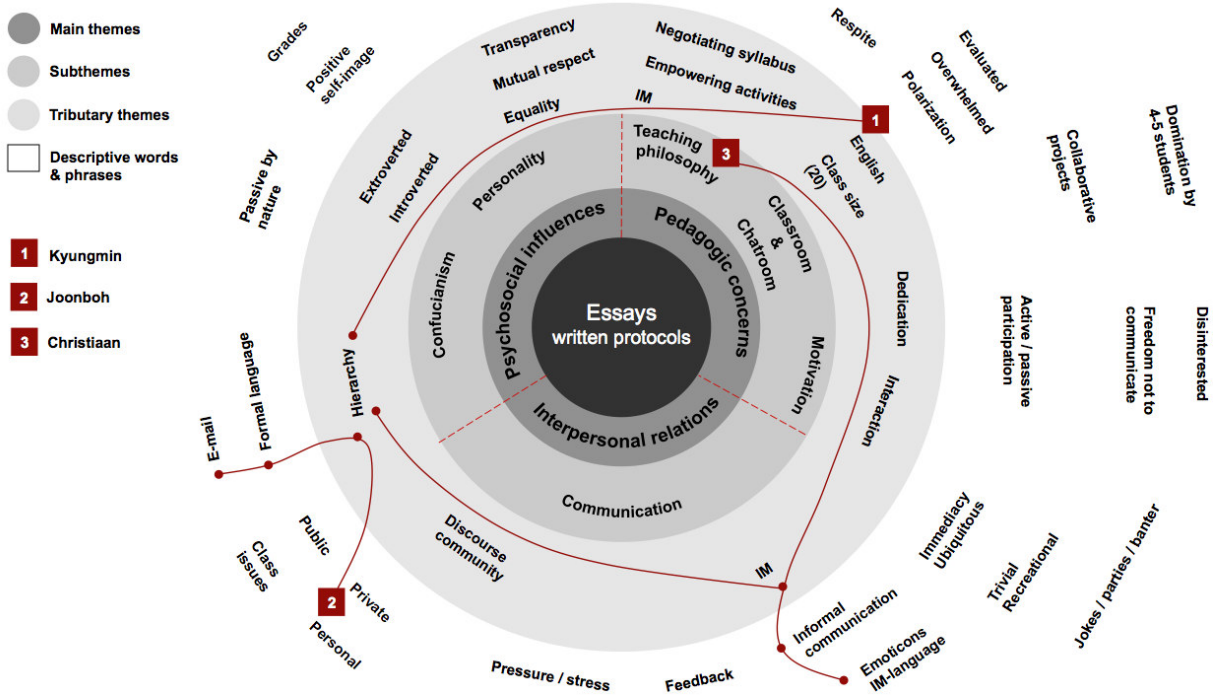

Figure 4. Factors that challenge the hierarchy

An important psychosocial theme referred to by all three the researcher-participants is the dismantling of a latent Confucian hierarchy that entered the chatroom by virtue of the students' Korean heritage and education. Figure 4 illustrates the different perspectives from which each researcher-participant experienced the challenge of the hierarchy.

Kyungmin considers the English language as a challenger of the hierarchy because Korean grammar uses honorifics to differentiate social standing among discourse participants (see Figure 4, Line 1). Inevitably, honorifics affect physical identity or digital persona development. Joonboh credits the sharing of personal information as a challenge to the hierarchy because it dismantles the notion of professional distance associated with Confucian-based education (see Figure 4, Line 2). Christiaan motivates the challenge to the hierarchy from the class philosophy and the nature of IM (see Figure 4, Line 3). The class philosophy explicitly promotes transparency, mutual respect, equality, and the negotiation of the syllabus; all these principles endeavor to empower students on an equal footing among themselves and with the teacher. The principles of the class philosophy are facilitated and operationalized through the ubiquity and informal nature of IM.

4. Discussion

While the results demonstrate that three main themes surfaced from the written protocols, their deeper meaning needs to be illuminated in conjunction with the hermeneutic phenomenological methodology, and their implications for education need be articulated so that the research objectives can be met. In order to meet the research objectives, the discussion section draws on the results to theorize IM-mediated education and formulate practical principles for academic discourse socialization through IM.

4.1 Theorization of IM-mediated education

In order to contribute to pedagogic theory building in the context of applied linguistics (Hartree, 1984; Johns, 1997; Richards & Rodgers, 2001), the following questions need to be answered: (1) what pedagogic underpinnings can support a theory of learning in the context of IM in education; (2) what is the nature of language in the digital environment; (3) what is the nature of the digital learning environment; (4) what is the nature of the learning community; and (5) what roles do members of the community perform in the digital environment.

4.1.1 Pedagogic underpinnings for a theory of learning

Because the sample course was a multidisciplinarity EAP course that used IM as an auxiliary mode of communication, theoretical underpinnings could be drawn from a spectrum of pedagogic perspectives. For example, the multidisciplinarity could be grounded in multiple intelligences pedagogy, EAP in genre-based pedagogy, and IM in computer-mediated communication theory. However, the results indicate that the social dimensions and digitality of the chatroom should be central to the theorization, hence the reliance on socioliterate and Web 2.0 pedagogy.

Socioliterate (sociocultural) pedagogy includes language socialization, discourse socialization, and academic discourse socialization (Duff, 2010). Language socialization occurs *through the use of language* with the *purpose to use language* (Schieffelin & Ochs, 1986). In English as a Foreign Language (EFL) contexts language socialization contributes to language acquisition, with the purpose to use language. In the EAP context, discourse and academic discourse socialization occur through the use of language to obtain subject content knowledge. Socioacademic competence is acquired through EAP, and such competence could be mediated through various platforms including IM. In practice, however, these theoretical distinctions become blurred (see Table 3).

Academic discourse socialization "represents an orientation to language and literacy development in particular communities and settings" (Duff, 2010, p. 172). While scholarship on academic discourse socialization drew on first language (L1) composition instruction such as New Rhetorical pedagogy, contemporary scholarship on academic discourse socialization also probes second language (L2) and EFL contexts (Morita & Kobayashi, 2008).

Within this context, Duff (2010) encourages a critical consideration of the discursive practices and the positions of community members (students, teachers, and scholars). An intersubjective orientation initiates such critical understanding. Intersubjectivity, or in hermeneutic phenomenological terms co-constitutionality, serves as the underpinning for "new knowledge, competencies, and textual identities" (Duff, 2010, p. 186). Intersubjectivity depends on socialization and heteroglossia that accentuate shared responsibility among discourse participants.

The use of IM in the context of EAP not only associates the project with socioliterate pedagogy, but it also operationalizes Web 2.0 pedagogy because the content shared in a chatroom is multilateral, user-generated and not unilateral, teacher-driven. Web 2.0 "exploits the participatory potential" of the Internet to provide a collaboration-oriented and community-based digital learning environment (Wang & Vásquez, 2012, p. 412-413).

Web 2.0 pedagogy theorizes IM in EAP in terms of text, digitality, and language learning (Wang & Vásquez, 2012). Firstly, a principal linguistic issue that affects language learning is text, more specifically textese (IM language) and hypertext. Textese is typically abbreviated, non-academic, and iconographic. Hypertext is multimodal and multidimensional as a text interfaces with multiple texts through hyperlinks. Kakao Talk embraces both textese and hypertext that pose challenges to a traditional conception of academic discourse socialization as formal and two-dimensional. Secondly, the digitality of IM affects ontological and epistemological underpinnings of the community because of the reciprocal influence of digital and physical interactions. Thirdly, the community-generated and heteroglossic ontology and epistemology of Web 2.0 pedagogy associates its language learning theory with the social constructivist pedagogies of Vygotsky and Piaget and social constructionist theory of language (Prinsloo, 2014). Socioliterate pedagogy provides a useful theoretical underpinning that supports the language learning theory of Web 2.0 pedagogy such as the use of IM for EAP.

4.1.2 Nature of language

Instant messaging is synonymous with textese or abbreviated language that is non-academic in the traditional sense of the word. As such, IM is relegated as trivial, recreational social tool. Scholarship confirms this assertion as Contreras-Castillo et al. discovered that IM seems to be used mostly for peripheral academic purposes, such as progress checks and "superfluous comments about course materials" (2006, p. 213). Social media is ubiquitously used for social purposes; therefore, it is associated with personal communication when language is used for socialization (Schieffelin & Ochs, 1986). As such, the use of IM in EAP supports a theory of language socialization. However, this does not mean that our chatroom seized to consider academic matters as personal issues permeated the original academic discussions. In fact, the original academic purpose ascribed to the chatroom through the teaching philosophy embraced academic discourse socialization and expanded

spontaneously to include the language socialization functions commonly associated with IM. Instant messaging can, therefore, support both language socialization (*socialization through the use of language, with the purpose to use language, to facilitate general interaction*) and academic discourse socialization (*through the use of language, with the purpose to use language, to become members of the academic community*) in the EAP context.

4.1.3 Nature of the digital learning environment

The digital learning environment is primarily language-driven (as discussed in Section 4.1.2) and text-based. Interaction with digital texts affect thought patterns, recall, and communication styles (Hull, 2003; Mayes, Sims, & Koonce, 2001) because digital texts are multimodal and intertextual by virtue of being hypertext.

Multimodal texts use more than one modality to convey meaning for example through text, audio, photo/video sharing, and haptic feedback. In the digital learning environment, modality is a means of comprehension. Because meaning is expressed through different modalities, modalities become "socially and culturally shaped resources" (Bezemer & Kress, 2008, p. 171). Through the multimodality of digital texts, conventional readers, writers, listeners, and speakers become participants, interactors, and co-creators of layers of texts and realities. In contrast with the unilaterally, teacher-driven traditional classroom, the collectively generated and owned digital learning environment is the sociocultural artifact of the participating discourse community.

The digital discourse community interacts through hypertext that "allows different readers to begin or end in different places by choosing different links on a screen" (Lasso, 2002, p. 8) which renders hypertext fluid and multidirectional. Hypertext is limitless because of the infinite interconnectivity among hypertexts in the matrix of ones and zeros called the Internet. Because of the infinite possibility of connections among hypertexts, readers most often do not read digital texts in a linear manner. Coupled with the fast-paced rhetorical-responsiveness of IM, topics in the digital learning environment evolve rapidly and appear to not necessarily be topic-specific like Wikis and discussion boards (Sun & Chang, 2012). Instant messaging is associated with quick, concise, and on-point responses that may not be considered appropriate or useful for instructional purposes (Hrastinski & Aghaee, 2012). The multimodality, intertextuality, dynamic, and heteroglossic nature of the digital learning environment opens unlimited pedagogic possibilities whilst simultaneously making demands on the discourse community that are still being discovered.

4.1.4 Nature of the learning community

Academic discourse socialization motivates the acquisition of academic registers *through the use of language* for the *purpose to use language* in the EAP context. It sensitizes the EAP context not only linguistically through awareness of disciplinary registers and discourse conventions but also sociolinguistically through intersubjectivity, that is, through the awareness of the development of "new knowledge, competencies, and textual identities" (Duff 2010, p. 186). Transference of such awareness to the IM chatroom establishes a digital community of practice as it operationalizes Web 2.0 pedagogy through collaboration and community-based learning.

The community of practice that emerges could be seen as a result of the blurring and merging of a continuum of linguistic communities with the speech community and discourse community at either end. Important here is the blurring of the distinction between sociolinguistic and sociorhetorical grouping (Swales, 1990) that merges socioliterate pedagogies. While language socialization may be associated more with English as a Foreign Language, academic discourse socialization favors English for Specific Purposes. Table 3 synthesizes two descriptions of linguistic communities that seem to surface and unify through the use of IM in EAP. The informal nature and socializing function of language in the digital learning environment evoke the speech community while disciplinary register and content evoke the discourse community. In conjunction with a directed teaching philosophy, the use of IM evokes both communities simultaneously to become a community of practice.

Table 3. Merging of the continuum of linguistic communities

	Continuum of linguistic communities	
	Speech community	**Discourse community**
Associated socio-literate pedagogy	• Language socialization	• Academic discourse socialization
Associated field of teaching	• English as a Foreign Language	• English for Specific Purposes (English for Academic and Occupational Purposes)
Grouping	• Sociolinguistic	• Sociorhetorical
Nature of discourse determined by	• Socialization and group solidarity • The social	• Communicative needs • Functionality
Nature of the community	• Centripetal • Absorb participants into general field	• Centrifugal • Distinguish participants based on qualification
Disciplinary association	• Multidisciplinary	• Subject specific disciplines
	IM chatroom as community of practice	

By considering these communities on a continuum, at least three important issues emerge: Firstly, it accentuates mutual social and collaborative engagements of the community. Membership and practice become secondary consideration of the community because community existence depends on heteroglossia (Garrett & Baquedano-Lopez, 2002). Secondly, the centripetal and centrifugal nature of communities unequivocally challenges the tautness between the community and individual caused by binary combinations such as "structure and agency, collectivity and subjectivity, power and meaning" (Garrett & Baquedano-Lopez, 2002, p. 347). The tension between the community and individual also codetermines the roles of the members of the digital community (see Section 4.1.5). Finally, "the community of practice model presumes the existence of diversity in any group and admits the possibility of dynamic, shifting patterns of participation in multiple (often overlapping) communities" (Garrett & Baquedano-Lopez, 2002, p. 348). The diversity, shifting patterns of participation, and overlapping communities may contribute to social fatigue and saturation and the emergence of pastiche personalities that affect the roles of members of the digital community.

4.1.5 Roles of the members of the digital community

The roles of the members of the digital discourse community could be affected by multiple factors beyond the purview of this paper such as access to SNS, literacy, and culture. However, the results indicate that Confucianism, personality, and the digitality of the learning environment affect these roles in this study substantially.

Schenck, Mottalib, and Baldwin (2013) provide a discerning case study on the effects of Confucianism on Korean higher education. Members of a traditional Confucian-based society are required to conform to a strict social hierarchy of subservience to superior members. In education this manifests as reluctance among students to ask questions, denial of responsibility for their own learning, and inconceivability of equal, reciprocal relations with teachers (Schenck et al., 2013). As the results indicate, these effects of Confucianism are challenged by the "neutrality" that the English language provides, the close respectful interpersonal relations among the students and teacher in the digital and physical environments, and the informal nature of IM. Consequently, the teacher and most students perform active, collaborate roles. However, the teacher becomes less directive and facilitative in the digital environment as students assume more responsibility for their learning than with traditional pedagogic approaches such as the lecture method.

The consequences for language teaching are penetrating since teachers have to regulate when and how they participate in the digital learning environment (Lemke, 1993). "[O]ne can justifiably ask whether the [digital] education system is to an increasing degree cultivating the observer role [among teachers]?" (Buhl, 2008, p. 14). The results affirm an evolution of roles as the IM chatroom provided a platform for equal reciprocal collaboration. Most notably, while the teacher's teaching responsibility decreased, his personal responsibility increased, and vice versa for the students. This is suggestive of professional and personal identity shifts.

Scholarship affirms the development of multiple personas and alter-egos across physical and digital environments (Andrade, 2009; Greenhow, Robelia, & Hughes, 2009), and as the results indicate, these personalities affect educational performance and eventually grades (Komarraju, Karau, & Schmeck, 2009; Noftle & Robins, 2007). The digital discourse community nurtures the creation of a collection of "pastiche personalities" in a "socially saturated world" (Gergen, 1991) where multiple-selves encounter a provisional split between the Cartesian body and mind duality (Talamo & Ligorio, 2001). The split could be considered as distributed cognition that enables members of the discourse community to (re)connect with multiple communities. Thus the fatigue induced by the fast pace and communicative saturation of the IM chatroom (Lee,

Son, & Kim, 2016) also transforms personas and their individual and collective purposes. In a sense, Confucianism is avant-garde because it considers individual purposes in terms of or in relation with the community: "in order to establish myself, I establish others; in order to enlarge myself, I enlarge others" (Leaman, 1999, p. 74) and vice versa. The academic discourse community could, therefore, be seen as the cumulative collective efforts of its active and passive personas.

4.2 Principles for academic discourse socialization in IM-mediated education

The theorization of academic discourse socialization through the use of IM in EAP explains the interrelationships among and effects of these key concepts on each other. As IM facilitates academic discourse socialization, it complicates and complements education; therefore, the following interrelated principles integrate the results and theorization to envision the considered operationalization of IM for EAP. The principles revert to the main themes of the radial matrix.

4.2.1 Pedagogic concerns

- To facilitate digital academic discourse socialization, a resilient teaching philosophy should initiate and actively promote equality among discourse participants, reciprocity, and community.
- Because the academic discourse community determines the extent of language and discourse socialization, IM can be used in both EFL and EAP settings. The informal nature of IM encourages participation and the *use of language* while discourse participants determine the formality and complexity of content and language to actualize the *use of English for academic purposes*.
- To ensure the vitality of the digital environment, a sense of collective responsibility for learning should be instilled among students and teachers alike. Such responsibility could be achieved through individual or small group work distribution.
- Although the digital environment accentuates community, the community of practice also recognizes individuality and diversity that challenges patterns of participation. Therefore, the polarization that occurs as a result of active or passive participation does not necessarily equate to inequality because active or passive participation could merely be the result of the digital and physical personas that students assume.
- When a chatroom is used in conjunction with physical class attendance and participation, chatroom participation as means for assessment should be carefully (re)considered because social fatigue could spur lethargy and/or animosity toward the course and other participants.

4.2.2 Interpersonal relations

- Private and personal communications that occur through IM challenge traditional hierarchies that separate students from teachers. Instant messaging has the potential to enhance interpersonal relations.
- Because the digital learning environment is community-driven and its digitality renders it ubiquitous, the limitations of human interaction must be recognized as prolonged and persistent exposure to digital interaction irrefutably leads to social fatigue.

4.2.3 Psychosocial influences

- The digital learning environment is community-driven and relies on reciprocal social and collaborative engagements, hence interpersonal relations and textual identities are continuously (re)negotiated.
- The inherent informal nature of IM challenges formal societal hierarchies. Therefore, it would be prudent to be cognizant of cultural contamination where it is not desired.

5. Conclusion

This paper is the culmination of the classroom, chatroom, and in-person collaboration among two undergraduate students and their teacher. It serves as a material example of the range of (digital) academic discourse socialization from personal domain to professional academic practice, and it reports on academic discourse socialization through IM in the context of EAP.

Instant messaging is a versatile mode of communication that could be used productively to enhance interpersonal relations, operationalize teaching philosophies, and challenge traditional hierarchical relations. As Kyungmin reported in her essay: "Taking into consideration that the chatroom facilitated better communication among students and the professor and thus enhanced the efficiency of the class, it is irrefutable that it [IM] served its purpose better than expected." However, its ubiquity, quantitative presence, and demands on shifting personas pose threads of social and communicative fatigue and saturation. Therefore, implementation of digital learning environments should not be done without thoroughly (re)evaluating the physical and psychological demands on students and teacher.

While this paper contributed to theory building and the systemization of principles for the use of IM in EAP, it could be criticized for being relatively small in scale. Yet, the scale is in harmony with the phenomenological methodology. The principles and theoretical contributions formulated in this paper do not

constitute a hegemonic metanarrative on the topic of academic discourse socialization through IM. As such, the project could be seen as a pilot study and a harbinger of more elaborate and empirical studies. For example, issues that remain unanswered, but that could have far-reaching consequences for education, include the following: Firstly, how does the digital environment contribute to educational equality in racially and sexually stratified societies? Secondly, how can pedagogic practice overcome social fatigue while digital learning environments seem to be proliferating unabatedly? Finally, information overload seems to be symptomatic of the proliferation of digital learning. How does the academic discourse community respond judiciously and ethically to information overload? Answers to these questions may further inform the narrative on digital discourse socialization.

References

Andrade, N. N. G. D. (2009). Striking a Balance between Property and Personality the Case of the Avatars. *Journal of Virtual Worlds Research*, *1*(3), 3-53.

Bezemer, J., & Kress, G. (2009). Visualizing English: a social semiotic history of a school subject. *Visual Communication*, *8*(3), 247-262.

Bohl, J. C. (2008). Generation X and Y in law school: Practical strategies for teaching the MTV/Google generation. *Loyola Law Review*, *54*, 775-799.

Buhl, M. (2008, March). New teacher functions in cyberspace-on technology, mass media and education. In *Seminar.net*, *4*(1), 1-16.

Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research*, *17*(10), 1316-1328.

Contreras-Castillo, J., Pérez-Fragoso, C., & Favela, J. (2006). Assessing the use of instant messaging in online learning environments. *Interactive Learning Environments*, *14*(3), 205-218.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: SAGE.

Davis III, C. H., Deil-Amen, R., Rios-Aguilar, C., & Gonzalez Canche, M. S. (2012). *Social Media in Higher Education: A literature review and research directions*. Retrieved from http://works.bepress.com/hfdavis/2/

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.

Duff, P. A. (2010). Language socialization into academic discourse communities. *Annual Review of Applied Linguistics*, *30*, 169-192.

Duncan, I., Miller, A., & Jiang, S. (2012). A taxonomy of virtual worlds usage in education. *British Journal of Educational Technology*, *43*(6), 949-964.

Ellis, C. S. (2008). Co-constructed narrative. In *The SAGE Encyclopedia of Qualitative Research Methods* (Vol. 1&2, pp. 84-85). Thousand Oaks: SAGE.

Fouser, R. J. (2010, July). From CMS to SNS: Exploring the use of Facebook in the social constructivist paradigm. In *Applications and the Internet (SAINT), 2010 10th IEEE/IPSJ International Symposium on* (pp. 221-224). IEEE.

Garrett, P. B., & Baquedano-López, P. (2002). Language socialization: Reproduction and continuity, transformation and change. *Annual Review of Anthropology*, *31*, 339-361.

Gergen, K. (1992). *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.

Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, teaching, and scholarship in a digital age Web 2.0 and classroom research: What path should we take now?. *Educational Researcher*, *38*(4), 246-259.

Griffith, S., & Liyanage, L. (2008, June). An introduction to the potential of social networking sites in education. In *Emerging Technologies Conference 2008* (p. 9). Retrieved from https://www.researchgate.net/profile/Liwan_Liyanage/publication/30387690_An_introduction_to_the_potential_of_social_networking_sites_in_education/links/004635221f30710f81000000.pdf

Hartree, A. (1984). Malcolm Knowles' Theory of Andragogy: A critique. *International Journal of Lifelong Education*, *3*(3):203-210.

Hershkovitz, A., & Forkosh-Baruch, A. (2013). Student-teacher relationship in the Facebook era: the student perspective. *International Journal of Continuing Engineering Education and Life Long Learning*, *23*(1), 33-52.

Hrastinski, S., & Aghaee, N. M. (2012). How are campus students using social media to support their studies? An explorative interview study. *Education and Information Technologies*, *17*(4), 451-464.

Hull, G. A. (2003). At last: Youth culture and digital media: New literacies for new times. *Research in the Teaching of English*, *38*(2), 229-233.

Johns, A. M. (1997). *Text, Role and Context: Developing Academic Literacies*. Cambridge: Cambridge University Press.

Kakao (2016). *Kakao terms of service*. Retrieved from http://www.kakao.com/policy/terms#none.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59-68.

Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*, *19*(1), 47-52.

Lasso, R. (2002). From the Paper Chase to the Digital Chase: Technology and the Challenge of Teaching 21st Century Law Students. *Santa Clara Law Review*, *43*,1-61.

Leaman, O. (1999). *Key concepts in Eastern philosophy*. London: Routledge.

Lee, A. R., Son, S. M., & Kim, K. K. (2016). Information and communication technology overload and social networking service fatigue: A stress perspective. *Computers in Human Behavior*, *55*, 51-61.

Lemke, J. L. (1993). Education, Cyberspace, and Change [Serial Article Online]. *Electronic Journal on Virtual Culture*, *1*(1), n1.

Lopez, K. A., & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative health research*, *14*(5), 726-735.

Mayes, D. K., Sims, V. K., & Koonce, J. M. (2001). Comprehension and workload differences for VDT and paper-based reading. *International Journal of Industrial Ergonomics*, *28*(6), 367-378.

Morita, N., & Kobayashi, M. (2008). Academic Discourse Socialization in a Second Language. In *Encyclopedia of Language and Education, 2nd Edition*. Edited by Duff, P. & Hornberger, N. Heidelberg: Springer, 8:243-255.

Noftle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: big five correlates of GPA and SAT scores. *Journal of personality and social psychology*, *93*(1), 116.

Prinsloo, C. (2014). *A curricular framework for English for Academic Legal Purposes*. Doctoral dissertation. Available at: http://repository.up.ac.za/handle/2263/42844.

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching, 2nd Edition*. New York: Cambridge University Press.

Schenck, A., Mottalib, R. E., & Baldwin, M. (2013). Investigating Ways to Reform International Education in Confucian Contexts: A Case Study of South Korean Higher Education. *International Education Studies*, *6*(7), 31.

Schieffelin, B. B., & Ochs, E. (1986). Language socialization. *Annual Review of Anthropology*, *15*, 163-191.

Sorensen, C. W. (1994). Success and education in South Korea. *Comparative education review*, *38*(1), 10-35.

Sun, Y. C., & Chang, Y. J. (2012). Blogging to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning & Technology*, *16*(1), 43-61.

Swales, J. M. (1990). *Genre Analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

Talamo, A., & Ligorio, B. (2001). Strategic identities in cyberspace. *CyberPsychology & Behavior*, *4*(1), 109-122.

Teclehaimanot, B., & Hickman, T. (2011). Student-teacher interaction on Facebook: What students find appropriate. *TechTrends*, *55*(3), 19-30.

Tess, P. A. (2013). The role of social media in higher education classes (real and virtual)–A literature review. *Computers in Human Behavior*, *29*(5), A60-A68.

Ullrich, C., Borau, K., Luo, H., Tan, X., Shen, L., & Shen, R. (2008, April). Why web 2.0 is good for learning and for research: principles and prototypes. In *Proceedings of the 17th international conference on World Wide Web* (pp. 705-714). ACM.

Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on ELearning*, *6*(1), 81-94.

Vrocharidou, A., & Efthymiou, I. (2012). Computer mediated communication for social and academic purposes: Profiles of use and university students' gratifications. *Computers & Education*, *58*(1), 609-616.

Wang, S., & Vásquez, C. (2012). Web 2.0 and second language learning: What does the research tell us? *Calico Journal*, *29*(3), 412-430.