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**PRACTICES AND STRATEGIES OF SELF-INITIATED LANGUAGE
LEARNING IN AN ONLINE SOCIAL NETWORK DISCUSSION FORUM: A
DESCRIPTIVE CASE STUDY**

A Dissertation in

Instructional Systems

by

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ABSTRACT

The proliferation of information and communication technologies and the prevalence of online social networks have facilitated the opportunities for informal learning of foreign languages. However, little educational research has been conducted on how individuals utilize those social networks to take part in self-initiated language learning without guided instruction. The main purpose of this descriptive case study was to understand the strategies, practices, and knowledge that were shared by forum members during the self-directed learning process. I reviewed forum topics that remained actively discussed over a six-month time frame (from the beginning of September, 2011 to the end of February, 2012). Among those active forum topics, only topics with 30% or more popularity were studied. A total of ten forum topics qualified both selection requirements. Only those that exchanged questions and information pertaining to knowledge of language learning were analyzed.

By examining a total of two hundred and eighty-three discussion messages from the ten selected topic threads, twenty-eight codes with their operational definitions were generated to analyze the selected discussion messages into thirteen sub-themes, and eventually to summarize them into main themes. The results of the data were categorized into four themes that illustrated the main practices and strategies used by participants in the social network to help each other learn new languages: (1) self-initiated learning strategies, (2) self-initiated learning priorities, (3) reflections on the complexities of practices, and (4) knowledge building. These four themes suggested that this online language learning social network Website provided an open space for registered forum

participants to exchange resources and information for language learning, to share their past learning experiences, to discuss their personal learning problems with other members, to contribute their language learning strategies and skills to the knowledge repository, and to build up their individual knowledge based on others' distributed knowledge and the dispersed knowledge within the social network shared by other forum members (Gee, 2004).

Through forum members' social practices of group interaction, communication, discussions, clarification, and negotiation on different subject matters, self-initiated learning and sharing of group meanings were evidenced in the threaded discussions. In addition, forum members' participation in the various discussion topics by contributing their individual knowledge to the group knowledge base served the effect of advancing the accumulation of collective knowledge and moved the current knowledge repository forward during the process of knowledge sharing (Chuy et al., 2011; Scardamalia & Bereiter, 2003; Scardamalia & Bereiter, 2006; Stahl, 2006; Sternberg, 2003).

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Chapter 1. Introduction

Background

In the digital age, access to information and ideas is a part of everyday life. Learning is not only limited to formal, school-based venues, it can happen at work and play, via interactions with others, throughout our daily activities, during our leisure time, or across our entire lifetime (Falk & Dierking, 2002). Having such a variety of opportunities for informal learning, individuals can take control of when, where, what, with whom, and via what media or methods to perform “free-choice learning” when we are self-motivated to learn based on our personal needs, pleasure, interests or curiosity (Falk & Dierking, 2002).

In informal environments, we have the autonomy to develop our own learning trajectories, as well as to build up our thinking dispositions and strategies, knowledge, and identities according to our motivations, culture, and social competencies and practices (Bell et al., 2009). For years, educational researchers have focused attention on the relationship between motivation and human learning (Falk & Dierking, 2002). Studies have shown that humans are more likely to participate voluntarily in learning activities that they perceive to be free of anxiety, enable choice, and that they are competent to accomplish (Falk & Dierking, 2002). Personal interest is another crucial factor to sustain learning in informal environments. Barron (2006) has proposed a sequence of conjectures to examine the relationship between the dynamics of interest and learning in the process of self-initiated learning. The presence of both text-based informational sources and ideational resources should be made available for initial

interest in learning to emerge and to maintain within any life space. Once the interest is triggered, chances for engaging in interactive, boundary-crossing, and self-sustaining activities should be created to provide more opportunities for structured learning (Barron, 2006).

Another key strategy to sustain learning in informal environments is the use of artifacts. People tend to establish their own distinctive systems of utilizing different artifacts to handle different learning tasks in everyday learning. Various forms of media tools and electronic devices are regarded as pervasive representations of learning artifacts to provide diverse functions for people to participate in learning activities and social interaction (Bell et al., 2009). Barron (2006) suggested that the exploration of media is an important step in terms of developing knowledge-building networks in the process of self-initiated learning. Modern media technologies have helped to loosen boundaries, and to promote multidirectional communication between different learning activities across different contexts. Modern media technologies have also offered more physical and virtual spaces for people to interact with other participants, media objects, and communication tools at a distance (Barron, 2006; Gee, 2004). The extensive uses and proliferation of information and communication technologies have made informal learning more attainable in our day-to-day life. With the support of technologies, informal learning can occur boundlessly anywhere and at anytime without the limitations of space and time.

Self-Initiated Language Learning in Informal Networks

Throughout the 1990s, language educators began to shift their perspective on knowledge development of language learning from cognitivist assumptions to collaborative and social-interactive styles due to the increasing influence of direct personal experience with the emerging network technologies (Thorne, 2008). Thus, as new information and communication technologies continue to develop, as well as the number of worldwide users engaging in Internet-supported activities for language learning, studies in connection with computer-mediated communication (CMC) and language education should advance along with the expansion of new user populations and learning needs, and emerging tools (Thorne, 2008).

In recent years, several language learning social networks have emerged that facilitate the self-directed learning of a foreign language. Online social networks, such as “LiveMocha,” “Italki,” and “Palabea,” support language learning by providing access to learning resources, pairing language exchange partners or teachers for learners, and connecting learners with others who speak the target languages to help them learn vocabularies and pronunciation. Media tools such as podcasts and live video or audio chats are used to support conversational practice and tutoring. Reputation systems are incorporated in online social network sites to motivate learners to earn reward points by engaging in interactive activities with other learners and content. Spaces for socially-driven Q&A discussions, open-source file sharing, or collaborative Wikis are also included to encourage learners to sharing resources and building knowledge of language learning together with other members.

Another online language learning social network Website provides an open space for people to share their language-learning experiences, to exchange resources and information with others, and to teach themselves any language. This online language learning social network offers a place for people around the world to tell their personal stories pertaining to any specific language learning, language programs, media and resources used in language learning, learning techniques and strategies, and cultural experiences in foreign language learning. The primary activity on this Website is forum discussions participated by registered members. Users are required to register for an account with basic profile information about their language-learning experiences and interests in order to contribute to forum discussions, or to view other members' profiles. With an increasing number of new registered users and forum posts on a daily basis, this social network site currently has a total of more than 30,000 registered users with over 360,000 posts among nearly 30,000 topics in 35 discussion forums.

Theoretical Perspectives for Learning in Online Social Networks

Gee (2004) introduced a concept of social configuration – affinity space – in which people participate, interact, and learn from others when they are self-motivated to engage in social practices that they think are valuable. In an affinity space, a mixed group of people from newcomers to more skillful or experienced expertise share common interests, goals, or practices through different forms or methods to contribute and exchange various types of knowledge within the same space. “Content,” “interaction,” and “portals” are three important components to define an affinity space (Gee, 2004). Content is the subject matter for the space to be about. Content organization is how the

content is arranged or designed in an affinity space. When content is generated and presented in an affinity space, users can view and interact with the content directly, or they can interact with others over that content by giving specific meaning to the content (Gee, 2004). In terms of interactional organization in an affinity space, it is defined as various approaches of how people arrange their ideas, behaviors, and social actions and interactions with and over the content and their relationships as they perform some regular patterns in an affinity space (Gee, 2004). A portal enables people to enter a space, to gain access to the content, to add or change the content created by other content generators, and to interact with the content by themselves or with others (Gee, 2004).

Language learning social network Websites share many features of an affinity space. People who can speak different languages join the network voluntarily with different motivations or purposes. Some highly skilled participants who can speak at least one or many languages fluently are participating in forum discussions, multimedia chats, and interactive learning activities to contribute their personal experiences or advices to help others to learn languages. Likewise, participants who are currently studying other foreign languages on their own are seeking useful information provided on social network Websites or from other members in the same space. Different routes to status and different forms to participation are evidenced on those language learning social network Websites since learners are at different levels of language proficiency in different languages, and as a result, they will have different degrees of contribution and interactions on the sites as they participate in learning activities, such as sharing personal stories, strategies and knowledge about language learning in forum discussions, providing free resources for language learning, and taking roles as language tutors or conversation

partners for language practices (Gee, 2004). Consequently, some features of an affinity space might be witnessed on the language learning social network sites, including intensive knowledge, extensive knowledge, individual knowledge, distributed knowledge from different people, content and materials, and mediating devices, dispersed knowledge at other sites, and tacit knowledge that users build up in practices (Gee, 2004).

Problem and Purpose

Current practices of using technologies for language learning include mobile communication, electronic devices, and video conferencing (Godwin-Jones, 2005; O'Dowd, 2006; Thorne, 2008). The extensive applications of mobile communication, such as PDAs, cell phones, and other electronic devices, have been widely used to engage learners in language learning without limitations of time and space (Godwin-Jones, 2005). Video conferencing is a point-to-point close communication system that provides language learners a cost-effective intercultural approach to interact with native speakers or distant partners without leaving their own classrooms (O'Dowd, 2006). Other types of Web-based technologies used for language learning include telecollaboration, online gaming, instant messaging, Wikis and blogs (Davies & Merchant, 2007; Godwin-Jones, 2005; Steinkuehler, 2004; Thorne, 2008). Telecollaboration is an Internet-mediated intercultural approach of language learning that requires class-to-class coordination between partner classes with intensive support from administrations (Thorne, 2008). Multiplayer online gaming is another strategy to support communication and cooperation in language learning while players are building their online identities and learning from others in collaborative environments (Godwin-Jones, 2005; Steinkuehler, 2004). The

informal and synchronous characteristics of instant messaging allow learners to exchange prompt communication. It is usually incorporated into online learning environments as an additional method for communication, such as in learning management systems or multiplayer online games (Godwin-Jones, 2005). Digital writing and online publishing like Wikis or blogs have become popular social practices for language learners. Such Web applications offer the possibilities for learners to contribute to an affinity group or online community by composing serial entries and collaborating with others (Davies & Merchant, 2007; Thorne, 2008).

Despite the prevalence of online social networks for language learning, little educational research has been conducted on how individuals use them to self-direct their own language learning. The main purposes of this qualitative study were to understand the strategies, practices, and knowledge that were shared by forum members during the self-directed learning process. During my investigation, I observed and read forum posts without intervening in members' interactions and discussions.

Research Questions

My research examined the following overarching question:

1. What practices and strategies were shared by participants in the online social network to help each other learn new foreign languages?

Chapter 2. Review of Literature

Language Learning and Technology Use

The advance of mobile and personal technology, such as smart phones, PDAs, MP3 players, and iPods, is viewed as delivery platforms for all kinds of services, and has helped the generation of digital natives to easily adapt to utilize emerging technologies as new strategies and tools in learning language (Godwin-Jones, 2005; The Horizon Report, 2006). Language learners are able to store language materials in those electronic devices, and to listen to the digital content while taking public transportations, walking across campus, or engaging in any spare time activities. The podcasting phenomenon is a popular application of using portable devices for foreign language learning. Recordings of dialogs or conversations, or readings from poetry or literatures in foreign languages can be broadcasted via podcast to help students learn the sounds and pronunciations of the languages, and practice dictation (The Horizon Report, 2006). With the support of those portable technologies, language learners can immerse themselves in their own mobile learning environments to sustain their language learning either for academic purposes or their personal interests (Godwin-Jones, 2005).

Video conferencing is another communication tool equipped with video function to network with distant peers for learning foreign languages. It a cost-effective approach which provides language learners with authentic opportunities to interact with native speakers without leaving their own classrooms (O'Dowd, 2006). Video conferencing in foreign language education usually requires students to take part in both pre-

videoconference preparation and post-session analysis to follow up any doubts or clarifications in order to gain sufficient intercultural learning experiences. Studies have shown that students participating in video conferencing sessions are less stressful and intimidating than their traditional form of oral practices with their language instructors (O'Dowd, 2006).

The development and applications of Web-based technologies have been providing language education with different learning approaches. Nowadays, language learning no longer takes place in traditional classroom-based environments only. Technology has helped to break the geographic boundaries, to increase intercultural interactions and communication between distributed language learners, and to connect individuals around the world with experts who speak those languages that they are studying (Thorne, 2008). "Telecollaboration" is a type of pedagogical approaches for intercultural language learning education that requires high level of collaboration and coordination between partner classes with intensive support from their administrative institutions (Belz & Müller-Hartmann, 2003). Classes practicing telecollaboration normally affiliate their course design and syllabi with each other by using parallel text materials and shared information in their curricula to encourage learners to exchange dialogs, to work on cross-cultural analyses, to develop and promote linguistic and intercultural competence, and to engage in collaborative activities (Belz, 2003; Thorne, 2008). In a case study of a telecollaborative project drawn from a three-year research project designed to investigate the impact of telecollaboration on foreign language learning and teaching at college level in the United States, Belz (2003) examined three participants' development of intercultural competence in a German-American e-mail

partnership via electronic correspondence. From analyzing the data collected from the seven-week e-mail interaction among three learners, Belz (2003) discovered that the participants were willing to interact with others in a relationship of equality, to express their interests in others' viewpoints, as well as were ready to interrogate different values and assumptions behind one's cultural practices, and were ready to participate in culture-specific verbal communication in the corresponding contexts.

Virtual gaming and massive multiplayer online role-playing videogames (MMORPGs), such as *Second Life*, *The Sims*, and *World of Warcraft*, offer opportunities for language learners to interact with both the gaming software and other characters, as well as to involve in social actions and language uses in multilingual, cultural, and task-based settings (Steinkuehler, 2004; Thorne, 2008). The simulated setting in virtual gaming and MMORPGs creates a learner-center environment in which learners are able to choose their own goals to achieve, to keep themselves on-tasks, and to progress through the games via collaborations and communications with other players. Simulation and gaming provide an environment of language immersion in which learners have the opportunities to apply their language skills to solve obstacles on their ways toward achieving their goals in the given "real-life" situations that require learners to practice different vocabularies and grammar in the target languages (Bryant, 2006). Players are motivated to study foreign languages so that they can communicate and exchange gaming skills with other players from all over the world, and negotiate gaming strategies with teammates to solve complex scenarios preprogrammed in the simulating systems which constantly provide feedback and demonstrate progress to stimulate players' participation (Bryant, 2006; Thorne, 2008). Therefore, language is practiced through collaborations

and interactions while learners are encouraged to polish up their language skills with the presence of native speakers in the virtual gaming environments (Bryant, 2006). Instant messaging (IM) has become widely utilized as a tool for informal communication due to its nature of language usage. Since IM users have a tendency to use shorter utterances, abbreviations, emoticons or other coded expressions than the more deliberate writing of e-mails and blogs, instant messaging is typically used as a conjunctive tool with other forms of communication to support synchronous conversations in online language-learning environments. Language instructors have been encouraging their students to find IM partners to exchange audio and video conversations in addition to text-based communication (Godwin-Jones, 2005).

Wikis, blogs, and discussion forums are popular Web-based technologies that have been rapidly used for language education in recent years (Thorne, 2008). Wiki provides an intensively collaborative writing environment for multiple users to spontaneously and continuously contribute to develop the content of the written production on Wiki pages. Practices of using Wikis in foreign language education include individual and collaborative authoring and term papers, fiction and non-fiction compositions, assembly space for managing projects, multi-party running commentaries, and genre specific publications, such as newspapers or newsletters (Thorne, 2008; Thorne & Payne, 2005). Since Wiki pages can be created for specific purposes with restricted allowance of user access, and the tracking feature enables instructors and Wiki collaborators to identify any content modification, Wiki sites function as online repositories of shared knowledge for foreign-language learning (Godwin-Jones, 2003; Thorne & Payne, 2005). Therefore, Wiki technology has been utilized in many

educational projects, such as L*Wiki, which was supported by Penn State's national foreign language resource center to encourage their language instructors to incorporate Wiki technology into their language courses and ESL programs (Thorne & Payne, 2005).

Blog is another Web-based technology that lays out a series of blog entries with posted date and time stamps. Blogging has been utilizing as an alternative evaluation method for language educators to request their students to take on their ownerships and responsibilities by posting writing assignments, personal narratives and reporting, or reflection journals on blogs instead of submitting them to course instructors (Godwin-Jones, 2003; Thorne, 2008). An individual learner can use a blog as an electronic portfolio to display his or her progress of language learning over time (Godwin-Jones, 2003). Blogs visitors can also post their responses to any blog entry if the comments feature is enable by blog owners. The chronological feature of blogs allows students to archive their works as resources or reference materials, which can be revisited and reflected upon by students themselves, and by other peers so that they can leave comments and exchange opinions pertaining to their language learning experiences (The Horizon Report, 2006; Thorne, 2008). For example, students in a literacy criticism course offered by the English Department at York University have to write their weekly learning journals on blogs, and give comments or reactions on their peers' journals as a part of course requirements by their faculty (The Horizon Report, 2006). Although most blogs are individually managed, group blogs can be created and linked together to form a larger online community for project-based language learning (Godwin-Jones, 2003). The CALPER Newsblog administrated by the Center for Advanced Language Proficiency Education and Research (CALPER) at the Pennsylvania State University is an open

online community in which people can share information and resources of language teaching profession and language education in a number of areas, including language program development, teaching and learning materials, language policy, language conferences and workshops (“CALPER Newsblog,” n.d.).

Language instructors have been using discussion forums as an auxiliary platform to facilitate student discussions and to encourage written conversations since all messages exchanged in discussion forums can be automatically kept in a threaded and hierarchical format. Some learning management systems (LMS) and content management platforms, such as WebCT, Blackboard, Moodle, or Drupal, support the discussion forum function so that language instructors had access to the built-in forums embedded in their institutional course management systems, and encouraged their students to exchange dialogs in forum discussions as a substitution for face-to-face communication (Godwin-Jones, 2003). Students became more aware of their language uses and structures when they contributed their messages due to the semi-public feature of discussion forums (Godwin-Jones, 2003). Using discussion forums as a supplementary teaching medium to support structured learning is not an unexplored area (Hanna & de Nooy, 2003; Hanna & de Nooy, 2009). However, little research has been conducted to study how language learners take part in self-initiated learning activities without guided instruction in informal online environments. By studying the questions initiated by individual learners and their corresponding threads of responses posted by other forum members on this online language learning social network Website, I gained more in-depth understanding in terms of forum members’ purposes and intentions of participating in self-initiated discussions about foreign language learning.

Computer-supported collaborative and collective learning (CSCL)

Computer-supported collaborative learning (CSCL) concentrates on the inquiry of understanding how people learn together and interact with other peers in small groups through interactive activities in a motivational environment created by computer technology (Kafai & Peppler, 2011; Stahl, Koschmann & Suthers, 2006). CSCL offers learners with media of communication for collaboration, and provides scaffoldings for learners' interactions during the group learning process of addressing questions, working toward to understand inquiries together, instructing others, and observing others' learning behaviors. The media of communication for collaboration in a CSCL environment include various forms, such as e-mail, chat, video conferencing, instant messaging, discussion forums and so on (Stahl, Koschmann & Suthers 2006). Since the group learning process of learners' collaboration is the primary focus of CSCL, a CSCL environment should equip with different pedagogical scaffoldings to support the ongoing discussions and shared meaning construction among learners, and to sustain sociability and productive interactions with feedback (Stahl, Koschmann & Suthers 2006). From a CSCL viewpoint, learning is situated in the social world when individuals engage in meaning negotiation with other social members. Therefore, a CSCL environment should include artifacts and activities with support of emerging communication technologies to facilitate learners' meaning-making process (Stahl, Koschmann & Suthers 2006).

Kafai and Peppler (2011) proposed an alternative framework of "computer-supported collective learning" to study collaborations in massive groups since the member sizes keep expanding in current online communities, such as social network

sites, and virtual gaming communities. The focus of computer-supported collective learning is the abilities to participate in collectives within large-scale networked communities, and further to promote new challenges and opportunities by learning together in massive groups, which is different from the scale of collaborative learning in small group settings (Kafai & Peppler, 2011). Studies have shown that learning opportunities of solving complex problems and collaboration with others across geographical boundaries are evidenced when an individual participate in a large-scale community (Boyd, 2008). In computer-supported collective learning, knowledge is collective and distributed among individual members, who take part in filling a legitimate community need across time and space. Therefore, leadership is emergent and decentralized in a massive online community (Kafai & Peppler, 2011). Either in collaborative or collective learning, researchers should consider not only the member size of the community, but also the nature of group activities, the roles of participated members, and the artifacts or representations of contributed efforts so that they can design and study collective learning environments more effectively (Kafai & Peppler, 2011).

Collaborative Knowledge Building

Knowledge building is defined as the deliberate knowledge creation and valuable knowledge advancement for a community when a group of individuals contribute to the collective knowledge collaboratively by elaborating the existing paradigm to a new direction with gradual moves and efforts (Chuy et al., 2011; Scardamalia & Bereiter, 2003; Scardamalia & Bereiter, 2006; Sternberg, 2003). Stahl (2006) concluded from a

collection of computer-supported collaborative learning (CSCL) literature that learning is a multi-phasic social process of both personal and social collaborative knowledge building. Before we can transform our personal beliefs into socially constructed knowledge, we have to undergo a series of steps, including “interaction, communication, discussion, clarification, and negotiation” (p. 204). In this process of building collaborative knowledge, some of our existing personal understanding or beliefs might be found problematic and would be challenged by different perspectives from other individuals. To resolve such conflict, we will have to clarify and elaborate on the meaning of our pre-understanding, and to amend our interpretation of that understanding to settle a shared comprehension or agreement with the outside world. Our experience of interacting with other cultural artifacts, tools, or symbolic representations would provide us with feedback during the process of meaning negotiation and adjustment. Once the problematic understanding has reached to a common result, and new-shared understanding has become a part of our tacit comprehension, we can utilize our new viewpoints to make sense of our world, as well as to build up the network of our socially collaborative knowledge for future learning (Stahl, 2006).

A knowledge-building environment (KBE) normally serves as a computer-based platform for different ideas or viewpoints to be articulated, communicated, and discussed during various phases of knowledge building process in order to support collaborative learning (Stahl, 2006). Negotiation and social sharing of group meanings are two fundamental components of group interactions in terms of constructing collaborative knowledge (Stahl, Koschmann & Suthers 2006). In KBEs, people are able to elaborate and discuss their thoughts with others, to compare and reorganize their ideas and

perspectives with other people, and to clarify and negotiate understanding and interpretation for reaching shared agreements and formulating collaborative knowledge. Stahl (2006) pointed out that negotiation phase in the knowledge-building process is a crucial step to mediate different perspectives together and to reach mutual understanding of shared knowledge. The collections of negotiated share knowledge contribute to the formation of group perspectives. Shared knowledge should be explicitly elaborated in written language, represented in other symbols, or incorporated into a broader system of comprehensive knowledge (Stahl, 2006).

Since KBEs are computational, ideas or information within a KBE can be preserved and revisited for future review or reflection at any time or from any place. Asynchronous discussion forum is one of the most common interactive communication systems in current collaborative knowledge-building environments. The asynchronous feature of computer-mediated communication (CMC) reduces time and geographic constraints for the participants, and allows them to be more reflective and interactive by exchanging intensive and simultaneous discussions and interactions with others in the knowledge building process of collaborative learning (Herring, 1999; Stahl, 2006). Digital textual records generated via computer-mediated communication (CMC) provide two conversational persistence of spontaneous language production, which are beneficial for language learners (Thorne, 2008). The first persistence is the “immediate rerepresentation” (Thorne, 2008, p. 433) of discussion board messages posted in a synchronous or asynchronous forum. Discussion forums are interactive communication systems that display discussion messages responded by other forum members to the initial posts. Those threads of responses represent the exchanges of divergent ideas that

can be negotiated by the forum members to converge on shared understanding in the process of knowledge building (Stahl, 2006). The second persistent conversation is searchable and analyzable transcripts, which offer opportunities for participants to engage in cognitive processing and meta-linguistic awareness that they might not be able to accomplish in spoken languages (Herring, 1999; Thorne, 2008). This online language learning social network Website possesses those characteristics of a computer-supported collaborative learning (CSCL) environment. Therefore, CSCL and collaborative knowledge building were used as analysis frameworks in my research to discover types of knowledge that were generated by registered members during the self-initiated learning process in this Web-based informal learning environment.

Chapter 3. Research Methodology

Research Context

The research context was an online language learning social network that had five different major categories of discussion forums: “practical language learning” for independent self-study learners to discuss about general and specific languages to learn; “non-English discussion rooms” for discussion about all other languages; “around languages” for discussion about foreign language multimedia for practicing target languages and cultural experiences in foreign languages; “resources” for members to share physical and online resources; and “administration” for any technical support issues. Each major forum comprises several sub-forums to include a variety of topical discussions. Each sub-forum has a consistent layout of information, including columns of forum topics, names of topic starters, numbers of replied posts, numbers of views, numbers of votes for usefulness, percentage of topic popularity, and timestamps of the last post for each forum topic. Different discussions in each sub-forum were listed by different topics brought up by topic initiators. The order of the discussion topics was arranged according to the posted time of the latest post. The most recent-posted or -replied topic was brought to the top of the list underneath the forum rules.

Among the five different major forums, I looked closely at the “advice center” sub-forum under the major forum of “practical language learning.” The “advice center” sub-forum, with more than 30,000 posts in 3,300 topics, is the top fifth popular forum among the 35 discussion forums in terms of the numbers of its total posts. It is a space for people who are learning their first foreign language to ask basic questions and receive

guidance and advice from more advanced members about their personal language learning strategies, priorities, difficulties, goals, and some other practical problems. Users are required to follow sub-forum ground rules and board's guidelines as clarified at the up front of the forum topics. To maintain the operation and order of the discussion forum, a sub-forum administrator is in charge of taking the highest control over the forum. Forum administrator has the authority to turn on and off the forum features, to ban and remove users, to edit and delete posts, and to create users groups. In addition, fourteen moderators are assigned to look after the day to day running of this sub-forum. Moderators have the power to edit, delete, move, close, and unclosed topics and posts in the forum they moderate. Their responsibility is to prevent users from posting offensive or abusive materials.

Research Participants

In this open online language learning social network Website, anyone can have the access to browse all of the content on the Website. However, only individuals who have registered as forum members can initiate new forum topics or reply to others' posts. Forum members are encouraged to fill in as much information as possible to their personal language profiles. Each member's language profile is listed at the left column next to the forum posts that they initiated or replied to any discussion topics. The member language profile contains basic information about the member's username, profile picture, member status (newbie, groupie, junior member, senior member, pro member, or moderator), origin country, personal Website URL, days joined, numbers of posts,

number of votes, languages spoken, and languages studying. The basic profile information provides other members with a general understanding of that member's level of expertise about certain languages, and his or her forum participation status. To guarantee the anonymity and confidentiality of this research project, pseudo names were given to substitute for forum participants' real identities in order to protect their personal information.

As the forum members spent more time browsing the content of this online language learning social network Website, they became more familiar and knowledgeable about where to find information they looked for, where to share their relevant experiences and knowledge to the topical forums correspondingly, and how to interact with the content, the resource, and other users at the Website. Unless their contribution might be helpful in other specific sub-forums, topic initiators in this "advice center" sub-forum are usually registered members who just started their first foreign language learning and were looking for answers and suggestions to their inquiries from other skillful experts. Participants are expected to respect the forum's guidelines, especially posting messages without spelling errors, and avoiding asking questions that have already been discussed at length.

The research proposal was reviewed by the Institutional Review Board (IRB) Administrative Office, and was determined to be non-human research. The Office for the Research Protections (ORP) at the University confirmed that this project did not meet the definition of human participant research. Therefore, no further review was required by the University's IRB or the ORP. (See [appendix A](#) for the determination letter.)

Data Collection

A descriptive case study approach was employed to conduct this qualitative research. The principal purpose of a case study is a descriptive or in-depth examination of a distinct case that might provide researchers with explanatory understanding of the case (Babbie, 2007). Yin (2003) suggested a researcher is able to maintain the “holistic and meaningful characteristics” (p 2.) of a contemporary event by using the case study method to investigate a complex social phenomenon. During the phase of data collection, an unobtrusive research design was employed to observe forum discussions among participated members. I did not interfere in the discussions at all during my observation.

Since the specific time boundary had to be identified to specify the beginning and the end of a case, I first narrowed down my selection of data to those topics that remained actively discussed in a six-month time frame (from the beginning of September, 2011 to the end of February, 2012). Among those active forum topics, only topic threads with thirty percent or more popularity were selected. A total of ten forum topics were qualified for both requirements of selection (See Table 3.1). All discussion messages from those ten topic threads, which together resulted in a total of two hundred and eighty-three discussion messages, were exported and saved as PDF (portable document format) files. Since the content on the discussion board constantly changed over time, exporting discussion messages from this online language learning social network Website to PDF files avoided any further alterations of the selected data, even though forum members continued contributing their comments to the posts after the end date of the six-month

time frame. Exported PDF files were labeled with the file names that also matched with the topic titles so that it was easier to locate and manage the data during the coding process. The selected topic threads for data analysis contained a variety of topics, including topics about learning International Phonetic Alphabet (IPA), Chinese, ancient Greek and Latin, and Spanish, comparing difficulty levels between Japanese and Korean, discussing learning sequences of Indian languages, discussing practical problems of switching between languages, finding useful languages to learn, and setting learning goals. A detailed list of the topic titles and other statistical numbers is presented in the table below.

Table 3.1 Selected Topic Threads for Analysis from the Language Learning Forum: Advice Center

#	Topic Thread	Message #	Views	Tags from Forums
1	Learning IPA (International Phonetic Alphabet)	15	1906	IPA (International Phonetic Alphabet)
2	Japanese is Harder than Korean	44	18335	difficulty, Korean, Japanese
3	Learning sequence for Indian languages	25	3275	India, college/university, choosing a language
4	Why won't she speak Croatian with me?	33	5212	relationship, Croatian, English
5	Structure and method for Chinese	15	1699	study plan, Mandarin
6	Ancient Greek and Latin: study strategy	47	10086	ancient Greek, Greek, Latin, learning strategy
7	Turning "on" and "off" languages	22	3193	language interference, forgetting a language, confusion/mixing up languages
8	Useful languages to learn?	35	2485	usefulness, choosing a language
9	When have you "finished" learning	17	3568	language level satisfaction
10	How to make the best out of Spanish?	30	2261	advanced level, immersion, Spanish
		283		

Data Analysis

In social science research, units of analyses might include individual human beings, social groups, social organizations, social interactions, and social artifacts (Babbie, 2007). In this study, the unit of analysis was each individual message of the two hundred and eighty-three discussion messages within the ten selected topic threads posted by the participating social network members. Although each message within the same topic thread was individually coded, the flow and the history of each particular topic thread might influence my judgment of assigning codes to the message. Codes originally assigned to the messages might be revisited and revised for the purpose of better coding consistency after I finished reading all the replied messages in the same topic thread. The whole topic thread, therefore, helped me with making more appropriate coding decisions along the way of my coding process.

Discussion messages were explicit and transparent records of social communication and exchange of information between forum members. They were valuable data for forum members to reflect, and for researchers to study the processes of both individual and group collaborative knowledge building (De Wever et al., 2006). Only those discussion messages that exchanged questions and information pertaining to knowledge and strategies for language learning were examined for further analyses. Off-topic discussions were not included in the process of data analyses. Through the case study approach, I have gained in-depth understanding of this bounded and identifiable case and produced a descriptive case report via detailed data collection (Creswell, 2007).

Different kinds of written texts that are used to mediate our social life in modern society provide an abundance of resources for qualitative studies. Peräkylä (2005) suggested that written texts and artifacts, considered as mute evidence, are important materials for qualitative researchers not only because they can be accessed with ease and low costs, but also they can be kept for a long period of time, and provide historical insight. By studying material culture, qualitative researchers are able to investigate different voices, and to interact with different interpretations and experiences hidden in those social artifacts (Hodder, 1994). Qualitative researchers who study written texts should not attempt to analyze their gathered materials by following any specified procedure. Alternatively, researchers should review their materials for as many times as needed to identify possible key themes before they can generate any assumptions or conclusions from their textual data to interpret the cultural world that they are studying (Peräkylä, 2005).

Content analysis is typically used to study recorded human communications, especially for analyzing transcripts of asynchronous discussion groups to investigate the process of knowledge construction in computer-mediated learning environments. Qualitative inductive content analysis, a technique to examine information and meaning embedded in messages of online discussion boards, aims to reveal inductive interpretation and conclusions to achieve more in-depth understanding of the social process of knowledge building (Babbie, 2007; De Wever et al., 2006; Zhang & Wildemuth, 2009). Qualitative content analysis focuses on research participants' descriptive perspectives and reflection on the social world that they are engaging in, as

well as searches for emergent patterns, categories or themes that delineate the meaning of the collaborative process (Zhang & Wildemuth, 2009).

Coding is an important step in analyzing qualitative data in social science research. It is an inductive process for researchers to directly review raw data, and categorize individual pieces of collected information into coding schemes by following methods of empirical observations and coding operation (Babbie, 2007; Hsieh & Shannon, 2005). Before the initial coding process, I read through the two hundred and eighty-three messages twice to immerse myself in the data set and familiarize myself with the gathered information. The process of data immersion allowed me to construct a tentative framework that helped me to generate potential schemes during my later coding process. While reading through the data for the third time, open coding was used as an initial round of the coding operation to organize the data by identifying emergent sets of codes and properties from the selected discussion messages. During the process of open coding, the two hundred and eighty-three discussion messages from ten topic threads were reviewed while notes and headings were marked down to describe details of the discussion messages (Burnard, 1991; Elo & Kyngäs, 2008; Hsieh & Shannon, 2005).

After the first round of preliminary open coding, a list of thirty codes and their corresponding operational definitions were generated. For the purposes of coding credibility and inter-rater reliability, this list of codes and definitions was given to a volunteer who has seven-years of experience in language learning. The volunteer randomly selected three topic threads and went over the discussions messages in those threads with the code list provided. Although a list of codes and definitions was provided

to the volunteer coder, her judgment of code assignments was not affected by my initial coding decisions since she did not review my coded messages for the same three topic threads. The volunteer coder marked and labeled her own codes on all of the messages from the three topic threads that she chose on her own. She was also advised to treat each individual message as a unit of analysis, and at the same time to consider the complete topic thread as a whole to help her with determining her own code assignments for the selected topic threads. After the volunteer finished the process of crosschecking, we met to compare our codes for the three topic threads, and discussed our agreements and disagreements in terms of the identified codes and their operational definitions. Messages labeled with the same codes by both of us were reconfirmed for coding consistency, whereas any discrepancy between our labeled codes was discussed thoroughly before we resolved our disagreement on any different code assignments. After the volunteer coder and I adjudicated the labeled codes for the messages within the three topic threads, I then reviewed and revised the coding schemes again, and generated a list of twenty-eight refined codes and operational definitions for analysis (Elo & Kyngäs, 2008; Glaser, 1978). With the refined codes and definitions in hand, I printed out all of the ten unlabeled topic threads again, and started to color-label different codes to the two hundred and eighty-three messages. Since my understanding and interpretation of the data changed over time as I immersed myself in the second round of the coding process, I repeated the iterative steps of going back to check previous coded messages from time to time for coding consistency. I also revised my wording for codes and refined my operational definitions for the codes again before the third round of data coding to make

sure all the twenty-eight codes and their definitions were appropriate and precise to describe my selected data (Zhang & Wildemuth, 2009).

The next step in the analysis process was the grouping phase. In this phase, I grouped various codes together into sub-themes by comparing their similarities and dissimilarities. Next, I categorized several similar sub-themes into broader themes (higher order categories). Elo and Kyngäs (2008) described this phase as the “categorization” (p.110) approach of inductive content analysis process. In the categorization phase, I decided which groups (sub-themes) of data belonged in the same category (main theme), and formed a higher order theme based on my observation and interpretation. Through categorization, the social phenomenon was described, the understanding of the social phenomenon was increased, and the knowledge was generated (Burnard, 1991; Cavanagh, 1997; Dey, 1993; Downe-Wamboldt, 1992; Elo & Kyngäs, 2008).

Once the sub-themes and themes were identified, the following step in the data analysis was to make sense of the coded data by providing valid inferences and reporting the conclusions (Elo & Kyngäs, 2008). Based on my understanding and interpretation of the data during the iterative analysis process, I provided examples of discussion messages for different sub-themes and themes, and presented my reconstruction of meanings to answer my research inquiries in the next chapter.

Trustworthiness

“Credibility” is an essential criterion to evaluate interpretive research work (Lincoln & Guba, 1985). Therefore, to ensure credibility was achieved in the study, I followed Lincoln and Guba’s (1985) suggested activities to improve the credibility of my research. I engaged in prolonged and persistent observation of discussion forum activities taking place in my chosen online language learning social network Website. I explained and provided detailed coding procedures in the data analysis by giving examples of how I accomplished various rounds of coding steps and performed the inter-rater process with a volunteer coder. I also consistently crosschecked my coding schemes and interpretations against the raw data to make sure adequate representation of the social reality was presented in my conclusions.

Lincoln and Guba (1985) also proposed that “transferability” is another way of evaluating the quality of the research. Transferability stands for the extent to which a research hypothesis can be applied to other types of contexts. I have attempted to provide detailed descriptions and interpretations of my collected data in the discussion of data analysis section so that other researchers would be able to consult with my research procedures, my experience, and my train of thought and to help them decide whether or not the findings in my study could be transferrable and applied to their research paradigms (Lincoln & Guba, 1985; Zhang & Wildemuth, 2009).

Chapter 4. Results

Introduction

In this chapter, I discuss the codes and operational definitions used during the open coding processes and the grouping phase, and the various sub-themes categorized in the main themes to address my overarching research question: What practices and strategies were shared by participants in the online social network to help each other learn new foreign languages? From the transcribed two hundred and eighty-three messages from the selected ten topic threads, twenty-eight codes were generated in the iterative coding processes along with twenty-eight operational definitions to describe the meaning that each code represents. Each message contains at least one or more codes. The maximum number of codes that a message contains is six. Thirteen sub-themes were generated from the coded two hundred and eighty-three messages during the grouping phase. The thirteen sub-themes were categorized into four broader themes based on their similarities and dissimilarities. The four main themes representing the final results of the coded messages are: (1) self-initiated learning strategies, (2) self-initiated learning priorities, (3) reflections on the complexities of practices, and (4) knowledge building. (See [appendix B](#) for the detailed codes labeled in each message.)

Theme 1: Self-Initiated Learning Strategies

The messages grouped in this theme illustrated the types of strategies that were generated during the online forum discussions. The first theme “self-initiated learning strategies” was generated from four sub-themes, including (1) accessing language

learning materials, (2) creating language learning opportunities, (3) discussing language learning strategies, and (4) showing support. Table 4.1 presents the detailed coding schemes for the first theme of “self-initiated learning strategies.”

Table 4.1 Coding Schemes for Self-Initiated Learning Strategies

Theme	Sub-Theme (4)	Code (6)	Definition	Topic Threads-Messages (#)
Strategies	Accessing language learning materials	Seeking of resources	Discussions about finding useful learning resources and information for studying languages on one’s own	1-2, 1-4. 2-12, 2-14. 3-11. 6-1, 6-16, 6-31. 10-3. (9)
Strategies	Accessing language learning materials	Examples of references	Providing specific books, Web resources or links for learning languages	1-2, 1-4, 1-5, 1-6, 1-7, 1-9, 1-12. 2-43. 3-7, 3-8, 3-16, 3-17, 3-21, 3-23. 5-2, 5-3, 5-4, 5-5, 5-6, 5-9. 6-4, 6-5, 6-8, 6-10, 6-17, 6-19, 6-26, 6-27, 6-31, 6-33, 6-35, 6-39, 6-40, 6-43, 6-44, 6-46. 8-2. 9-5. 10-4, 10-9, 10-11, 10-28, 10-29. (43)
Strategies	Creating language learning opportunities	Suggestions for creating opportunities for language practice	Giving suggestions to others in terms of how to create situations or chances to practice	4-4, 4-6, 4-10, 4-11, 4-14, 4-18, 4-19, 4-20, 4-22, 4-27, 4-31, 4-32, 4-33. 8-3. 10-25. (15)

			speaking certain language(s)	
Strategies	Discussing language learning strategies	Advices about language learning approaches	Suggesting approaches or methods for others to learn new languages, including watching TV series, dramas, movies, YouTube videos or other Web-based video content; listening to podcasts, studying formal textbook materials, finding conversation partners, reading classic novels or stories as supplementary reading materials	1-1. 5-1, 5-3, 5-5, 5-8, 5-9, 5-10, 5-12, 5-14. 6-2, 6-5, 6-8, 6-9, 6-12, 6-13, 6-16, 6-17, 6-25, 6-27, 6-31, 6-33, 6-35, 6-40, 6-41, 6-44. 9-6, 9-7, 9-9, 9-10. 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-9, 10-10, 10-11, 10-12, 10-13, 10-19, 10-20, 10-21, 10-22, 10-24, 10-25, 10-26. (47)
Strategies	Showing support	Respect for others' language preferences	Showing respect to other people's choices of their language preferences	4-8, 4-9, 4-16, 4-20, 4-31, 4-32, 4-33. (7)
Strategies	Showing support	Encouragement of others' language learning progress	Showing encouragement to other forum participants during their language learning processes	3-15, 3-21, 3-23. 4-33. 5-2, 5-3, 5-7. 6-2, 6-5, 6-8, 6-38. 8-9, 8-13, 8-15. 9-4, 9-8. 10-6. (17)

Sub-Theme 1: Accessing Language Learning Materials

In the first sub-theme of “accessing language learning materials,” nine messages were coded as “**seeking of resources**”, and forty-three messages were coded as “**examples of references.**” Forum participants discussed the methods that they utilized to search for available and useful printed materials or Web-based learning resources and information while studying new languages on their own. Specific examples of references, such as names of textbooks and Web-based resources or URL links, appeared in forty-three messages from eight topic threads, which is about fifteen percent of the total two hundred and eighty-three messages (ranked as #3). Forum participants were active in terms of sharing their knowledge of recommending learning materials that they were familiar with or had studied by directing other members to specific language learning resources. A senior member Jerry suggested a notable book in a discussion series of learning Indian languages:

It is worth noting that a lot of literature about India is written in German. The “History of India” written by Hermann Kulke and Dietmar Rothermund is the best scholarly history of India I have read. It is written in English, but their citations include a large number of German sources.

Another senior member Owen talked about uses of supplemental materials in his experience of learning Mandarin in a topic thread about structure and method for learning Chinese. He provided examples of useful textbooks and resources as shown in the following excerpt:

Use plenty of supplemental materials. I'm using my regular textbook (Practical Audio-Visual Chinese) plus another textbook (Far East Everyday Chinese.) ...I also listen to ChinesePod occasionally (any podcast will do if it's at your level). I pick a lesson at random from the Intermediate or Upper-Intermediate levels and just listen and try to pick up as much as I can.

In a discussion of studying strategies for ancient Greek and Latin, a senior member Derrick responded to the topic initiator's requests about recommendations of books and other resources to learn both languages:

I've used Athenaze & both Teach Yourself Greek books (Ancient & New Testament) by Gavin Betts, and sampled many others. The Teach Yourself books are very dense but all the readings and exercises are authentic Greek. Once you've got one or two grammar [books] under your belt, Google Books is your friend for plenty of content. I've recently become enamored of 19th century interlinear classics.

Sub-Theme 2: Creating Language Learning Opportunities

Fifteen messages coded as “**suggestions for creating opportunities for language practice**” discussed ideas and strategies for how to create situations or chances to practice speaking certain languages. Forum participants provided suggestions, such as finding conversation partners or tutors, creating natural environments or circumstances for speaking target languages, or interacting with people over the world who speak target languages via communication technologies. A senior member Calvin gave a suggestion

about how to encourage the topic initiator Ivan's girlfriend to speak her native Croatian with him:

English is now the "habit" – it "feels normal" and it "feels right". It's very difficult to change a habit. The best way to do so is to maximize the few situations where Croatian seems normal, and the more you speak Croatian, the more normal it will become.

Another new forum member Xavier commented on the same topic after he shared his similar experience with his Vietnamese girlfriend:

Make her tell you a story in Croatian, or make her tell you about something in Croatian, a controlled situation when she's only required to speak like that for a short period of time. After that then you can ask her to speak more and she'll become more comfortable speaking her native language with you when she sees you can understand everything and she sees she can tell stories and things like this without having to concentrate.

Another example of suggesting opportunities for language practice was a senior member Ray's comment on a topic regarding the usefulness of learning French.

So you're not going to live in France. That doesn't mean that you still can't use French everyday if you want to - literature, movies, music, poetry, television, radio, chatting online with French speaking people, twitter, skype, online forums, traveling in the French-speaking/French lingua franca world. You might even meet French speakers who live a lot closer to you than you think. It is as "useful" as you want it to be.

Sub-Theme 3: Discussing Language Learning Strategies

“Discussing language learning strategies” is the second most popular sub-theme within the ten selected topic threads from the “advice center” sub-forum in which many forum members shared their recommendations and strategies to engage themselves in language learning. Forty-seven messages from five topic threads, which are nearly seventeen percent of the coded messages (ranked as #2), were coded as “**advice about language learning approaches.**” Forum participants provided advice and suggestions for other members to learn new languages. A variety of learning approaches proposed by the forum participants included watching television series or dramas, watching foreign movies, watching Web-based videos, listening to podcasts, studying textbooks, participating in language exchange activities or programs, reading classic novels or historic stories as supplementary materials for language learning.

A new forum member Gary shared his learning approaches of studying Attic and Latin to comment on a discussion of studying strategies for ancient Greek and Latin:

While studying Attic, I made an effort to get more practice actually reading at least semi-authentic texts, and I think I was mildly successful. Still, as with Latin, my learning was motivated much more by the desire to use the language creatively than to decipher ancient texts.

In the topic thread of discussing the best ways to learn Spanish, a senior member Henry mentioned that immersing oneself in the environment that the target language is

spoken as much as possible is a key element while learning a new language. He also commented on the use of podcasts, as well as other methods for learning languages:

Podcasts are great but just like tv, they're crystal clear and easy to understand. Not that that's a bad thing, just that there's a difference and the only way to get used to Mexican slangs and ways of speaking is to speak with Mexicans or watch movies...Two of my favorites, cinemanet and horroris causa. Great shows with professional teams. Tons of great content.

In the same topic thread, a new forum member Ken shared his strategy of repetition and watching movies while learning a language:

It's all about repetition of everything. Repeatedly hearing, reading, saying. I have a mantra: "After three times experiencing a new word, I will own it." Some will stick sooner, but usually a word has to be experienced somehow three times for it to really stick....Watching movies is an excellent way to learn because you're seeing the context, you're seeing how people really speak to one another in various situations, their greetings, the way they say bye, etc.

Responding to Ken's suggestions, a senior member Frank talked about his learning approach of studying Spanish:

I, personally, put so much emphasis on reading and watching movies in Spanish. I've gotten to where I can polish off a Spanish novel in just a few weeks...It took me a couple months to get through. Now when I pick it up it looks pretty easy. But most important, the words I've learned from context in those novels really stick, whereas my flashcard words I have a lot more trouble recalling.

Sub-Theme 4: Showing Support

Showing support is the fourth sub-theme categorized from the coded forum messages. Forum participants discussed “**respecting others’ language preferences**” by showing their appreciation of others’ choices. This specific sub-theme was identified from a particular topic thread regarding a forum member’s personal concern. The topic initiator, Ivan, was learning Croatian and has a relatively high level of proficiency as a non-native Croatian speaker. Ivan was asking for other member’s suggestions about how to persuade his Croatian girlfriend to speak her mother tongue with him instead of speaking English all the time. Seven out of the thirty replies from other forum participants thought that Ivan should not have forced his girlfriend to practice Croatian with him and should have respected her preference of communicating in English. Another code of “**encouragement of others’ language learning progress**” was also categorized in the sub-theme of “showing support” as a strategy for language learning. Forum participants were generous with giving positive encouragement for other members’ language learning experience by expressing their understanding and sympathy for other’s struggles, and showing their beliefs in other members’ expectations or goals for achievements.

Theme 2: Self-Initiated Learning Priorities

The second theme “self-initiated learning priorities” was generated from four sub-themes, including (1) establishing learning goals, (2) evaluating learning achievement,

(3) recommending language(s) for others to learn, and (4) justifying choices of languages for others or selves to learn. The questions initiated and the comments responded in this group of discussion messages reflected forum members’ strategies and recommendations for how to select and self-direct one’s learning of a foreign language. Forum members were hoping to get a better understanding of estimated lengths for language learning and methods for self-evaluation. They were also asking for other member’s recommendations of choosing useful languages to learn, and their justifications of such recommendations. In addition, forum participants intended to know other member’s motivations when starting to learn a new language. Table 4.2 presents the detailed coding schemes for the second theme of “self-initiated learning priorities.”

Table 4.2 Coding Schemes for Self-Initiated Learning Priorities

Theme	Sub-Theme (4)	Code (7)	Definition	Topic Threads-Messages (#)
Priorities	Establishing learning goals	Expectation of a language proficiency level	Discussions about personal goals or expectations while learning a new language	5-1. 6-3, 6-5. 9-2, 9-4, 9-5, 9-10, 9-15. 10-1. (9)
Priorities	Establishing learning goals	Estimation of learning length	Discussions about estimated length required to achieve a certain level of language proficiency while learning a new language	6-1, 6-2, 6-4, 6-16, 6-22, 6-27, 6-30, 6-34, 6-35, 6-36, 6-41, 6-45. (12)
Priorities	Evaluating learning achievements	Self-examinations on language proficiency level	Discussions about types of evaluation methods, tools, or standardized tests to self-examine current	5-3, 5-13. 9-3. 10-2 (4)

			language proficiency	
Priorities	Recommending language(s) for others to learn	Language recommendations	Recommending useful languages to learn for different reasons or purposes, such as for business, most widely-spoken languages in the world, travel, official languages in multiple regions, or studying other materials	3-1. 8-1, 8-2, 8-3, 8-9, 8-15, 8-22, 8-30, 8-31. (9)
Priorities	Justifying choices of languages for others or selves to learn	Explanations of language selections	Providing reasons or justifications for selecting or recommending certain language(s) to learn	3-1, 3-2, 3-3, 3-5, 3-7, 3-16, 3-17, 3-19, 3-20, 3-22. 6-9, 6-16, 6-31. 8-1, 8-3, 8-5, 8-6, 8-10, 8-11, 8-12, 8-14, 8-19, 8-23, 8-25, 8-26, 8-27, 8-32, 8-35. (28)
Priorities	Justifying choices of languages for others or selves to learn	Learning order preferences of different languages	Proving a learning sequence among various languages with reasons or justifications	3-5, 3-7, 3-8, 3-9, 3-12, 3-17, 3-18. 6-1, 6-2, 6-5, 6-8, 6-15, 6-16, 6-17, 6-31, 6-33. (16)
Priorities	Justifying choices of languages for others or selves to learn	Motivation for learning a language	Discussions about the purposes or intentions when one first started to learn a new language	4-1. 6-1, 6-2. 8-3, 8-4, 8-5, 8-12, 8-19, 8-23, 8-25. 10-25. (11)

Sub-Theme 1: Establishing Learning Goals

The first code within the sub-theme of “establishing learning goals” is **“expectation of a language proficiency level.”** Forum participants discussed their personal goals or expectations when they started to learn a new language. Goals or expectations included passing a language class, getting a language proficiency certificate, preparing one self for studying or traveling abroad without encountering difficulties of communicating with local people, or accomplishing a certain level of language literacy. Forum discussions about estimated length required to achieve a certain level of language proficiency was coded as **“estimation of learning length”** in this sub-theme. A topic initiator Sonia called herself a polymath and assumed that she could learn Ancient Greek in five months, and then in another three months she would learn Latin. Her questions regarding learning Ancient Greek and Latin and her estimation of learning length had forty-six replies, which had the most replies within the ten selected topic threads. Many replies challenged and criticized her estimation of the time frame for learning both tough languages, proposing alternative time needed to learn both languages based on their own learning experiences or time estimator tools designed by the professions.

Sub-Theme 2: Evaluating Learning Achievement

In the “evaluating learning achievements” sub-theme, a code of **“self-examinations on language proficiency level”** was identified for those discussions on different types of evaluation methods, tools or standardized tests for self-evaluation on one’s language proficiency. A topic thread respondent, Marg, introduced a Chinese

reading and reference software to other forum members, and discussed his or her test results by using this Chinese character test applet to evaluate her Chinese proficiency level:

After watching two Mandarin dramas (around 36 episodes each) and another twelve episodes of another, I quizzed myself on characters. Browsing through the list (the most common Chinese characters in order of frequency), I recognized the first 1000 most commonly used characters easily and perhaps half of the next 2000. I also took Clavis Sinica's Character Test last night and scored 1440 on the high intermediate test.

Sub-Theme 3: Recommending Language(s) for Others to Learn

The third sub-theme in “self-initiated learning priorities” is “**recommending language(s) for others to learn.**” Forum participants were asking for others' opinions on language recommendations. Members contributed their recommendations of useful languages based on different purposes, such as for travel or for business, for learning most widely spoken languages in the world, for learning official languages that are spoken in multiple regions, or for studying other materials. A forum moderator Johnson recommended some languages to learn:

French and German is officially spoken in many European countries, so you can't go wrong by learning them. Also, Danish/Norwegian/Swedish could be useful if

you plan on going to Scandinavia. Dutch, English, French, German, Greek, and Swedish are all official languages at the national level in multiple countries. In addition, Czech, Danish, Hungarian, Irish, Italian, Slovak, and Slovene are official languages in multiple EU countries at the regional level.

Another senior member Melanie gave her opinions on the same discussion in terms of useful languages to learn:

I think there should be a rating agency to rate languages for their “learnworthiness”. French has lost its position as a very practical language and will by now only be an average practical language. But Mandarin has a positive tendency, we expect it will become more useful and practical in the future.

Sub-Theme 4: Justifying Choices of Languages for Others or Selves to Learn

In addition to language recommendations, forum participants also provided reasons or justifications for their selections of recommended languages. “**Explanations of language selections**” was used as one of the three codes for identifying discussion messages that belonged to the sub-theme of “justifying choices of languages for others or selves to learn.” A total of twenty-eight messages were coded as “explanations of language selections,” which is nearly ten percent of the total two hundred and eight-three coded forum messages (ranked as #5). In response to the topic initiator Sonia’s request about beginning with learning Homeric Greek with the intention of reading Homer’s works, a senior member Derrick made his comment of suggestions:

I'd encourage you to start with Attic Greek. It equips you for the bulk of the literature sooner (some of the vocab and morphology in Homer is specific to him). Pharr's book makes a decent argument for starting with Homer, but given your time frame as it is I'd suggest saving Homer for later. It hasn't been suggested, but I'd explicitly warn you away from starting with Koine-centered materials (ie. New Testament-specific), such as Mounce's book.

The second code used in this sub-theme was **“learning order preferences of different languages.”** Sixteen discussion messages with justifications or reasons that explained the learning sequences among various languages were categorized in this sub-theme. A topic initiator Marvin wondered the most sensible order of learning Bengali, Hindi, Urdu and some Sanskrit, given that he already had some Persian under his belt. A pro member Bobby provided his recommendations of learning order:

Hindi/Urdu would be an obvious first choice and Bengali would certainly be a reasonable second choice, but look closely at Tamil before you dismiss it! Tamil is absolutely fascinating. It is a true classical language relatively close to the same form that was spoken 2000 years ago. The script is beautiful and not too hard to learn. It is a “complex” and some would say “difficult” language to learn but I believe the rewards outweigh this.

However, another senior member Kate had a different suggestion of learning order for the mentioned Indian languages:

Go for Bengali and Sanskrit (if you've really ruled out Tamil yet)! Hindi and or Urdu will be a piece of cake afterwards (especially if you also know some

Persian). The grammar is relatively easy to pick up on your own and learning Bengali and Sanskrit gives you half the vocabulary (for Hindi).

Another code of “**motivation for learning a language**” was used to label forum messages with discussions on the purposes or intentions when an individual was first motivated to learn a new language. Motivations included intention to impress others, studying other materials in their original languages, personal interests in the culture and history of the studied languages, desire to live in other foreign countries, or usefulness for future job opportunities. A topic initiator, Adrian, asked for others’ opinions about the usefulness of learning Italian. A senior member Ray disapproved of such a motivation to sustain learning a new language:

Usefulness can be rather subjective. It is my opinion that learning a language just because you want to is reason enough. If you don’t really want to learn a language you won’t, no matter how “useful” the language is. Conversely, if you learn a language solely for its business utility or practicality without passion for the culture and people that language represents, you won’t be very happy with it and it will show in how you speak it.

Theme 3: Reflections on the Complexities of Practices

The third theme “reflections on the complexities of practices” was generated from three sub-themes, including (1) reflecting on difficulty level of a specific language, (2) reflecting on language complexity, and (3) discussing practical problems of speaking different languages. In this group of discussion topics, forum members intended to

understand other members' evaluations of language complexity, and their comparisons of differences between two or more languages, as well as to share and discuss practical problems in language learning. Table 4.3 presents the detailed coding schemes for the third theme of "reflections on the complexities of practices."

Table 4.3 Coding Schemes for Reflections on the Complexities of Practices

Theme	Sub-Theme (3)	Code (10)	Definition	Topic Threads-Messages (#)
Complexities of Practices	Reflecting on difficulty level of a specific language	Degree of mastery needed for learning a language	Discussions about the mastery level one should achieve while learning a new language	2-1, 2-5, 2-6. 5-5. 6-8, 6-25, 6-41. 9-1, 9-4, 9-11, 9-13. 10-12, 10-15, 10-16. (14)
Complexities of Practices	Reflecting on difficulty level of a specific language	Difficulty of grammar	Discussions about the difficulty level of grammar for a specific language	2-2, 2-7, 2-8, 2-13, 2-21, 2-25, 2-32, 2-34, 2-40. 3-7. (10)
Complexities of Practices	Reflecting on difficulty level of a specific language	Difficulty of pronunciation	Discussions about the difficulty level of pronunciation for a specific language	2-6, 2-7, 2-17, 2-19, 2-20, 2-21, 2-25, 2-26, 2-28, 2-34, 2-35, 2-40. 5-12. 10-17. (14)
Complexities of Practices	Reflecting on difficulty level of a specific language	Difficulty of writing system	Discussions about the difficulty level of the writing system for a specific language	2-7, 2-13, 2-14, 2-40. 8-5. (5)
Complexities of Practices	Reflecting on language complexity	Comparison of differences between	Comparing different components	2-8, 2-15, 2-16, 2-21, 2-25, 2-26, 2-28, 2-29, 2-31, 2-

		languages	and difficulty levels between two or more languages	32, 2-33, 2-34, 2-36, 2-40. 3-3, 3-17. 7-17. 10-9. (18)
Complexities of Practices	Reflecting on language complexity	Language complexity	Discussions about the complexity of a language and how various components, such as pronunciations, meanings, structure, logical approach, grammar, usage, writing system, and vocabularies, contribute to its complexity	2-15, 2-17, 2-21, 2-22, 2-23, 2-28, 2-36. 3-6, 3-18. 5-1, 5-7. 6-33. 10-6, 10-13, 10-17. (15)
Complexities of Practices	Discussing practical problems of speaking different languages	Problems with switching to different languages	Discussions about the difficulty of switching to speak a different language with the same person once their relationship is established in one certain language	4-1, 4-4, 4-8, 4-10, 4-11, 4-12, 4-13, 4-15, 4-20, 4-24, 4-25, 4-26, 4-27, 4-28, 4-29, 4-30, 4-31, 4-32, 4-33. 7-1, 7-4, 7-7, 7-19, 7-22. (24)
Complexities of Practices	Discussing practical problems of speaking different languages	Languages mix-up	Discussions about the difficulty with switching between two or more languages, or problems of	7-2, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-15, 7-18, 7-19, 7-20, 7-21. (12)

			mixing up different language together while learning more than one language at a time	
Complexities of Practices	Discussing practical problems of speaking different languages	Snippets of languages	Discussions about problems with using words from other languages when one can't express his/her thoughts fully because the language one is speaking or learning is not as well adapted to what one is saying as one would like	7-12, 7-13, 7-14. (3)
Complexities of Practices	Discussing practical problems of speaking different languages	Assumptions of speaking a certain language than the other	Discussions about possible reasons or explanations why one is speaking one certain language instead of the other language when one is capable of speaking both languages	4-5, 4-7, 4-11, 4-12, 4-16, 4-17, 4-29, 4-31. (8)

Sub-Theme 1: Reflecting on Difficulty Level of a Specific Language

Discussion messages about “**degree of mastery needed for learning a new language**” were grouped into the sub-theme of “reflecting on difficulty level of a specific language.” Comparing with the first sub-theme of “establishing learning goals” in the second main theme of “self-initiated learning priorities,” this sub-theme was not about discussions of personal expectations or long-term goals of learning achievement while studying a foreign language. This was primary for messages with input from other forum participants regarding their recommendations for overall mastery level needed to achieve when an individual is considered to be sufficiently competent and has a good command of a certain language. Suggestions that other forum participants provided were based on their past learning experiences from different perspectives, including grammar or reading skills, listening competence, speaking fluency, numbers of acquainted vocabularies or writing characters.

A senior member Mike described his situation with learning Dutch in 15-30 minute bursts each day for a couple of months. Every time he felt he had reached everyday normal functional Dutch ability, he would listen to the radio or read a newspaper article in Dutch. However, he felt embarrassed at how little he knew. Another new member Abby made a similar comment:

As for Dutch, I know that it is quite closely related to English but 15-30 minutes a day for a few months doesn't sound nowhere near enough to achieve even the lowest definition of “fluency” that I have come across – a vocabulary of 3,000 words and the associated grammar to go with it.

Another three codes were assigned to messages with specific discussions about “**difficulty level of grammar**,” “**difficulty level of pronunciation**,” and “**difficulty level of writing system**” of certain languages. Specific languages mentioned in those discussions included Japanese, Korean, Indian, Chinese and Spanish. Forum participants reflected on their personal experiences of learning those foreign languages and shared their thoughts about the difficulty levels of various components of those languages respectively. For example, forum participants discussed how Korean’s multiple forms of the same consonant sounds are difficult to pronounce or to differentiate from one and another for Western people. Others reflected upon their struggle with learning Japanese when they encountered how the length of the Japanese syllables could change the meanings of the words.

Sub-Theme 2: Reflecting on Language Complexity

“Reflecting on language complexity” sub-theme included discussion messages with two codes: “**comparison of differences between languages**” and “**language complexity**.” In one particular topic thread, the topic initiator debated whether Japanese or Korean is the harder language to master. One senior forum member Leonard, who has studied both languages, provided detailed examples in Japanese and Korean to explain the differences of pronunciation, grammar and writing system between these two languages. A new member Carol described how her three-year experience of learning Korean in a Korean university recently helped her to start learning Kanji in Japanese because she was already familiar with most of the vocabularies and grammar learned

from Korean Hanja. Another member Steven from Germany who could speak both Japanese and studies Korean commented on the post by comparing both languages in pronunciation, grammar and reading based on his own experience. In another topic thread of learning sequence for Indian languages, other forum participants contributed their opinions of comparing both Hindi and Urdu which are two of the required languages in a modern Indology program offered for a university degree that another topic initiator considered to join.

“Language complexity” discussed some complexity issues of certain languages from various angles, such as pronunciations, meanings, structures, logical approaches, grammar, usage, writing systems, and vocabularies. In one replied message to an initial request about learning sequences for Indian languages, a forum member talked about the relationships between Urdu, Persian, Sanskrit, Hindi and Bengali, as well as how learning each particular language might help with learning the others in terms of vocabularies, grammar, speaking and writing. Another example of language complexity emerged from a senior forum member Chris’ concerns with studying Chinese. Chris has been studying Chinese on and off for five years alongside a number of other Western European languages for which he had made significant progress. However, his concerns with the complex methods, structure and logical approach for learning Chinese resulted in hindering his progress from advancing to a better level of proficiency. Other responders in later posts within the same topic thread also discussed about their personal experience and frustration with the complexity of learning Mandarin and Japanese, and how they overcame their problems along the way to express their understanding and consensus with the topic initiator’s concerns. In another topic thread about the experience of

mastering Spanish, the topic initiator Pierre discussed the time and effort he spent to deal with the complexity of Spanish structure, and finally how he became comfortable with using the complicated structure of Spanish correctly by giving examples of expressions and sentence structures in both Spanish and English, and comparing the differences between them.

Sub-Theme 3: Discussing Practical Problems of Speaking Different Languages

The third sub-theme of “reflections on the complexities of practices” was about the practical problems one might possibly encounter when capable of speaking more than one language. “**Problems with switching to different languages**” discussed how an individual had a hard time switching to speak a different language with the same person or the same group of people once their relationships were established in certain languages. This problem seemed to be common for people who speak more than one language. A number of nineteen forum participants shared their unique experiences of dealing with this similar problem in their relationships. Another situation that forum participants expressed difficulty with switching to another language was under the circumstance when they had two different language classes back to back and they had to speak or read different languages right after the other.

The second practical problem of speaking different languages is “**language mix-up**” which is very similar to the first problem of switching to speak another language. “Language mix-up” happened when individuals had a difficult time to switch between two or more languages that they were capable of speaking, and then became confused

with choosing the correct language to use at the moment of speaking, reading or communicating with others. In one particular topic thread, forum members shared their personal anecdotes of how they mixed up Spanish and Korean, English and Vietnamese, French or Spanish with German, and many other past experiences of mixing up different languages together.

“**Snippets of languages**” is the third code used to categorize discussions about problems with using words from other languages when individuals could not express their thoughts fully because the languages they were speaking or learning were not as well adapted to what they were saying as they would like. One forum member Betty talked about the occasional experience of using words “though” from English without noticing while speaking native Norwegian with her parents. She believed that our brains sometimes found the best-fit words for what we wanted to say, regardless of whether they matched the rest of the sentences language-wise. Another forum member Rachel shared a similar experience about how she used little snippets of Spanish and Portuguese all the time when speaking with her Mexican and Brazilian friends. “**Assumptions of speaking a certain language than the other**” was used to code those discussion messages regarding possible reasons why an individual preferred to speak one certain language with other people instead of speaking the other language when he or she was capable of speaking both languages. Forum members shared possible explanations on this practical problem with other members. Assumptions were provided based on members’ past experiences of similar situations. Conclusions were drawn as the forum members deliberated upon the particular circumstance and the standpoint that the topic initiator and his partner might face.

Theme 4: Knowledge Building

The fourth theme “knowledge building” was based on how participants shared specified knowledge about language and reflected on their own language experiences. Two sub-themes were identified: (1) discussing language characteristics, and (2) building up the knowledge base. The results of the coded data showed how forum members built on each other’s ideas, as well as the types of knowledge originated through member discussions. Table 4.4 presents the detailed coding schemes for the fourth theme of “knowledge building.”

Table 4.4 Coding Schemes for Knowledge Building

Theme	Sub-Theme (2)	Code (5)	Definition	Topic Threads-Messages (#)
Knowledge Building	Discussing language characteristics	Characteristics of an alphabetic system	Descriptions of IPA (International Phonetic Alphabet) characteristics	1-3, 1-10, 1-11. (3)
Knowledge Building	Discussing language characteristics	Characteristics of Indian languages	Descriptions of characteristics of various Indian languages	3-4, 3-5, 3-7, 3-9, 3-22. (5)
Knowledge Building	Discussing language characteristics	Origins of Indian languages	Discussions about the origins of different Indian languages	3-2, 3-7. (2)
Knowledge Building	Building up the knowledge base	Additional information to an existing	Other forum participants quoted	1-11, 1-14. 2-3, 2-12, 2-15, 2-20, 2-22, 2-23, 2-

		message	previous messages within the same topic thread and responded directly to them by adding further information or explanations to the discussions.	24, 2-28, 2-29, 2-30, 2-32, 2-35, 2-41, 2-43. 3-4, 3-6, 3-10, 3-12, 3-13, 3-17. 4-17. 5-14. 8-12, 8-14, 8-20, 8-27, 8-32, 8-33. 10-22, 10-30. (32)
Knowledge Building	Building up the knowledge base	Sharing of learning experiences	Sharing personal language learning experiences or anecdotes with other forum participants, including their language learning tools, media, methods, techniques, examples of word choices and usage, etc.	1-4, 1-9, 1-14, 1-15. 2-5, 2-8, 2-13, 2-16, 2-24, 2-25, 2-29, 2-31, 2-34, 2-36, 2-37, 2-38, 2-39, 2-42, 2-43, 2-44. 3-10, 3-11, 3-12, 3-17, 3-19, 3-21, 3-23. 4-1, 4-4, 4-8, 4-10, 4-11, 4-12, 4-13, 4-15, 4-20, 4-24, 4-25, 4-26, 4-27, 4-28, 4-29, 4-30, 4-31, 4-32, 4-33. 5-1, 5-3, 5-5, 5-7, 5-12, 5-14. 6-8, 6-9, 6-14, 6-16, 6-28, 6-30, 6-31, 6-33, 6-34, 6-35, 6-40, 6-41, 6-42. 9-5, 9-9, 9-10. 10-1, 10-2, 10-3, 10-6, 10-10, 10-12, 10-13, 10-15, 10-17, 10-18, 10-20, 10-21, 10-25. (81)

Sub-Theme 1: Discussing Language Characteristics

Three codes were used in the sub-theme of “discussing language characteristics.” One topic thread was coded as “**characteristics of an alphabetic system**” since the discussion messages under this particular topic were about descriptions of IPA (International Phonetic Alphabet) characteristics. Forum members added notes on why it is important to learn IPA in addition to their introduction and explanations of some IPA characteristics. A new forum member Andy explained the features of IPA:

The IPA is beautiful because it’s really just describing what your mouth, lips, tongue, throat parts, etc. are doing and not some arbitrary symbols. It’s based on anatomy and physiology of the human upper respiratory and digestive tracts rather than any human language...Its not a separate alphabet with cultural quirks and problems, it’s a way to describe what movements your month is making and in what order.

Another topic thread contained discussion messages about “**characteristics of Indian languages**” and “**origins of Indian languages**”, including Hindi, Urdu, Bengali, Tamil, Sanskrit, and Dari, as well as detailed explanations of the importance of studying those Indian languages. A forum member Kathy gave her opinions on learning Indian languages:

Hindi and Urdu is mutually intelligible, and used to be one language, split up by the separation of Pakistan from India. If speakers of those two is understanding each other, it’s perhaps best to at least not study both of them...Sanskrit used to be the holy grail of Indo European linguistics about a hundred years ago, since it’s

the Indian equivalent of Latin, the linguistics used to simply try reconstruct the common language of the Indo Europeans by combining Latina and Sanskrit.

Sub-Theme 2: Building up the Knowledge Base

The second sub-theme under the theme of “knowledge building” has two codes to categorize discussion messages. The first code “**additional information to an existing message**” has thirty-two labeled messages from seven topic threads, representing about eleven percent of the total two hundred and eighty-three messages (ranked as #4). To answer the topic initiator’s questions or to respond to previous posted messages within the same topic thread, other forum participants quoted either a portion or the whole original message in their replied messages first, and commented on them by adding further information or explanations to the discussions. For example, a senior member Clint showed his opinion about the previous comment regarding the statement that Japanese is harder than Korean based on the usage of Chinese characters alone by giving more precise information of Japanese Kanji. He explained why Kanji was an obstacle when learning Japanese since there were about 3000 distinct elements to memorize the meanings of every Kanji (1945 Jouyou Kanji plus 1000 more commonly used).

In the same topic thread, a senior member Nikki discussed the situations of using honorific language in Japanese and Korean:

In Japanese, deciding when to use honorific language depends on which circle one is in, or who you are talking with (among other factors), so determining those factors alone sometimes can be quite challenging. (eg. If you talk with your friend

about your teacher, you can use plain form to describe the teacher's actions, but you have to use honorific language if you were to talk with another teacher, or other acquaintances). In Korean, as long as the subject being talked about is of higher social status (or older etc.), one must use honorific language to describe the subject's action.

Adding to Nikki's explanations, another forum member Martin provided another example in Korean language after quoting Nikki's message in his comment:

Korean is the same way. You can use plain speech when describing a more respected figure's actions to a friend, but you just must use -ㅏ] .. what that is called escapes me at the moment. Example: you would use chondaemal (polite form) to talk with the teacher, but you could use panmal (plain form) to describe the teacher to a friend, providing you use the ㅏ].

The second code labeled in the sub-theme of "building up the knowledge base" is **"sharing of learning experiences."** With a total of eighty-one messages from eight topic threads, representing nearly twenty-nine percent of the total two hundred and eighty-three coded messages (ranked as #1), forum participants actively shared their personal language learning experiences or anecdotes with other members by providing information on their language learning tools, media, methods, techniques, as well as by giving specific examples of their word choices or usage while speaking other foreign languages. For instance, a forum member Marg responded to a topic initiator Chris' question about the necessity of studying five-volume, 2000-page textbook dialogues and narratives in

order to learn Chinese by sharing efficient approaches of watching Mandarin dramas with English subtitles along with some help of book study from her past learning experiences.

In a topic thread of comparing the difficulty between Japanese and Korean, Pam talked about her research experience of studying contrastive linguistics of both languages, and was hoping to find the differences instead of just pointing out the similarities between the two languages:

Japanese writing is quite different from your imagination if your native language does not use Chinese characters. Even though Korean is more difficult, I receive so much help from sympathetic native speakers and they all help me to reach a new stage...if the people are more friendly and helping, you will conquer the language someday. However, if they aren't, you will just end up wasting so much time to speak a language and being discouraged and looked down on.

In a series of discussion regarding how to make the best out of Spanish, a senior member Eva shared her learning approaches:

No matter how much vocabulary and grammar you know, you need to listen to improve your listening, even if you're learning a language with a regular spelling, where you can pronounce every word you see in writing. So while you certainly learned a lot while in college, you're comparing your listening skills with someone who's been interacting with the natives a lot and watching telenovelas and seems to have had more contact, with the spoken language than you did.

Another new member Ken described his techniques of learning a new language by giving specific examples of how his visualization helped with his learning:

The brain memorizes things best when an emotional experience is connected to the world...The trick is when seeing a new word in the dictionary or in a book, to try and invent a picture to see it. For example, I never knew that the word “arrancar,” which I only knew to mean “to uproot,” also can mean to start a car. So if I visualized a little tree coming out of the ignition and this helps me to remember that.

In sum, the discussions demonstrated that individual members contributed their personal experiences or knowledge about certain languages to different topics in the discussion forum, typically in response to questions or problems posed by a novice language learner. In response, forum members articulated the practices and strategies they used to build a knowledge base and proficiency in their choice languages.

Chapter 5. Discussion

Review of the Research Findings

The online language learning social network Website provided an open space, or an affinity space (Gee, 2004) for registered forum participants to exchange resources and information for self-initiated language learning, to share their past learning experiences, to discuss their personal learning problems with other members, to contribute their learning strategies and skills, and to build up their individual knowledge based on others' distributed knowledge and the dispersed knowledge. By examining a total of two hundred and eighty-three discussion messages from the ten topic threads in the "advice center" sub-forum under the major forum of practical language learning, twenty-eight codes with their operational definitions were generated to analyze and categorize the selected discussion messages into thirteen sub-themes, and eventually to summarize them into four major themes, including self-initiated learning strategies, self-initiated learning priorities, reflections on the complexities of practices, and knowledge building. The iterative open coding processes during the data analysis phase helped me to look at the whole data set more closely and to discover answers to my research question.

In terms of strategies and knowledge generated from the selected discussions, forum members actively participated in related topics to share their experiences and useful information for language learning, and to build on others' ideas to contribute to the process of knowledge building. In the first main theme of "**self-initiated learning strategies**," forum members discussed their strategies of accessing language learning materials by giving directions for finding useful learning resources and information for

studying languages on one's own, and providing specific examples of references for self-initiated learning. Forum members also discussed the strategies of creating learning opportunities, provided suggestions to other members in terms of how to create situations or chances to practice speaking certain languages. In discussions pertaining to "advice about language learning approaches," forum members talked about their personal learning experiences and their approaches, methods and resources that they used along the way of learning new languages. Showing support was another key strategy in language learning. Forum members discussed how to express support to other members' learning experience by respecting others' choices of language preferences and giving encouragement to others during their language learning processes.

Forum participants did not only look for general help from other members, they intended to reveal more specific and complicated issues pertaining to language learning in their discussions. In the main theme of "**self-initiated learning priorities**," forum members discussed how to establish learning goals by talking about their personal expectations when they started to learn a new language, and by sharing their estimation of the learning time frame that was required to achieve their expected levels of language proficiency. For evaluating their learning achievements, forum members exchanged information about various types of evaluation tools, methods, and standardized examinations for self-evaluating their current language proficiency. Another strategy that forum members initiated in the "advice center" sub-forum was to consult other experienced members' recommendations for choosing useful languages to learn. Language recommendations made by other members based on different reasons or purposes, including for business or pleasure, popular languages in multiple areas, or

studying other materials that were printed or published in other languages. Forum members also elaborated on their recommended languages by providing explanations or justifications for their selections. Members also raised questions regarding preferences of learning sequences when they had a number of different languages to learn. Feedback or comments made by other members were based on their past learning experiences and learning order choices. Learning motivation was another issue discussed in the section of self-initiated learning priorities. Forum members shared their stories about why they were motivated to learn other new languages, and how they went about starting their learning journey of studying foreign languages.

Forum members were also concerned about the difficulty levels, complexity and other practical problems of specific languages while learning other languages. Therefore, issues about “**reflections on the complexities of practices**” were widely discussed in the “advice center” sub-forum. Issues concerning learning difficulties included reflections on the skills of mastery needed for learning certain languages, discussions about the difficulty levels of grammar, pronunciation, and writing system of specific languages, comparisons of differences between two or more languages, as well as information about various components that contributed to language complexity. Conversations about practical problems for language learning were another popular and widely discussed topic in the main theme of “reflections on the complexities of practices.” Members talked about their personal experiences with difficulties of switching to speak a different language with the same person or people once their relationship was established in a certain language. Problems with mixing up different languages together, switching between two or more languages in a short period of time, using snippets or words from

other languages, insisting to speak one certain language instead of the other languages were the other practical difficulties that forum members encountered when he or she was capable of speaking more than one language.

To contribute to building up the knowledge shared in the forum discussions, forum members added detailed descriptions of characteristics and origins of some languages while they attempted to answer some other questions and concerns mentioned by others. In the fourth main theme of “**knowledge building**,” forum members participated in the discussions by quoting the original messages in their replies, and responding directly to their quoted messages with additional information and explanations. Discussion on sharing of personal learning experience was a very popular topic in the sub-theme of “building up the knowledge base,” which was also the most popular area of discussions among all of the threads. In about eighty percent of the ten topic threads, forum members shared their personal language learning experiences and anecdotes with other participants, and discussed their learning tools, media, methods and techniques for studying other languages.

The discussion forum at this online language learning social network Website enabled the presence of both the text-based informational sources (which were the threaded discussions posted by participated forum members) and the ideational resources (which were the useful references and examples for language learning shared by the participated forum members). Therefore, forum member’s interests in participation were triggered and their interests in self-directed learning were supported within this informal learning environment (Barron, 2006).

Language Learning Online Social Network as an Affinity Space

The online language learning social network Website explored in this study shared the features of an affinity space (Gee, 2004). From the user language profiles that were displayed next to the initial messages or responded comments posted by each individual forum participant, it was shown that there was a continuum group of forum members from various countries with different levels of language skills and proficiency, ranging from “newbies”, “groupies”, to more advanced senior members, skilled pro members, and forum moderators. This represented one of the features defining an affinity space – “newbies and masters and everyone else share a common space” (Gee, 2004, p. 85). Participants from newcomers to more experienced experts utilized this language discussion forum as a “portal” to voluntarily participate in the topics that they valued and were willing to exchange information and contribute their experiences to build up the knowledge repository (Gee, 2004).

The discussion messages that the forum members posted are the “content” of this affinity space. As Gee (2004) described, “content” of an affinity space is the subject matters that the space is about. Content generated from this discussion forum was diverse, including discussions on a specific alphabetic system of phonetic notation, characteristics of Indian, Japanese, Korean, Chinese, ancient Greek, Latin, and Spanish languages, comparisons of Eastern languages with Chinese characters, concerns of multilingual speakers, priorities and strategies of language learning, as well as difficulties of different components of various languages. By sharing the “content” of mixed topics, forum members were able to “interact” with each other at this “portal” of online

discussion forum to exchange information and share knowledge of any issues or concerns pertaining to language learning. Through forum members' social practices of group interaction, communication, discussions, clarification, and negotiation on different subject matters, self-initiated learning and sharing of group meanings were evidenced in the threaded discussions.

Sharing other features of an affinity space, the knowledge generated in this online language learning social network Website contained "individual knowledge, distributed knowledge, and dispersed knowledge" (Gee, 2004, p. 86). Through the group discussions and participation, forum participants contributed individual knowledge, and learned to connect them with distributed and dispersed knowledge that was shared by other people or existed in other materials at external Web links or resources. One important discovery in my research indicated that the distributed and dispersed knowledge did not necessarily come from more advanced participants or participants who have joined the forum discussion for a long period of time. Discussion messages showed that these types of knowledge might sometimes come from new forum members who already possessed pre-existing knowledge about certain languages. "Leadership" is another key feature in Gee's affinity space theory (Gee, 2004, p. 87). However, this feature was not apparent in my research result. The process of knowledge building in this online social network did not merely rely on some leaders in the discussion forum, but it was a collective of knowledge advancement accumulated and contributed by all the participated members.

Zhang et al. (2009) have suggested that creative and collective knowledge building in a learning community would achieve better sustainability and collaboration with the support of "distributed, flexible, adaptive, and social structures" (p. 8). Social

members are responsible for making their “complementary contributions” (Zhang et al., 2009, p. 11) by building on their personal growth to the knowledge advancement of the whole community. Therefore, the research results showed that forum members’ participation in the various discussion topics by contributing their individual knowledge to the group knowledge base served as a critical factor to advance the accumulation of collective knowledge and the current knowledge repository during the process of collaborative knowledge building in a self-initiated learning environment (Chuy et al., 2011; Scardamalia & Bereiter, 2003; Scardamalia & Bereiter, 2006; Stahl, 2006; Sternberg, 2003).

Self-Initiated Learning Processes

In Barron’s (2006) discussion on the relationship between personal interests and self-sustained learning, she suggested that as individuals age, they increasingly develop their own learning patterns as they gradually gain more autonomy to decide what is valuable to pay attention to, spend time on, and with whom to interact. Such independent choosing of our learning opportunities allows us to become more adaptable to the learning environments that we choose to participate in, as well as affects the interaction between us and other people. The online language learning social network Website in this study shared this unique phenomenon that was introduced in Barron’s idea of a learning ecology perspective (Barron, 2006). This social network was an informal environment in which forum participants had the opportunities to perform “free-choice learning,” since they had full control of their own learning trajectories and behaviors, in terms of when, where, what, with whom and via what media or methods to engage in self-initiated

learning (Falk & Dierking, 2002). Forum members were free to decide any question or topic that they would like to initiate within the “advice center” sub-forum. They chose any thread or message to respond to or comment on, or any other forum members with whom to interact. They were all self-motivated to participate and engage in the forum discussions with others who shared similar interests, based on their own learning choices or preferences.

Barron (2006) also suggested a sequence of three conjectures to observe the dynamics between interest and learning in the process of self-initiated learning. According to Barron’s process of self-initiated learning, the existence of “ideational resources” (p. 200) should be first made available for initial interest in learning to emerge. Once the interest for learning is triggered, opportunities for engaging in interactive, boundary-crossing, and self-sustaining activities should be created to offer more learning opportunities over time. In this online language learning social network, the ideational resources to attract members’ interests were those ongoing conversations on the forum. Different members with different backgrounds, interests, or intentions would be interested in observing and engaging in different topics or subject matters that have been brought up on the forum discussions. The second conjecture introduced by Barron (2006) is the “creation of learning opportunities” (p. 206). Forum members had their own personal choices to develop and create different learning opportunities by “searching for informational resources or finding their learning companions” (p. 200). In the case when informational resources were not available, forum members would initiate a new topic thread to seek out answers from other forum participants. For instance, members asked about useful textbooks, materials, Web resources, or media to learn

specific languages. They also started discussions about learning strategies or approaches, or discussed their personal concerns about some practical problems they have encountered from their past experiences of language learning and asked for other members' suggestions and feedback. Forum members from different backgrounds or with different knowledge contributed to the discussions based on different motivations, purposes or intentions. As a result, the collective knowledge generated from the self-initiated discussions was somewhat interdisciplinary and across different contexts; yet, members participated as part of a social network with common interests or affinities in language learning. The learning activities they engaged in could be sustained over time because forum members' participations were self-driven based on their own, and collective, self-motivated interests.

Limitations of the Study and Implications of Future Research

Stake (1995) suggested that the purpose of a case study is not for generalization, but for particularization. Although the intention of this qualitative case study was not to produce potentially generalizable results, I still hoped the results generated from this study could provide useful references for researching other language learning activities in online social networks. In this section, I reflect on some limitations I encountered during the processes of data collection and analysis. As described in the section of data analysis in the chapter of research methodology, I reviewed the two hundred and eighty-three discussion messages twice before my initial open coding process. After the first round of open coding, a list of thirty codes and their corresponding operational definitions was generated, and was later refined to a list of twenty-eight codes after a discussion with a

volunteer coder for inter-rater agreement. I was very cautious about the coding consistency during the second and third round of coding processes. I went back to check on the codes that I've labeled for previous messages as many times as I could whenever I encountered similar discussions in the later posts and had doubts about my coding schemes. One limitation was the numbers of discussion messages that have been checked with two different coders for inter-rater reliability. Only messages from three randomly selected topic threads were reviewed and coded by two persons. I hoped that all the two hundred and eighty-three messages could all have been coded and discussed for coding consistency. This was a limitation that I would improve for future study.

Since the messages on the discussion forum consistently changed and updated as more comments or corrections were added by other forum members over time, I had to set a six-month time frame for selecting qualified data for my research. However, this criterion might inevitably rule out some other valuable comments in the later discussions which were posted after the time frame that I set for the selection requirements. Therefore, the sub-themes and themes generated from the selected topic threads could only represent the results of the discussion messages for a certain period of time. The thirteen sub-themes and four main themes generated from the study might not be applicable to the discussion messages posted after the six-month time frame. For a future study, additional messages from the same topic threads for another extended period of time after the original six-month time frame could be collected and compared with the current results to check if there is any new knowledge accumulated or generated in the later discussions based on the existing conversations. The third limitation of the study was the full understanding of the discussion content. Since I was not familiar with some

of the thread topics, such as the discussions on Indian, Latin, ancient Greek and Spanish, there might be a possibility that I might have missed some potential explanations that could be generated as other sub-themes and themes to explain and represent the data set. Finding someone who speaks or understands those languages to review and to help with the coding process is another alteration I could improve in future research.

In collaborative knowledge building, personal understanding or beliefs have to undergo a series of social processes before those pre-existing understanding or beliefs could transform into socially-constructed knowledge. According to Stahl (2006), those social processes include steps that individuals have to interact, communicate, elaborate, discuss, compare, reorganize, clarify, and negotiate with others so that learning would occur during those social practices of personal and social collaborative knowledge building. From the data set, I found examples of other social processes that forum members performed during their discussions and interaction with other peers. Correction, challenge, and confrontation on others' mistakes seemed to contribute to the building of collaborative knowledge. For instance, in one discussion about the comparisons between Japanese and Korean, a senior member Nikki talked about how Chinese characters in Japanese might have multiple readings. She gave an example of "cigarettes" and explained how it should be pronounced as "tobako." However, her misspelling of "cigarettes" was mentioned and corrected in the very next reply message by a new member Aaron. Although he was a newcomer to this forum in terms of his status, he seemed to have enough knowledge of Japanese to correct Nikki's mistake. He provided the correct spelling of "cigarettes" in various forms of Japanese characters "タバコ", Japanese Kanji "煙草", and its pronunciation "tabako" in English. Another example of

confrontation and challenge was a discussion about the estimated learning length for ancient Greek and Latin proposed by a topic initiator Sonia. Her estimation of learning length was questioned and criticized by a majority of the replied participants. Some forum members corrected her estimation by giving her the actual learning lengths that they had experienced while learning both languages, and others criticized and mocked her underestimation of learning those difficult languages.

From those two examples, I am intrigued to find more examples or any supporting theoretical frameworks to confirm whether or not collaborative knowledge building could take place through correction, challenge, or confrontation of other's ideas or knowledge. Those would be interesting elements to explore for future research. Furthermore, through my research experience, I realized that the current coding system is not efficient to analyze the process of knowledge building and self-initiated learning. For future research, a new tagging system would be a great tool to help researchers to organize conversations which are taken place in self-initiated learning environment, and therefore, to make the coding process more effective and reliable.

Appendix A: Determination of non-human/non-research status



Vice President for Research
Office for Research Protections

The Pennsylvania State University
The 330 Building, Suite 205

Phone : (814) 865-1775
Fax: (814) 863-8699
Email : orp protections@psu.edu
Web : www.research.psu.edu/orp

Date: July 30, 2012
From: The Office for Research Protections - FWA#: FWA00001534
Stephanie L. Krout, Compliance Coordinator
To: Hsiu-Wei Hsieh
Re: Determination of Non-Human/Non-Research Status

IRB Protocol ID: 40598

Title of Protocol: Collaborative Knowledge Building of Self-Initiated Language Learning in an Online Social Network Discussion Forum: A Descriptive Case Study

The Office for Research Protections (ORP) has received and reviewed the above referenced eSubmission application. It has been determined that this project does not meet the definition of Human Participant Research, as defined by the DHHS Federal Regulations.

In meeting the criteria for the DHHS Federal Regulations definition of "human participant research", the project must fulfill requirements for BOTH "human participant" and "research":

- **45 CFR §46.102(f)** A human participant is defined as "a living individual about whom an investigator (whether professional or student) conducting research obtains: 1) data through intervention or interaction with the individual or 2) identifiable private information".
- **45 CFR 46.102(d)** Research is defined by DHHS as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge"

Therefore, this project, as described in the application, does not require further review by The Pennsylvania State University's Institutional Review Board or the Office for Research Protections. Your application will be closed out. You will receive no further communication regarding this matter. You may begin your project.

Should your project change in any way that would then involve human participant research, prior to initiating those new procedures, you must submit for review and approval the appropriate application for the use of human participants in research: <http://www.research.psu.edu/orp/humans>.

Please do not hesitate to contact the ORP if you have any questions or concerns. Thank you for your continued efforts in protecting human participants in research.

This correspondence should be maintained with your research records.

Appendix B: Codes within Each Topic Thread

#1: Learning IPA (International Phonetic Alphabet) – 15 messages

Message #	Code	Sub-Theme	Theme
1-1	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
1-2	Seeking of learning resources	Accessing language learning materials	Self-initiated Learning Strategies
1-2	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-3	Characteristics of an alphabetic system	Discussing language characteristics	Knowledge building
1-4	Sharing of learning experiences	Building up the knowledge base	Knowledge building
1-4	Seeking of learning resources	Accessing language learning materials	Self-initiated Learning Strategies
1-4	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-5	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-6	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-7	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-9	Sharing of learning experiences	Building up the knowledge base	Knowledge building
1-9	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-10	Characteristics of an alphabetic system	Discussing language characteristics	Knowledge building
1-11	Additional information to an existing message	Building up the knowledge base	Knowledge building
1-11	Characteristics of an alphabetic system	Discussing language characteristics	Knowledge building
1-12	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
1-14	Additional information to an existing message	Building up the knowledge base	Knowledge building
1-14	Sharing of learning	Building up the	Knowledge building

	experiences	knowledge base	
1-15	Sharing of learning experiences	Building up the knowledge base	Knowledge building

#2: Japanese is harder than Korean – 44 messages

Message #	Code	Sub-Theme	Theme
2-1	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-2	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-3	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-5	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-5	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-6	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-6	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-7	Difficulty of writing system	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-7	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-7	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-8	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-8	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-8	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-12	Additional information to an existing message	Building up the knowledge base	Knowledge building

2-12	Seeking of learning resources	Accessing language learning materials	Self-initiated Learning Strategies
2-13	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-13	Difficulty of writing system	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-13	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-14	Difficulty of writing system	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-14	Seeking of learning resources	Accessing language learning materials	Self-initiated Learning Strategies
2-15	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-15	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-15	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-16	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-16	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-17	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-17	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-19	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-20	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-20	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-21	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-21	Difficulty of grammar	Reflecting on difficulty	Reflections on the

		level of a specific language	Complexities of Practices
2-21	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-21	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-22	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-22	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-23	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-23	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-24	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-24	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-25	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-25	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-25	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-25	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-26	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-26	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-28	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-28	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-28	Comparison of differences between	Reflecting on language complexity	Reflections on the Complexities of

	languages		Practices
2-28	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-29	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-29	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-29	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-30	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-31	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-31	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-32	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-32	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-32	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-33	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-34	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-34	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-34	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-34	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-35	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-35	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices

2-36	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-36	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-36	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
2-37	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-38	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-39	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-40	Difficulty of writing system	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-40	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-40	Difficulty of grammar	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
2-40	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
2-41	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-42	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-43	Additional information to an existing message	Building up the knowledge base	Knowledge building
2-43	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
2-43	Sharing of learning experiences	Building up the knowledge base	Knowledge building
2-44	Sharing of learning experiences	Building up the knowledge base	Knowledge building

#3: Learning sequence for Indian languages – 25 messages

Message #	Code	Sub-Theme	Theme
3-1	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
3-1	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-2	Origins of Indian languages	Discussing language characteristics	Knowledge building
3-2	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-3	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-3	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
3-4	Additional information to an existing message	Building up the knowledge base	Knowledge building
3-4	Characteristics of Indian languages	Discussing language characteristics	Knowledge building
3-5	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-5	Characteristics of Indian languages	Discussing language characteristics	Knowledge building
3-5	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-6	Additional information to an existing message	Building up the knowledge base	Knowledge building
3-6	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
3-7	Origins of Indian languages	Discussing language characteristics	Knowledge building
3-7	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-7	Difficulty of grammar	Reflecting on difficulty	Reflections on the

		level of a specific language	Complexities of Practices
3-7	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-7	Characteristics of Indian languages	Discussing language characteristics	Knowledge building
3-7	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-8	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-8	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-9	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-9	Characteristics of Indian languages	Discussing language characteristics	Knowledge building
3-10	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-10	Additional information to an existing message	Building up the knowledge base	Knowledge building
3-11	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-11	Seeking of resources	Accessing language learning materials	Self-initiated Learning Strategies
3-12	Additional information to an existing message	Building up the knowledge base	Knowledge building
3-12	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-12	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-13	Additional information to an existing message	Building up the knowledge base	Knowledge building
3-15	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
3-16	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-16	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-17	Additional information	Building up the	Knowledge building

	to an existing message	knowledge base	
3-17	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
3-17	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-17	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-17	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-17	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-18	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-18	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
3-19	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-19	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-20	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-21	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-21	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-21	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
3-22	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
3-22	Characteristics of Indian languages	Discussing language characteristics	Knowledge building
3-23	Sharing of learning experiences	Building up the knowledge base	Knowledge building
3-23	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
3-23	Encouragement of	Showing support	Self-initiated Learning

	others' language learning progress		Strategies
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#4: Why won't she speak Croatian with me? – 33 messages

Message #	Code	Sub-Theme	Theme
4-1	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
4-1	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-1	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-4	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-4	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-4	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-5	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-6	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-7	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-8	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-8	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-8	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-9	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-10	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-10	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-10	Suggestions for	Creating language	Self-initiated Learning

	creating opportunities for language practice	learning opportunities	Strategies
4-11	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-11	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-11	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-11	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-12	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-12	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-12	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-13	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-13	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-14	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-15	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-15	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-16	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-16	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-17	Additional information to an existing message	Building up the knowledge base	Knowledge building
4-17	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-18	Suggestions for creating opportunities	Creating language learning opportunities	Self-initiated Learning Strategies

	for language practice		
4-19	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-20	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-20	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-20	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-20	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-22	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-24	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-24	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-25	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-25	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-26	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-26	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-27	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-27	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-27	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-28	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-28	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices

4-29	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-29	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-29	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-30	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-30	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-31	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-31	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-31	Assumptions of speaking a certain language than the other	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-31	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-31	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-32	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-32	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-32	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
4-32	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-33	Sharing of learning experiences	Building up the knowledge base	Knowledge building
4-33	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
4-33	Respect for others' language preferences	Showing support	Self-initiated Learning Strategies
4-33	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies

4-33	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
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#5: Structure and method for Chinese – 15 messages

Message #	Code	Sub-Theme	Theme
5-1	Sharing learning experience	Building up the knowledge base	Knowledge building
5-1	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
5-1	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
5-1	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-2	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
5-2	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
5-3	Sharing of learning experiences	Building up the knowledge base	Knowledge building
5-3	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
5-3	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-3	Self-examinations on language proficiency level	Evaluating learning achievements	Self-initiated Learning Priorities
5-3	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
5-4	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
5-5	Sharing of learning experiences	Building up the knowledge base	Knowledge building
5-5	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-5	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
5-5	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
5-6	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies

5-7	Sharing of learning experiences	Building up the knowledge base	Knowledge building
5-7	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
5-7	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
5-8	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-9	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-9	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
5-10	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-12	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-12	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
5-12	Sharing of learning experiences	Building up the knowledge base	Knowledge building
5-13	Self-examinations on language proficiency level	Evaluating learning achievements	Self-initiated Learning Priorities
5-14	Additional information to an existing message	Building up the knowledge base	Knowledge building
5-14	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
5-14	Sharing of learning experiences	Building up the knowledge base	Knowledge building

#6: Ancient Greek and Latin: Study Strategy – 47 messages

Message #	Code	Sub-Theme	Theme
6-1	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-1	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-1	Seeking of resources	Accessing language learning materials	Self-initiated Learning Strategies
6-1	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-2	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-2	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-2	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-2	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-2	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
6-3	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
6-4	Examples of reference	Accessing language learning materials	Self-initiated Learning Strategies
6-4	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-5	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-5	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
6-5	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-5	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies

6-5	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
6-8	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-8	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-8	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-8	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
6-8	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-8	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
6-9	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-9	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-9	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-10	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-12	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-13	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-14	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-15	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-16	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-16	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-16	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-16	Sharing of learning	Building up the	Knowledge building

	experiences	knowledge base	
6-16	Seeking of resources	Accessing language learning materials	Self-initiated Learning Strategies
6-16	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-17	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-17	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-17	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-19	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-22	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-25	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-25	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
6-26	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-27	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-27	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-27	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-28	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-30	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-30	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-31	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-31	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-31	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-31	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities

6-31	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-31	Seeking of resources	Accessing language learning materials	Self-initiated Learning Strategies
6-33	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-33	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-33	Learning order preferences of different languages	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
6-33	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-33	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
6-34	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-34	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-35	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-35	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-35	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-35	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-36	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-38	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
6-39	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-40	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-40	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-40	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-41	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-41	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies

6-41	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
6-41	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-42	Sharing of learning experiences	Building up the knowledge base	Knowledge building
6-43	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-44	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
6-44	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
6-45	Estimation of learning length	Establishing learning goals	Self-initiated Learning Priorities
6-46	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies

#7: Turning “on” and “off” languages – 22 messages

Message #	Code	Sub-Theme	Theme
7-1	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-2	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-4	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-5	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-6	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-7	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-7	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-8	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-9	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-10	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-12	Snippets of languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-13	Snippets of languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-14	Snippets of languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-15	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices

7-17	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
7-18	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-19	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-19	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-20	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-21	Languages mix-up	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices
7-22	Problems with switching to different languages	Discussing practical problems of speaking different languages	Reflections on the Complexities of Practices

#8: Useful languages to learn? – 35 messages

Message #	Code	Sub-Theme	Theme
8-1	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-1	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-2	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-2	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
8-3	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-3	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-3	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-3	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
8-4	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-5	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-5	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-5	Difficulty of writing system	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
8-6	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-9	Language recommendations	Recommending language(s) for others	Self-initiated Learning Priorities

		to learn	
8-9	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
8-10	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-11	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-12	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-12	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-12	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-13	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
8-14	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-14	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-15	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
8-15	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-19	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-19	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-20	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-22	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-23	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities

8-23	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-25	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-25	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-26	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-27	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-27	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-30	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-31	Language recommendations	Recommending language(s) for others to learn	Self-initiated Learning Priorities
8-32	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-32	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
8-33	Additional information to an existing message	Building up the knowledge base	Knowledge building
8-35	Explanations of language selections	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities

#9: When have you “finished” learning – 17 messages

Message #	Code	Sub-Theme	Theme
9-1	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
9-2	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
9-3	Self-examinations on language proficiency level	Evaluating learning achievements	Self-initiated Learning Priorities
9-4	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
9-4	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
9-4	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
9-5	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
9-5	Sharing of learning experiences	Building up the knowledge base	Knowledge building
9-5	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
9-6	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
9-7	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
9-8	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
9-9	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
9-9	Sharing of learning experiences	Building up the knowledge base	Knowledge building
9-10	Sharing of learning experiences	Building up the knowledge base	Knowledge building
9-10	Expectation of a language proficiency	Establishing learning goals	Self-initiated Learning Priorities

	level		
9-10	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
9-11	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
9-13	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
9-15	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities

#10: How to make the best out of Spanish? – 30 messages

Message #	Code	Sub-Theme	Theme
10-1	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-1	Expectation of a language proficiency level	Establishing learning goals	Self-initiated Learning Priorities
10-1	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-2	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-2	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-2	Self-examinations on language proficiency level	Evaluating learning achievements	Self-initiated Learning Priorities
10-3	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-3	Seeking of resources	Accessing language learning materials	Self-initiated Learning Strategies
10-3	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-4	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-4	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
10-5	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-6	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-6	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-6	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
10-6	Encouragement of others' language learning progress	Showing support	Self-initiated Learning Strategies
10-9	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-9	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies

10-9	Comparison of differences between languages	Reflecting on language complexity	Reflections on the Complexities of Practices
10-10	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-10	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-11	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
10-11	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-12	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
10-12	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-12	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-13	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-13	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-13	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
10-15	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
10-15	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-16	Degree of mastery needed for learning a language	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
10-17	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-17	Language complexity	Reflecting on language complexity	Reflections on the Complexities of Practices
10-17	Difficulty of pronunciation	Reflecting on difficulty level of a specific language	Reflections on the Complexities of Practices
10-18	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-19	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies

10-20	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-20	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-21	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-21	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-22	Additional information to an existing message	Building up the knowledge base	Knowledge building
10-22	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-24	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-25	Sharing of learning experiences	Building up the knowledge base	Knowledge building
10-25	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-25	Suggestions for creating opportunities for language practice	Creating language learning opportunities	Self-initiated Learning Strategies
10-25	Motivation for learning a language	Justifying choices of languages for others or selves to learn	Self-initiated Learning Priorities
10-26	Advice about language learning approaches	Discussing language learning strategies	Self-initiated Learning Strategies
10-28	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
10-29	Examples of references	Accessing language learning materials	Self-initiated Learning Strategies
10-30	Additional information to an existing message	Building up the knowledge base	Knowledge building

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- 09/1998-12/2000 B. A. in Journalism. School of Communication. The Ohio State University.
- 09/1993-06/1998 Junior College Diploma. Department of German.
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PROFESSIONAL EXPERIENCE

- 01/2012 Ad-Hoc Peer Reviewer. The International Journal of Engineering Education (IJEE)
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- 07/1999 Dean's List for Spring Quarter 1999; Dean's List for Winter Quarter 1999
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