

A Qualitative Study of Twitter Edchat Through An Affinity Space Lens

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Dedication

I dedicate this thesis to my mother, Rabia, who makes all things possible and worthwhile.

Abstract

We have always learned by exchanging ideas and asking questions often of the people in our vicinity; now with the rise of the social web the potential of learning socially is huge. Social media platforms such as blogs, wikis, discussion forums, and social networking sites have enabled people to connect and learn in ways never imagined before. The echo of this social learning revolution has been widely felt within the field of education. Educators are presently in a better position to grow professionally and learn collaboratively on a global scale using different virtual learning environments. The purpose of this research is to study one of these learning environments called Edchat and explore its inner workings in terms of the content generated within it and the interactions participants engage in while using it. To this end, Gee's affinity space conception has been used as an underlying theoretical framework. More specifically, this study focuses on the three defining elements of affinity space: generator, portal, and content. Using qualitative content analysis and drawing on the coding frame built for this research, Edchat is proved to be a strong generator of content that spans different themes and topics. This generation of content comes through the enactment of various socially situated roles participants take up while interacting with each other.

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Introduction

The emergence of the Internet and the World Wide Web in the last decade of the 20th century marked a significant breakthrough in the social and technological development in the human history. In Barlow's words "this is the biggest technological event since the capture of fire in terms of what it will do to the basic look and feel of being a human being" (cited in Lankshear & Knobel, 2006, p. 35). Web technologies are radically changing the way people work and communicate with each other; the ways in which schools, businesses and other organizations operate. With these new changes emerged a new learning culture, one that is grounded in the social capital afforded by the net.

This social aspect of learning has been particularly foregrounded by the proliferation of web 2.0 technologies that enable users to generate, interact with, and share content to a wider unrestricted audience. Knowledge becomes distributed across different networks and platforms. And if in the past people drew on their locally constrained communities to collaborate with others and grow their knowledge around a common subject or problem, now web technologies such as social networking sites provide limitless possibilities for people to connect and learn from each other on a global scale. Learning in communities is not a novel idea that appeared with this digital revolution; it actually accompanied human beings since the dawn of time. It was 'our first knowledge-based social structure, back when we lived in caves and gathered around the fire to discuss strategies for cornering prey' (Wenger et al. 2002, p. 4). Despite the different modifications that touched this concept throughout different

historical periods, at the heart of collective learning resides the basic premise that learning is a social construct that is collaboratively constructed through concerted efforts of individuals sharing common goals. Internet and web technologies, however, pushed the potential scope and scale of this concept to unprecedented heights (Richardson & Mancabelli, 2011) giving rise to new learning environments where participation transcends geographical boundaries.

The rise of these new learning environments became the subject of extensive research studies from scholars across different disciplines (Greenhow, Robelia, & Hughes, 2009) using different theoretical perspectives. The Sociocultural perspective is one salient example of a theoretical framework used by a large group of scholars to study the emerging forms of learning taking place within these new environments (Baker, 2010). Sociocultural theory is a broad concept that encompasses multiple perspectives including discourse theory (Gee, 2001), cultural psychology (Bakhtin, 1986; Cole, 1996; Wertsch, 1991), activity theory (Engestrom, Miettinen, & Punamaki, 1999), and situated cognition (Lave & Wenger, 1991; Wenger, 1998). Different as they are, all of these perspectives "share a view of human action as mediated by language and other symbol systems within particular cultural contexts" (Lewis, Enciso, & Moje 2007, p. 5). At the core of the sociocultural theory is the belief that the human advancement in any given area is deeply influenced by a multitude of social and cultural factors that include "interactions with other people as well as their society's particular values, beliefs, and ways of thinking" (Lewis et al. 2007, p. 20).

Drawing on the ethos of the sociocultural theory, Lave and Wenger advanced the concept of communities of practice (CoPs) as a viable approach to the study of

knowledge management and sharing that takes place among people sharing the same community. CoPs were first established in the corporate world, and were later popularized by Brown and Duguid (1991). With the development of internet and the widespread of information and communication technologies, CoPs moved to the cloud and studies of online communities of practice appeared (Hara et al. 2009). However, and as is explained in the literature review in the next section, the concept of CoPs has several limitations in terms of both membership and boundaries which make it inadequate as a theoretical framework for studying online learning environments. Given these limitations, James Paul Gee (2004) developed the affinity space concept as an alternative that better addresses CoPs weaknesses and limitations. It is this concept that I am drawing on to guide my present research endeavour.

Interestingly, following an extensive literature review on affinity space research, I noticed that although this concept has been quite productive in recent years, providing “new literacies” (Lankshear & Knobel, 2006) and New Literacy Studies (e.g., New London Group, 1996) scholarship with an interesting field of research, most of affinity space research was conducted around popular fan culture and game-based environments (Ellcessor, E., & Duncan, S. C. (2011); Duncan, S. C. (2012).; Black, R. (2008); Gee, J. P., & Hayes, E. R. (2010); Hayes, E., & Games, I. A. (2008). To the best of my knowledge, very few studies have used this concept outside the gaming context and hence the importance of this research study in providing a new perspective to use affinity space to study a new space that is not game oriented. The purpose of this research is to study the Twitter Edchat community and explore the ways educators use it in terms of both interactions and content generation. To this end, I am drawing on

Gee's affinity space as a methodological framework and more specifically on the three defining aspects of affinity space: content, portal, generator. As such the general research question guiding this study is:

As a portal to a wider education affinity space, is Edchat a generator of content?

Chapter 1: Literature Review

This literature review is thematically divided into three key areas of interest in this research project: communities of practice (CoPs), affinity space and Twitter Edchat. I will first proceed by a review of the literature on CoPs followed by a discussion of the weaknesses and limitations of this concept. Next is an overview of Gee's affinity space concept with a particular focus on three of its aspects: content, portals and generators. The last section is devoted to the social networking site Twitter and more particularly Edchat.

Communities of Practice

Communities of practice (CoPs) is a topic that has been well documented in the education literature. Actually, the original notion of CoPs, basically a social learning theory, was developed by Lave and Wenger (1991) to refer to a group of people who "share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 4). Being a social learning theory, CoPs imply a process of collective and collaborative co-construction of knowledge. According to Wenger (cited in Cassidy, 2011) this knowledge is essentially based on three precepts: domain, community, and practice.

A- Domain

Wenger (1998) views domain as the core constituent that pumps life into communities in CoPs. Domain, in this context, embeds the ensemble of values, beliefs, interests and

passions commonly held and shared by individuals making up a community.

B- Community

Wenger (1998) describes a community as an informal gathering of people brought together by their shared passions, interest or work. Community, in this sense, implies “participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities “(p. 98).

C- Practice

A shared practice is the third distinctive feature of CoPs. Wenger, McDermott, and Synder (2002) define practice as “a set of frameworks, ideas, tools, information, styles, language, stories, and documents that community members share.”(p. 29). In their engagement in a shared practice, members of a CoP get to collaboratively build and enrich the content of their community.

At the heart of CoPs is the idea of promoting situated and collaborative learning. According to Liu, Magjuka, Bonk, and Lee (2007), this collaboration and communication that take place within a community of practice consolidate the social bonds between community members and provide them with a sense of belonging.

Limitations of CoPs

As has already been mentioned above, the CoPs concept as theorized by Lave and Wenger (1991) was originally formulated in a situated learning context bounded within co-located geographic boundaries. However, with the rapid uptake of digital media and the exponential increase in Internet connectivity, CoPs’ scope has been

expanded to include the virtual space. The application of CoPs in the study of the learning that takes place in virtual spaces reveals a wide range of limitations and weaknesses that put to question the relevance of this concept as a theoretical framework for the study of learning in online virtual spaces.

In their book *Cultivating Communities of Practice*, Wenger et al. (2002) were the first to talk about some of the limitations of CoPs in an entire chapter devoted to what they referred to as the "downside of communities of practice" (Roberts, 2006). Wenger et al. (2002) argued that the "very qualities that make a community an ideal structure for learning- a shared perspective on a domain, trust, a communal identity, long-standing relationships, an established practice- are the same qualities that can hold it hostage to its history and its achievements" (p. 132). Being social configurations, CoPs were viewed as problematic due in part to the connotations carried in the term "community" (Contu & Willmott, 2003; Handley et al., 2006; Lindkvist, 2005). For instance, Bauman (2000) contends that the word community carries connotations of a warm, comfortable cosy place characterized by a common understanding. This narrow sense of communities of practice poses some vexing challenges as to the type of membership and boundaries that define who is in and who is out (Gee, 2004). Being part of a close-knit community, with mutual engagement, joint enterprise, and a shared repertoire of actions (Wenger, 1998) implies geographical proximity and close-knit ties between members and thus the argument goes : " we need to belong to learn, and whatever it is that we belong to, can be called a community of practice" (Hodkinson, 2004).

Another strong voice in the critique of CoPs comes from James Paul Gee. While recognizing the centrality of CoPs as an important force in learning in modern world,

Gee argued for the inadequacy of this concept in studying the different physical and virtual social configurations in which people participate and learn. Specifically, Gee (2004) identified three key problems in using the notion of communities of practice: first, the connotations of belongingness and close-knit personal ties carried in the term community do not always fit contexts other than class and workplace where it has been initially used. Second, the idea of 'community' highlights the notion of membership and because there are various ways and degrees of being a member in communities of practice it becomes unclear whether this notion is helpful or not. Third, the overuse of communities of practice in categorizing different social forms blurs the boundaries delineating CoPs from other sorts of affiliations.

CoPs' weaknesses regarding issues of participation, membership and boundaries pushed several scholars to conceptualize other alternatives. For instance, Hodkinson and Heather (2004) suggested a modification of terminology: Instead of using Lave and Wenger's semantically narrow terminology "communities of practice" they suggested using situated learning or learning as a social participation which, in their eyes, imply a general view of learning as largely social. Bourdieu used the concept field of practice or learning field arguing that such a concept overcomes the problem of boundaries presented in CoPs. Another powerful alternative to CoPs is advanced by Gee (2004). On a deep and fundamental level, Gee proposed the idea of space and focused on the theory of affinity space "in which people interact, rather than on a membership in a community" (p. 77).

From all the alternatives mentioned above, Gee's concept of affinity space provides an ideal conceptual and methodological framework for the present research

study. Ideal because of two reasons: first it provides a working solution to the problematic of participation, boundaries and membership that plagued the concept of communities of practice. Second, it provides a deeper and more profound conceptualization of learning that also captures all forms of learning including the ones present in virtual spaces such as Twitter Edchat. The following is an overview of affinity space.

Affinity Space

By definition, an affinity space is “a place wherein people interact with each other, often at a distance primarily through shared practices or a common endeavor (which entails shared practices), and only secondarily through shared culture, gender, ethnicity, or face to face relationships” (Gee, p. 98). Interestingly, not every virtual space is an affinity space. Gee proposes 11 features that define the concept of affinity spaces. For him, “any space that has more of these features than another is more of an affinity space than the other or is close to being a paradigmatic affinity space” (Gee, p. 85). These definitional features are:

1- Common endeavor, not race, class, gender, or disability, is primary

In an affinity space a person’s race, gender, age, disability or social class are backgrounded. People interact with each other based on common goals, interests, or practices.

2- Newbies and masters and everyone else share common space

Affinity spaces accommodate people with different skill levels, be it a new comer (newbies) or experienced, skilled or unskilled. All people sharing the space are treated on equal footing.

3- Some portals are strong generators

According to Gee, a portal is “anything that gives access to the content and to ways of interacting with that content by oneself or with other people”(p, 81). Whatever gives the space some content is called a “generator”. In an affinity space, portals are created to generate new knowledge in the form of guides, tutorials, tips, recommendations...etc to help consolidate knowledge about the target topic under discussion.

4- Content organization is transformed by interactional organization

Based on the discussions that take place in affinity spaces, the original content of the space can be transformed to let the place for a new emerging content. For instance, in the world of games, the interaction that takes place between fans of a certain game within its affinity space often becomes a treasure trove of ideas that game designers draw on to enhance the performance of their games.

5- Both intensive and extensive knowledge is encouraged

Gee argued that through encouraging the sharing of both intensive (specialized) knowledge and extensive (less specialized and broader) knowledge, members of an affinity space get to share lots of knowledge, but each has something unique to offer.

6- Both individual and distributed knowledge are encouraged

In an affinity space, people get to develop their own individual knowledge (stored in their heads) while also contributing to distributed knowledge. This latter has multiple forms

and can be present in other people, the content of the portal, or in links and resources provided by other members.

7- Dispersed knowledge is encouraged

Members of an affinity space are also encouraged and enabled to use dispersed knowledge: that is, they can draw on other sources of information to enrich the content of their affinity spaces.

8- Tacit knowledge is encouraged and honored

Tacit knowledge is also encouraged within a portal. This is the knowledge that is “built up by daily practice and stored in the routines and procedures of the people who use the space” (p, 98). Tacit knowledge is usually communicated between members of an affinity space through embodied action and engagement in real tasks.

9- There are many different forms and routes to participation

There are many forms and routes to participation. Participation in an affinity space is open and can be done on whatever basis members can see fit. It can, for instance, be done on a daily basis or across stretches of time.

10-There are lots of different routes to status

Status in an affinity space does not have any connotation of power. Through their commitment to the cause of the space and through sharing resources and helping others, some members stand out from the crowd as being more active and helpful.

11-Leadership is porous and leaders are resources

Just like the notion of status, leadership is another concept stripped of its power and hierarchy connotations. There are no bosses who can order people around in affinity

spaces. Everyone is entitled the right to lead or guide at any time if they can generate pertinent and rich content for the portal.

Affinity space research has been used in wide variety of domains “addressing online spaces as varied as adolescent anime fan fiction communities (Black, 2008) to the multifarious play and instructional spaces around games such as The Sims (Gee & Hayes, 2010) to studies of celebrity-centric affinity spaces around web television series such as The Guild (Ellcessor & Duncan, 2011)” (Duncan, 2011, P. 52). Additionally, affinity space concept has also opened up new research avenues for scholarship on “new literacies” (Lankshear & Knobel, 2006) and New Literacy Studies (e.g., New London Group, 1996). It also contributed in the development of what (Jenkins et al., 2006) called “ecological perspective” for understanding and enhancing the informal engagement with popular media (Duncan, 2011). Although Gee's theory of affinity space was heavily used in investigating the kind of content and interactions that populate gaming affinity spaces, it is also worth signalling here that Gee's primary purpose behind conceptualizing such a theory is to provide researchers and interested scholars with a conceptual tool, a better alternative to communities of practice, for thinking about and studying learning in both physical and virtual environments..

The tenor of Gee's affinity space concept is that it provides a lens through which we can compare and contrast the affordances and features of online affinity spaces with those limited standard space models present in school environments. Comparing those eleven features of affinity space to today's classroom, Gee concludes that" we usually find that the classroom either does not have a given feature or has it much more weakly than a prototypical affinity space."(p. 88).

In the years since Gee's initial conception of affinity space, several things have changed in the gaming culture and social media. As far as digital gaming is concerned, there is now a skyrocketing rise of mobile gaming using smart phones and other hand-held mobile devices such as tablets. Along similar lines, the role of social media has been foregrounded in almost all fields but more specifically in recreational, journalistic, and political fields (Duncan, 2010). Also, the emergence of several online technologies coupled with the uptake of social networking sites have created affinity spaces that are continuously changing and evolving (Lammers et al. 2012). As such, contemporary affinity spaces have tremendously expanded to include social media spaces such as Facebook and Twitter and blogging platforms such as Tumblr and Wordpress. It is from within this context that my interest in using affinity space as a conceptual framework to understanding the kind of learning that takes place in Twitter Edchat emerged. As I have mentioned earlier, most of the studies involving affinity space were conducted in a gaming-related environment. While acknowledging that gaming websites and other popular fan culture media sites are fertile places for research studies related to learning and literacies, the potential of affinity space is too big to be limited only to a particular field of scholarship. In this regard, the present research study stretches the boundaries of affinity space and shifts its focus towards another type of virtual environment known as social networking websites exemplified in Twitter and more specifically Edchat.

Viewing Edchat as an affinity space that gathers education professionals from all around the world, the purpose of my study is to understand how these professionals use this affinity space in terms of the content generated within it and also in terms of the

interactions that shape this content. To do this, I will focus on the three defining aspects of affinity space: content, portals and generators.

Content/ Portal/ Generator

For any space to be called an affinity space, it must have three main elements: content, a generator, and a portal (Gee, 2004). According to Gee (2004), the content of a space is what the space is about, it is the ensemble of the multimodal signs (images, words, graphs, etc) “to which people can give specific types of meanings and with which they can interact” (P. 80). A generator is what gives the space its content. To further illustrate these two notions, Gee cited the example of real-time strategy (RTS) computer games and more specifically a game called Age of Mythology (AoM). In this case, RoM is one of the generators of the content that makes up the RTS games. Similarly, in a cooking club, cooking books and recipes act as generators of the content of that club. Given these two elements, any affinity space can be viewed in two ways. First, it can be looked at in terms of the immediate content contained within it (that is the different semiotic signs it has) and how this content is organized within the space (Gee, 2004). Second, it can also be looked at from an interactional perspective. That is, in terms of the interactions participants engage in with one another or over the content of the space. In this way, to take a content view of a given affinity space is to talk about the internal content generated by either the designers of that space or by participants using the space or by both of them. To take an interactional view of that same space is to talk about "the ways in which people organize their thoughts, beliefs, values, actions, and social interactions"(p. 81) in relation to the content made available in that space.

Content and generators are intricately related to each other and they work in unison to shape the design of the space. A good paradigmatic example that shows how this mutual interactivity plays out in affinity space is found in gaming affinity spaces (Gee, 2007). Most of the popular games have virtual spaces where fans get to meet and talk about the game. In their interactions over the games, fans usually share tips on how to solve problems in the game, express personal views on certain features of the game, talk about the affordances and weaknesses of the game, compare the actual game to other similar games, and in some cases offer recommendations for improving the overall performance of the game. This data bank of information generated by actual players of the game provides game designers with first-hand data to work on to enhance their game and increase its competitiveness in the game market. Content designers (in this case game designers) “ must react to the pleasures and displeasures of the people interacting with the content they have designed” (p. 81). At the same time, the actions and practices of content designers rebound on the interactional organization of the space and on the social practices of the participants within that space. The content organization which emerges from the work of designers has a direct impact on how participants interact with each other over that content, and most often, it can even shape and transform those practices.(Gee, 2004)

The third element that defines an affinity space besides content and generators is called portal. Portals are entities that grant access to the content of a space. They are the entry points people use to access the space and interact with its content (Gee, 2004). Portals can be physical as well as virtual places. A gaming website that fans enter to access and interact with the content of the game is called a portal. A strategy

book that gamers buy to help them play the game well is also a portal. Interestingly, portals can be or become generators. That is when a portal allows people to add, modify, and generate new content in the space this portal is also a generator (Gee, 2004). For instance in the website related to the game Age of Mythology, fans virtually come together, share resources on how to play the game, help each other solve problems related to the game play, and help beginners on how to play the game well. In this case the portal AoM website is also a generator in that it allows people (who are not game designers) to generate new content for others. Alternatively, a generator can also be a portal as long as it is visible to the people interacting with the space. An example of this is the teachers manual that students never get to see; "it is a generator but not a portal for the students, though it is a portal for the teacher"(p. 82). These three aspects of affinity space are what I will focus on in my study of Twitter Edchat.

Twitter

Twitter is a social networking website that allows for real-time public self-expression and conversation in real. It is a social networking and micro blogging site that has become so viral since its incorporation on July 13, 2006. As a microblogging platform, Twitter is distinguished by the strict length limit of its messages to 140 characters which makes it an efficient communication tool (Java et al. 2007). As of April, 2014, Twitter counts more than 255 million monthly active users, 198 million of which were monthly active mobile users posting over one billion messages known as tweets each day (Twitter, 2014). These 140 character messages can be sent via both web based services as well as mobile apps, thus eliminating the need for computer access.

As Twitter grows more and more in popularity, it becomes a social networking site of choice for numerous educators. While some teachers used it in the classroom with their students, others employed it as a tool to garner data for course evaluations (Stieger & Burger, 2009), and also as a backchannel that facilitate communication in conferences (Reinhardt et al. 2009). These and several other similar studies provided the foundational concepts not only for the use of Twitter in educational settings, but also for its use as a tool for informal learning (Elliot et al. 2010).

Twitter is also the first microblogging platform that incorporated hashtags. Twitter defines a hashtag as follows: "The # symbol, called a hashtag, is used to mark keywords or topics in a Tweet. Hashtags are a great way to build community around content." Since its introduction in October 2007, hashtags become an important part of the way people communicate online. When a hashtag is added to a tweet it automatically makes it a searchable link, a practice which enables others to keep track of discussions and conversations around a given topic. Also, hashtags are used in discussions around a variety of topics from politics to pop culture. For instance, in education conversations, one of the most used hashtag is #Edchat.

The story of Edchat

Edchat was born out of a series of discussions between two prominent educators on Twitter: Tom Whitby and Shelly Terrell (later on Steve Anderson joined them). Tom and Shelly used to hold daily discussions with their Twitter followers on issues related to education. However, these mini-discussions were limited only to people that were in their friends lists. To expand the exposure of these mini-discussions and make them

accessible to people beyond their immediate personal networks, Tom and Shelly thought of setting up a hashtag that anyone can use in order to take part in their discussions and hence the creation of Edchat. The premise behind founding Edchat was to provide a worldwide audience of educators and teachers with a space where they can interact with each other, share educational resources, post thought-provoking questions and grow professionally. In her interview with The New York Times, Shelly explained that the idea of Edchat was prompted by “a desire to transform education and by a urgent need to provide educational stakeholders with a virtual meeting place where they can discuss, debate, explore, reflect and act on various issues which impact education”(Schulten, 2011, p. 1).

Edchat discussions take place every Tuesday at 7PM EDT and last for an hour. The topics of Edchat are selected through a public poll that is posted by Steve Anderson every Sunday afternoon and voting ends Tuesday mornings. The topic with the highest votes is selected for discussion. The idea of Edchat poll, as Tom Whitby (Schulten, 2011) stated, is developed with the purpose of giving participants more of a say in topic choice. After the selection of the Edchat topic, moderators tweet about it and announce it to the rest of participants. Anyone with a Twitter account can participate in Edchat conversations by simply adding the hashtag #Edchat to their tweets. Given the fast moving stream of tweets in Edchat conversations, several participants use third party tools like Houtsuite (www.houtsuite.com) and Tweetdeck (www.tweetdeck.com) to keep track of the conversation. Also, a script of each Edchat discussion is saved to the wikipage www.edchat.pbworks.com and anybody can view, access and download them from there.

Because of its global reach and due to the time zone differences between participants, moderators created a second Edchat to accommodate the time zones in Europe. This second version of Edchat takes place every Tuesday noon EDT and tackles the topic that is ranked second in the Edchat poll. All of the topics covered in Edchat are related to education and span a wide variety of themes including: testing, education leadership, teaching methods, educational technology, teaching skills, pedagogy, education reform to mention but a few. Often times, moderators of Edchat would invite leading education thinkers to participate in a live chat with Edchat participants. Among those that were invited in the past are: Alfie Kohn, Diane Ravitch, Howard Rheingold, Gary Stager, Jim Burke and Steve Hargadon (Schulten, 2011).

Since its launch in July 2009, Edchat has grown in popularity among the education community with over 500 individual tweeters in a single chat and over 3,000 tweets in an hour (Schulten, 2011). The impact of these discussions has some far-reaching results. Edchat has inspired over '400 additional educational chats, a new school, a free online conference with over 4,000 attendees, an international blogging day of education reform and so much more' (Schulten, 2011, p. 1).

As a budding researcher interested in exploring the new learning forms afforded by digital media and more specifically social networking websites such as Twitter, I find Edchat to be an ideal research site for the present study. To understand how this virtual space is being used by educators and anyone else interested in education, I will particularly focus on Gee's three defining features of affinity space: content, generator, and portal. As such the research questions guiding this study are:

As a portal to a wider education affinity space, is Edchat a generator of content? If so, what kind of content does it generate and is it a strong or weak generator?

Chapter 2: Methodology

I will begin this chapter by examining the reasons behind positioning this study within the qualitative research design. This will be followed by an overview of the researcher assumptions and a detailed examination of the research setting and population. Next, I will talk about the research questions guiding this study together with the data collection method employed in this research and conclude with laying out the outline of the analytic method I used to carry out this research.

Why qualitative research design?

The present research study is situated within a qualitative research design. The choice of a qualitative methodology is founded on a set of reasons which intersect with the underlying goals of this study. First, qualitative research focuses on meaning and understanding of the phenomena within its naturalistic setting. As Patton (cited in Sharan, 2009) explains:

Qualitative research is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting....The analysis strives for depth of understanding. (p.16)

In this research, I am studying the portal Edchat to understand and explore the different ways participants generate content and interact with each other. In so doing, I am drawing on data culled from the 'natural setting' that hosts Edchat discussion. Another important feature of qualitative research is that the process of research is done inductively. Rather than deductively testing hypothesis to reach generalizable conclusions about the phenomenon as is the case in quantitative research, this study employs an inductive process that started with a close examination of the data with the purpose of building themes and categories. Often times, findings inductively derived from the data in a qualitative study are in the form of "themes, categories, typologies, concepts and even tentative hypotheses (Sharam, 2009, p. 12). The coding frame I built for this study captures the different themes and categories uncovered from participants' discussions and forms the basis of the findings of this research. Also, the final product of a qualitative inquiry is richly descriptive (O'Leary, 2009) which is different from quantitative research that "seeks measurable, observable data variables "(Creswell, 2005, p. 47). The findings of this study are qualitatively laid out in a descriptive language grounded in words, pictures, and quotes drawn from the data.

Finally, in qualitative research, the researcher is the primary instrument for data collection and analysis (Sharam, 2009). However, as no human instrument is immune to biases and subjectivities, I deemed it important to explicitly state my prior assumptions and worldview regarding this research in attempt to drive away any potential confusion that might cloud the relationship between me as a researcher and the subject matter of this study.

Researcher assumptions:

In line with the interpretivist stand informing my worldview, I don't see myself as an objective observer with no underlying assumptions as is the case with positivists, but rather as an individual subject to such factors.. Birks and Mills (2011) were unequivocal on this. They contended that "researchers are a sum of all they have experienced" (p. 11). The experience I have accumulated during my 5 years of educational blogging coupled with my heavy use of Twitter (particularly Edchat) for professional development will definitely impact and inform the insights I will bring to this research project. Denzin & Lincoln (1994) views this close relationship between the research and the subject being researched as a defining element of qualitative research.

Sampling Frame

A non-probability sampling method is employed in this study. According to Trochim (2006), non-probability sampling method includes samples that are purposefully selected to illuminate the research questions. Henry (2009) defined non-probability sampling as sampling that "allows human judgement, either purposefully or unintentionally, to influence which individuals or units are selected for a study" (p. 78). For this study, I intentionally selected the Edchat discussion that took place in the last week of August 2013. The purpose behind this choice is to see whether there is any correlation between what participants talked about in terms of the content generated in this portal and the approaching school entry. Seeking such a correlation is by no means the primary purpose of this research; it is only hoped that this correlation, if confirmed, will help in illuminating the kind of content generated in this Edchat portal. Transcripts of

all Edchat conversations are publicly archived and searchable in a wiki page designed specifically for this purpose. This wiki page is available through this link: <http://edchat.pbworks.com/w/page/219908/FrontPage>. All the transcripts archived in this wiki page include the following information:

- Contents of each tweet.
- The sender's user name and user id.
- The language of the tweet.
- The geo-location coordinates of the tweet in case the user has enabled geo-location.
- Date and time the tweet was created.

Figure 1. A screenshot Showing How Scripts of Edchat Conversations Are Organized in The Wiki Page: <http://edchat.pbworks.com/w/page/219908/FrontPage>.

Kids know how they best respond to their learning. How do we involve their voice in education conversation? : #edchat8-27				
Username	UTC Date	Status	Location	URLs Shared in Tweet
cybraryman1	8/27/13 16:00	Welcome! Thank you for joining us. Please remember on each tweet to use the hashtag #edchat	ÜT: 27.179819,-80.23	
cybraryman1	8/27/13 16:00	#edchat Topic: Kids know how they best respond to their learning. How do we involve their voice in education conversation?	ÜT: 27.179819,-80.23	
HeartsatPlay	8/27/13 16:00	RT @ChildrenNature: YOU CAN GET YOUR STUDENTS OUTSIDE — and Still Meet Your State Standards http://t.co/2XVznqZRLI #edchat #playoutdoors ht...	Ventura, CA	http://bit.ly/13kZVM1
MaxScholarLLC	8/27/13 16:00	@EarthEcho We are looking forward to it too! #EdChat	Miami, Florida	
Tutorhub	8/27/13 16:00	Half of teenagers are indeed sleep-deprived, say experts. http://t.co/CdnA3rGko2 #edchat #teenagers	Bristol, UK	http://www.bbc.co.uk/news/uk-scotland-23811690
justinohearn	8/27/13 16:00	Starting #college this fall? Some tips. http://t.co/16Rcd7IV5O #university #edchat	Whitehorse, YT	http://wp.me/p2EdVM-p0
NanubhaiEF	8/27/13 16:00	Is poor sex ratio the reason why #India sees many crimes against #women? Can #education fix the problem? http://t.co/PhRZnVHSrj #edchat	USA & India	http://goo.gl/FrRhr0
FredEnde	8/27/13 16:00	3-8 ELA almost complete with 1st half of year. 2nd half of year by December. 9th grade over Labor Day. #edchat #edu #NYedchat	Westchester/Putnam County, NY	
FredEnde	8/27/13 16:00	#Bilingual #CommonCore progressions now available via @kategerson #edchat #edu #NYedchat #ELLS	Westchester/Putnam County, NY	
tomwhitby	8/27/13 16:01	#Edchat Topic: Kids know how they best respond to their own learning. How do we involve their voice in the education conversation?	Long Island, New York	
FredEnde	8/27/13 16:01	#Math modules should be available by start of school for P-8 for 1st semester; second semester by December. #edchat #efu #NYedchat	Westchester/Putnam County, NY	
SBEducation	8/27/13 16:01	New SmartBlog on Education - Starting the school year with a sense of humor - http://t.co/BMNYgYZxF9 #edchat #education #backtoschool	Washington, D.C.	http://ow.ly/oimfb
blairteach	8/27/13 16:01	Will be co-moderating #edchat for the next hour. Pardon heavy tweet stream. Feel free to join the conversation.	Atlanta, Georgia	
prityaylor	8/27/13 16:01	We need to give our children more opportunities to build a relationship with failure. http://t.co/MeAjk9Pgnu #edchat #ntchat	Pennsylvania	http://buff.ly/1cb3QLL
oJaison	8/27/13 16:01	RT @tomwhitby: #Edchat Topic: Kids know how they best respond to their own learning. How do we involve their voice in the education convers...	Houston, TX	
HJNystrom	8/27/13 16:01	"We see in the Common Core...fundamentally beautiful opportunities..." More in our whitepaper: https://t.co/EEOCm4hPtp #edchat #sschat #CCSS	Chicago & Indianapolis	https://www.herffionesnystrom.com/fa=information.CCSS_SS&c=Blog
slackt	8/27/13 16:01	Back to school and empathy. A must! ---> http://t.co/62NgQdG88n #edchat #ocsbcll		http://www.edutopia.org/blog/empathy-back-to-school-supply-homatavangar
AngelynCheath	8/27/13 16:01	App Review: Visual Poetry #edtech #edchat #iosed #ipaded http://t.co/cKTnx1luva	Texas	http://bit.ly/15fLsLW

Population

The population of this study consists of all those who participated in the Edchat discussion that falls within the last week of August, 2013. The total number of these participants is 311 from 29 countries. Participation in Edchat conversations is open to anyone with a Twitter account from all around the globe. As the autobiographical information included in their Twitter profiles show, participants have diverse work backgrounds but most of them come from the education sector (e.g., teachers, educators, school principals, literacy coaches, superintendents, ICT counsellors, parents, students). While the participants come from different geographical locations, it is noticed that 95% of them are from the United States.

Table 1. Data about the Participants and Tweets Shared in This Edchat Discussion.

Number of Participants	Number of Tweets	Number of Retweets	Participants Locations
311 participants	992 tweets	178 retweets	<ul style="list-style-type: none"> • United States • United Kingdom • India • Columbia • Finland • Chile • Sweden • Australia • Honduras • Canada • Japan • Monaco

			<ul style="list-style-type: none"> • Dubai • Pakistan • Spain • Tanzania • Ireland • Wales • Romania • Malaysia • Germany
--	--	--	--

Data collection

There are three major strategies for collecting qualitative data: interviewing, observing, and mining data from documents (Sharam, 2009). The decision of which one of these strategies to use depends on the purpose of the research study together with the nature of the research question guiding it. For the purposes of this study, interviews and observations are excluded as they focus on generating data from the participants while the raw data in this study is already generated and publicly archived in a wiki page. To collect the data from this archive I had first to select the portion I wanted to study then had to copy it into a word editor where I examined it in more details. One of the limitations of working on online documents and artifacts is the unstable nature of technology: "The web page cited today may be gone tomorrow or the content changed so radically as to be unrecognizable. Managing data assumes a new dimension when its stability can no longer be granted" (Sharam, 2009, p. 17). As a preventive measure and to avoid possible issues that might rise from a potential break-down of the wiki page

or any sudden loss of access to the archived data of my research, I downloaded the whole archive into a PDF document and saved it in a secure place on my computer.

Data Analysis

The archived transcripts of Edchat discussion that happened in the last week of August formed the primary documents around which I began to conduct my analysis. Initial analysis took the form of a close and thorough reading of the transcripts after which I sorted all the tweets into a word document. As a procedural measure, I only copied the content of the tweets and their senders. I excluded all the other accompanying features such as the location of the sender, name of the country, and date and time the tweet was sent. In this way, I was able to separate the clutter from my data and aggregate all the tweets into a single document that I worked on throughout the entire analysis.

The analytic method I utilized in analyzing the data of this study is qualitative content analysis (QCA). I particularly focused on Schreier's framework (2012). The following is a short overview of this analytic approach, its features and how it has been employed to create the coding frame for this research.

Qualitative Content Analysis

Qualitative content analysis is "a method for systematically describing the meaning of qualitative material" (Schreier, 2012, p. 27). One distinctive feature that differentiates QCA from other qualitative methods for data analysis is its focus on analyzing only certain aspects of the data. There are two ways QCA helps researchers focus on

selected aspects of data: first, it requires them to build a coding frame that contains different categories of the meanings uncovered in the material under study. Second, it helps them classify the different segments of their data according to these categories. According to Schreier (2012), qualitative content analysis is characterized by three main features: systematicity, flexibility, and reduction of data.

As a systematic approach to qualitative data analysis, QCA always involves the same sequence of steps:

- Deciding on your research question
- Selecting your material
- Building a coding frame
- Dividing your material into units of coding
- Trying out your coding frame
- Evaluating and modifying your coding frame
- Main analysis
- Interpreting and presenting your findings.

QCA is also a highly flexible method in that it allows for a constant re-adaptation of the coding frame in a way that can account for new emerging aspects of data. Flexibility of the coding frame is an essential element for its validity. A "coding frame can be regarded as valid to the extent that your categories represent the concepts in your research question" (Schreier, 2012. p. 46).

The third defining characteristic of QCA is that it reduces data. This is possible in two ways: first, QCA is concerned only with analysis of specific aspects of the data,

these are the aspects defined and demarcated by the research question. Second, the categories of a coding frame are usually higher in the level of abstraction from the more concrete information embedded in the data. The main strength of QCA is that it helps in analogy and in describing salient features of large amount of qualitative data (as is the case with the data of this study) without losing the potential multiplicity of meanings of the data. In this way, QCA is more about summarizing what is there in the material, and less about generating a theory or looking at the data in new ways (Shreier, 2012).

An important step in QCA is the building of a coding frame that captures the data into different categories and makes it easier for the analysis of content.

Building a Coding Frame

A coding frame is a way of structuring the data. It consists of main categories, also called dimensions, and a number of subcategories which specify and classify instances of the main categories in the data (Schreier, 2012). Coding frames differ according to the level of complexity and depth of the data studied. Simple coding frames are made up of one dimension and two levels; frames of medium complexity consist of one dimension but more than two hierarchical levels, or several dimensions but only two hierarchical levels; highly complex frames comprise several dimensions and more than two levels. It follows that a simple coding frame is not applicable in this research study for it cannot provide enough details for an in-depth description of the data. With only two dimensions and several subcategories, a coding frame of medium complexity is adopted for structuring the material of this study.

Throughout the process of building my coding frame, a number of criteria for guaranteeing a maximum degree of validity and reliability as recommended by Schreier (2012) have been considered. These criteria include:

1- Unidimensionality

In coming up with the categories and subcategories comprising my coding frame, I meticulously labelled them in such a way that they become unidimensional. In this sense, all the labels selected can only capture one aspect of the material and each instance of a subcategory occurs only once throughout the coding frame.

2- Mutual Exclusiveness

All subcategories included in this coding frame are mutually exclusive in the sense that only one segment of data is assigned to each subcategory.

3- Exclusiveness

For a coding frame to be exclusive, it requires that each unit of coding in the database is captured at least in one subcategory. This can be done by adding a residual subcategory with each dimension. To this end, I added a residual category under the name "Miscellaneous" where I featured tweets that do not fit in any of the subcategories used in the coding frame.

4-Saturation

The criterion of saturation requires that each subcategory should be used at least once and that no subcategory be left empty.

In building my coding frame, I had to make use of both data-driven and concept-driven strategies. In a concept-driven approach, a deductive strategy that depends on previous knowledge (e.g., a theory, prior research, every day experience) is

drawn upon to test a hypothesis or to confirm or disconfirm a claim. Alternatively, a data-driven strategy is based entirely on the data contained within the materials examined. The categories and subcategories in a data-driven frame are built inductively in the sense that they emerge from reading and analyzing the material several times (Schreier, 2012). In qualitative content analysis, it is usually rare to create a coding frame that is purely concept-driven or purely data-driven and that is why using a mixture of both strategies is the best way to go about doing it.

The coding frame I designed for this study is made up of two main conceptually driven categories (content and interactions) and a set of subcategories nested under each one of these two categories. The reason why I selected content and interactions as main categories in this coding frame is because they are the two essential defining elements of any portal (Gee, 2004). In the following sections, I will be talking about each of these categories in more details.

Figure 2. The Conceptually-driven Categories of The Coding Frame.

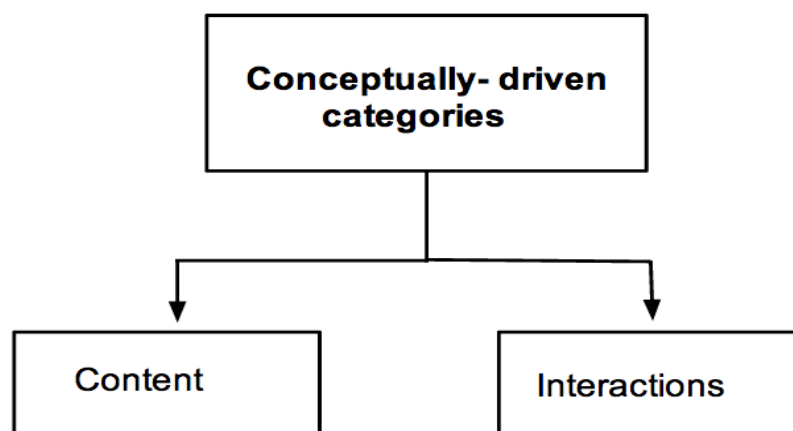
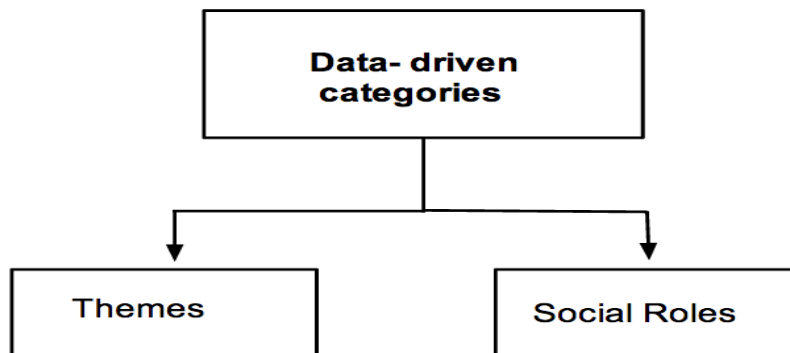


Figure 3.The Data-driven Categories of The Coding Frame.



A- First Main Category 'Content'

To take a content view of the portal Edchat is to ask about the themes and topics participants talked about. Having gone through the data numerous times I found out that the tweets shared in this Edchat were largely of two kinds: tweets related to the topic of Edchat and tweets covering other themes unrelated to the topic. As I mentioned in the literature review, each Edchat discussion tackles a topic that is predefined by a public vote prior to the start of the chat. The topic of the Edchat that falls within the timeframe I selected for this study was on how to involve kids' voice in education conversation. Based on the topic of this Edchat, I created two other categories nested under the main category 'content'. These categories are labeled "on topic tweets" and "off topic tweets". All tweets contributing to the discussion around involving kids' voice in

education were assigned to the category "on topic tweets" and the rest were assigned to the category "off topic tweets".

B- Interactions

The second main category captured in this coding frame is labelled "interactions". To take an interactional view of the portal Edchat is to ask about the ways participants organize their social interactions in relation to the content they generate in this space (Gee, 2004). To understand the different interactional patterns that populated Edchat I had to go back to the data and scan it again several times and copy all the conversational tweets into a separate document. While studying these interactions, I often had recourse to the autobiographical information included in participants Twitter profiles. These telling snippets of text helped me identify participants in terms of their work sector, their digital presence online (if they have a personal website or blog they link to), number of followers and number and type of tweets they share. Often times, these pieces of information prove to be essential in understanding how participants socially situate themselves in the discussion.

An initial examination of the interactional tweets shared in this portal revealed a variety of ways that participants employed when interacting with both the content of Edchat and with each other. To capture these interactions I coded them into various socially situated roles and assigned to each one of them a label that best represents these social roles. The roles I identified are: moderators, silent participants, promoters, help seekers, and provokers. Here is an illustrative visualization of the interaction part of the coding frame:

Figure 5. Illustrative Visualization of The Interaction Part of The Coding Frame.

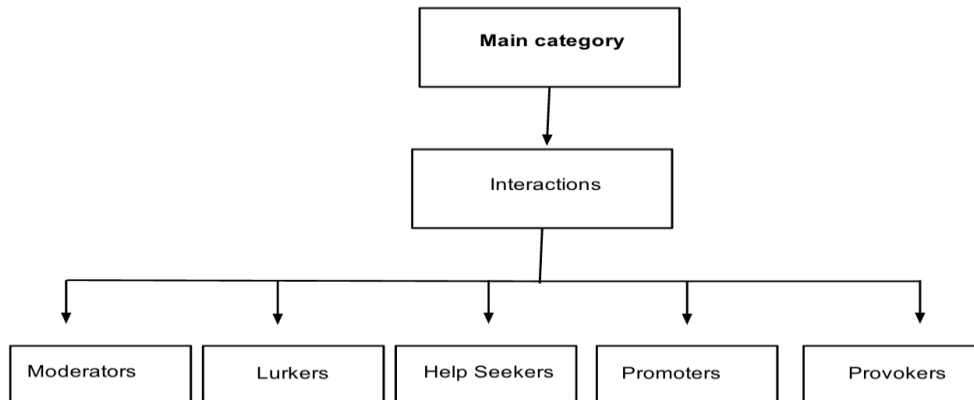
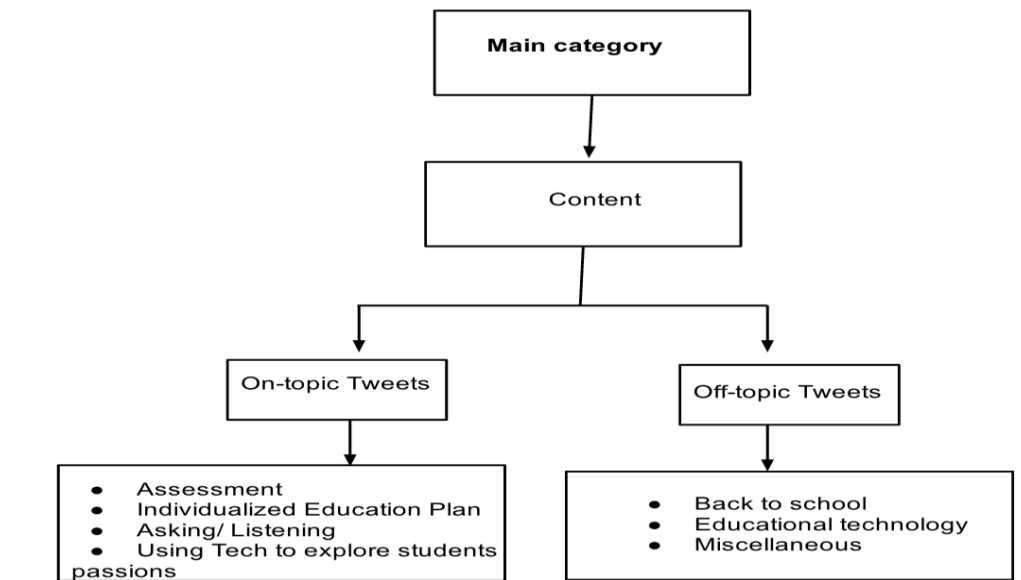


Table 2. The Two Main Categories of the Coding Frame.

Main Categories	Description
Content	This category captures the content that is generated in this Edchat session. It categorizes content into two main parts: <ul style="list-style-type: none"> ● On-topic tweets: these are tweets related to the topic selected for discussion in this Edchat. ● Off-topic tweets: these are the tweets that are not related to the topic of this Edchat discussion.
Interactions	This category captures the interactional exchanges between participants in this Edchat conversation. These interactions are further sorted into the following socially situated roles: moderators, lurkers, Provokers, help seekers, and promoters.

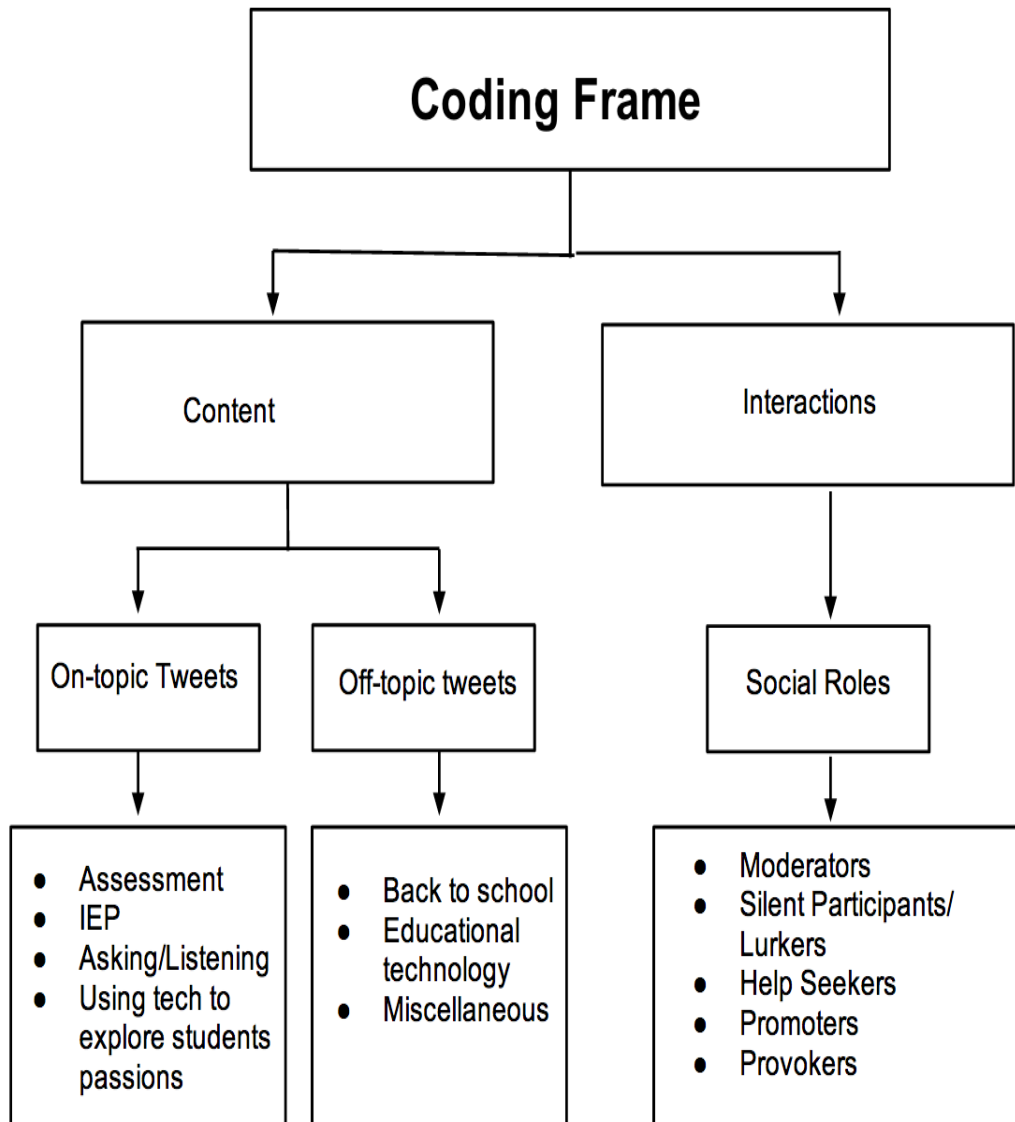
After dichotomizing the content into two discrete categories I proceeded with the analysis of each of these categories separately. I copied the tweets related to each category into a separate document and started scrutinizing them for emerging themes. In the category "on topic tweets" there emerged 5 themes participants talked about namely: Assessment, individualized education plan, asking/listening, and Using technology to explore students passions. The category "off topic" comprised 3 themes: Back to school, educational technology, and miscellaneous. All of these themes are nested as subcategories under the main categories in the coding frame I designed. Here is an illustrative visualization of the content part of the coding frame:

Figure 4. Illustrative Visualization of The Content Part of The Coding Frame.



Here is the final coding frame comprising both the content and interaction parts:

Figure 6. The Final Coding Frame of This Study.



Chapter 4: Data Analysis

The analysis of the data of this research is divided into two main sections. The first section is devoted to analyzing the themes covered in this Edchat discussion and in the second section I will be talking about interactions.

Themes

The topic of the Edchat that falls within the timeframe I selected for my data was already predefined by a public vote held a week before the start of the chat. The topic that was chosen came in the form of a question: "Kids know how they best respond to their learning. How do we involve their voice in education conversation?" As such, all the content generated in this portal was categorized into two main categories: tweets related to this topic and off topic tweets. Based on these two main categories, I drew out the themes covered in each of these subcategories and classified them into various subcategories. In this way, the main category "on topic tweets" captures the different subtopics (themes) participants talked about. These themes are: Assessment, Individualized Education Plan (IEP), Listening/Asking, and Using Technology to Explore Students Passions. The second main category (off topic tweets) features subcategories (themes) not related to the topic set for this Edchat conversation. These themes are: Back to School, Educational Technology Resources, and Miscellaneous.

Classifying data into different themes allows me to control and capture all the aspects of content being shared in this portal. The following is the analysis of each of these themes, and for illustrative purposes, I also provided sample tweets representing instances of these themes in the data.

Assessment

Assessment is the first topic that has been raised in this Edchat discussion with a total number of 13 members participated in this conversation. This thread started with a tweet from Touqo in which he suggested students' self-assessment as a strategy to engage their voice in education. While some participants like Drdouggreen strongly criticized classroom assessment and blamed it for undermining students learning, the majority of participants in this thread took a milder stance recommending a systematic change in the testing culture. Other tweeters advanced ideas on how to go about employing assessment as a way to encourage students' voice and learn about their learning needs. Teachablelit, for instance, suggested that students should be taught how to create their own rubrics to use when doing guided peer review; for WonderingWinter, teachers should assess students in the start of the school year to determine what worked or did not work for them in the past. In similar vein, Edutech20 shared a tweet with a link to an article featuring 20 ways to assess students learning.

Here are some sample tweets from this thread:

Table 3. Sample Tweets from Assessment Theme.

Theme Name	Sample Tweets
Assessment	<ul style="list-style-type: none"> ● QuinnEng8 : self-assessment, what forms of self assessment get students to create their own rubrics, given them points for them to peer review and assess themselves before they turn in their papers, ● drdouggreen: @TiffanyReiss @dgspurginE Any teacher with tenure that favors test prep over cool lessons is in the wrong business. #edchatthey aren't curious about: that's the big challenge of education. #EdChat. ● dgspurginE: @drdouggreen so you're saying part of teachers job is to protect kids from evil forces of testing and just let kids enjoy learning? #edchat ● WonderingWinter:@cybraryman1 @QuinnEng8 A baseline assessment w/ students beginning the year about what has & hasn't worked for them in past #EdChat. ● Drdouggreen: @dgspurginE Teachers must definitely protect students from evil aspect of testing and fixed curricular schedules. #edchat. ● JosePopff: @drdouggreen Isn't this hard to do when you have certain admin. requirements? #edchat. ● Dgspurgine: @drdouggreen can see shutting door policy working w/ inspired teachers but need a systematic change for less brave teachers? #edchat. ● TiffanyReiss @dgspurginE Top down doesn't work very well in education. You really can't micromanage a building full of teachers. #edchat. ● Drdouggreen:@JosePopoff If you have admins with no backbone to fight the insanity it is harder to do what right for kids. #edchat. ● Drdouggreen:@dgspurginE For less brave teachers you need admins willing to fight the nonsense and take some risks. #edchat. ● Edutech20: 20+ Ways to Assess Student Learning http://t.co/wRLXhtQc6d #edchat #assessment.

Individualized Education Plan

Individualized Education Plan (IEP) is another topic covered in this Edchat discussion. The conversation about IEP was first initiated by a tweet from co-moderator Tom Whitby in the form of a rhetoric question:"To consider each child's voice in education would we need IEP's for everyone?" Overall, 10 participants responded to this question and apart from Cybraryman's contribution that included a link to a resourceful page containing a wide variety of resources and materials on IEP, all the

other tweets in this conversation were dialogic in nature and reflective of participants viewpoints towards IEP. In this regard, some participants like Mike Sweet viewed IEP as a step too far in education reform and argued for a more realistic approach that would depart from one-size fits all methodology. ChrisWejr, on the other hand, emphasized the need for a redefinition of what IEP should look like, an idea which DrDouggreen stretched further to include the need for providing effective IEP for not only students with disabilities but every teacher and administrator. As for Fishtree-Edu, IEP is a complex issue and as such it should be approached as a guide that teachers should gradually use in their instruction. Below is a sample of the tweets shared in this thread:

Table 4. Sample Tweets from IEP Theme.

Theme Name	Sample Tweets
Individualized Education Plan	<ul style="list-style-type: none"> ● Tomwhitby: To consider each child'd voice in education would we need IEP's for everyone? ● Mike-sweet: @tomwhitby I don't see it going that far, but there could certainly be a shift awayfrom one size fits all #edchat. ● tomwhitby: @_Mike_Sweet Why do you view universal IEP's a step too far? #Edchat. ● Tomwhitby: @QuinnEng8 @_Mike_Sweet Me too, but technology has gotten to the point where it could keep track for us, if it becomes a priority. #Edchat. ● NathanSandberg: Attending IEP meetings should not be an option for teachers. Why do we make it so? #edchat. ● Drdouggreen: @tomwhitby Everyone should have an IEP including teachers and Endicott, New https://twitter.co/admins. #edchat. ● ChrisWejr: @drdouggreen @tomwhitby we would need to redefine what an IEP looks like... #edchat. ● cybraryman1: @JosePopoff My IEP page http://t.co/7wLmGHQPqi Individualized Ed ÜT: Programs #edchat. ● Drdouggreen:@TiffanyReiss @dgsurginE Close door and don't be driven by standards or curriculum. Do what's best for the students not the system #edchat. ● Touqo: Personalized learning is often reduced to some adaptive intelligent software. I think today's topic is very relevant to PL. #edchat. ● Lemino:@wonderingwinter #edchat but what do you do about diversity and personalization in the classroom? Can you meet each need method?

Listening/ Asking:

In this thread, 11 participants talked about the importance of listening and asking as a way to involve students' voice in education. DrDouggreen triggered this conversation with a tweet highlighting the need for teachers to do more asking and listening and less telling. After this, JaimeVanderG dashed off a tweet recommending that teachers should open the year with 'listening instead of telling'. Sjunkins, too, contributed with a tweet stressing the need to use questions to engage students through exploring what they think and then value their input. Similarly, Betteresp added that integrating questioning in teaching could be as easy as asking students about their opinions and then using this feedback to inform future teaching practices. Another set of participants tackled the topic of asking questions from students' side. Teachablelit, for instance, urged that teachers should encourage students to pose questions and reward them when they do. Dsocia too advanced a tweet in this direction underscoring the importance of enabling students to adopt a culture of asking questions. A third type of contributions in this conversation came in the form of tweets with embedded links to external resources as is the case with Cybraryman's tweet that directed participants to one of his blog pages or Ugafrank's tweet that shared a book entitled "*Making Just One Change*". Here is a sample of the tweets shared in this thread:

Table 5. Sample Tweets from Listening/ Asking Theme.

Theme Name	Sample Tweets
Listening/ Asking	<p>Drdouggreen: @lemino @cybraryman1 I think we need to do more asking and listening and less telling. #edchat.</p> <p>JaimeVanderG: Open up the year with listening instead of telling to get the ball rolling with a different voices making decisions. #EdChat.</p> <p>Dsocia: @whatedsaid And encourage students to ask lots of questions, too. #edchat.</p> <p>Jgmac:@lemino @whatedsaid @birklearns Not sure I agree that the balance of talk should be tilted more towards students #edchat.</p> <p>Ugafrank:@cybraryman1 @drdouggreen @lemino Not sure if already 8/27/13 mentioned, but a greatread in that direction http://t.co/1pu3LkJPfv #edchat.</p> <p>Sjunkins: By simply asking students what they think and then value (rather than dismiss) their input, we create more engaged students. #EdChat.</p> <p>Teachablelit: @dsocia @whatedsaid Encourage and REWARD questions lots more discussion opens up when points are up for grabs. #EdChat.</p> <p>GraphDesProject: @tomwhitby In day2day learning openended qs and focus on learners inspiration & reactions helps foster emphasis on whatTHEY think #edchat.</p> <p>betterwriteresp: It can be as easy as asking Kids their opinion an incorporating their feedback so we can include their voice in ed conv. #edchat.</p> <p>Dgspurgine: #edchat. Today's Correct Answer = go into classroom (now!) and ask, "Give me as many questions about anything as you can think up". Listen.</p> <p>cybraryman1: How can we know what students want if we don't ask them? ÜT: http://t.co/gFCtWMha5L #edchat.</p>

Using Technology to Explore Students Passions

Another theme which emerges from the discussions in this Edchat session is the use of technology to empower students' voice. A number of participants (approximately 10) shared tweets with a focus on technology. Blogging is one major web tool participants repeatedly talked about. Accee viewed blogging as 'a great place for students to share their ideas; others like JosePopoff, DrDouggreem and Earthecho

considered it a way for giving students a global voice and a global audience to interact with. And as is the case in the previous threads, Cybraryman did not let the chance go by without sharing one of his blog pages with resources on teaching students to blog. Besides blogging, participants also mentioned several other web technologies to engage students' voice in education. Some of these include the use of voting and polling tools such as TodaysMeet, Celly and Google Forms to gather students' feedback about their own learning. Social media websites such as Twitter, Podcasting and YouTube were also suggested as potential outlets students can use to voice out and to explore their passions.

Table 5. Sample Tweets from Using Technology to Explore Students Passions Theme.

Theme Name	Sample Tweets
Using Technology to Explore Students Passions	<ul style="list-style-type: none"> ● Aceedu: @BrandiJClark Blogging is the same idea. It's a great place for students to share their ideas and think. #edchat. ● JaimeVanderG: @ugafrank @TodaysMeet @21ststacy That is great! It is such a powerful tool 2 hear the things that otherwise out students won't say!#EdChat. ● Cybraryman: Get your students to voice their opinions to a global audience. My Blogs page: http://t.co/k3didxy3bO #edchat #edchat. ● EarthEcho: @brandijclark Great idea! Let students use technology (blogs, twitter, video, etc.)everyday to explore their passions #edchat. ● JosePopoff: Blogging is important to have kids voice out too. Honduras, http:// www.josepopoff.com. http://t.co/cmKhA40J7h #edchat. ● Drdougreen: @MaxScholarLLC Having students blog is a great way to hear their voices. #edchat. ● Drdougreen: @JosePopoff Having kids make podcasts sounds like a great idea. YouTube videos as well. #edchat. ● Cybraryman: Blogging gives even the quietest student a global voice http://t.co/k3didxy3bO #edchat. ● JosePopoff: @drdougreen They can also include pictures, videos, etc. It allows them to be creative! #EdChat. ● cybraryman1: Empower your students to help their peers & teachers My Student Tech Help pagehttp://t.co/KXQrzM3awb#edchat

Back to School

As mentioned before, the timeframe for the data collection of this research study spans the last week of August, a week before the start of school. Creating a thread under the label "back to school" helps in capturing and understanding part of the discussion and content being shared by educators related to this event. As is shown in the tweets shared in this thread, it appears that the topic back to school was predominantly present in participants' contributions and as such it proves that there is a correlation between the upcoming school entry and the content shared in this Edchat. One thing worth noting here is that the majority if not all of the tweets related to this topic were shared by participants not directly engaged in the discussion of the Edchat topic of this week. Another thing I noticed while analyzing the data of this thread is that all the tweets related to "back to school" integrated another hashtag of some sort other than #edchat, some examples include: #edtech, #education, #backtoschool, #eltchat, #edreform, and #ntchat.

Using hashtags other than #Edchat means that participants were targeting an audience beyond the immediate participants in the actual Edchat discussion. This is particularly the case with some individuals who tweeted links referring people to websites that sell school products. These kinds of tweets are promotional in nature and seek to obtain more coverage among an audience interested in education and schooling. Most often, originators of these tweets are people working for companies that sell school products as their public profiles on Twitter shows. An example of this includes "Schoolmaster", "Wiziq", and "Teacherhorizen". Other promotional tweets related to the topic of back to school included links to colleges with 'lower tuition fees'.

However, not all tweets in this thread were promotional in nature. Several participants contributed with tweets embedding links to useful resources for preparing teachers for school re-entry. These resources cover a wide variety of materials from printables to tips on how to start the first week of school with students. Here is a sample of what participants have shared in this thread:

Table 6. Sample Tweets from Back to School Theme.

Theme Name	Sample Tweets
Back to School	<ul style="list-style-type: none"> ● justinohearn: Starting #college this fall? Some tips. http://t.co/16Rcd7IV5O #university #edchat ● ExtendEDNotes: Back to School: Try these Q&A activities to connect students http://t.co/v6QlxdKOF2 #edchat #ntchat ● FredEnde: #Math modules should be available by start of school for P-8 for 1st semester;; second semester by December. #edchat #efu #NYedcha ● SBEducation: New SmartBlog on Education - Starting the school year with a sense of humor - http://t.co/BMNYgYZxF9 #edchat #education #backtoschool ● slackt: Back to school and empathy. A must! ---&gt;; http://t.co/62NgQdG88n #edchat #ocsbcil ● fishtree_edu: Empathy: The Most Important Back-to-School Supply http://t.co/lgqnY08UPd #ntchat #edchat Back to School with EDSITEment World History and Culture http://t.co/EA6XsS9Wg6 #sschat #historyteacher #edchat #geographyteacher... ● College_Expert: Introducing 'The Tuition is Too Damn High' http://t.co/AGGKQPf0Fo #college #HigherEd #tuition #edchat #educhat #WaPo ● SCSIC: Will Parents Choose Diverse Schools? http://t.co/FYPsiwe7A9 #SIC #edu #k12 #edchat ● From #EdWeb - School is Starting – Now What Do I Do About the Summer Slide?: It's a fact: witho... http://t.co/xczwvZSy0B #eLEAD #edchat ● SCSIC: Back to School with iPads: 5 Steps for the First 5 Days http://t.co/m4HXQTSTFn #SIC #edu #k12 #edchat ● CFGCollege: Which colleges offer the best balance of affordability &; quality for non-wealthy students? The 2013 list: http://t.co/vX6fMRQCaD #edchat ● davidtedu: Majority of college entrance essay readers are minority females @ age 24 and 1st gen college grads. Know your audience #baronslearn #edchat ● SCSIC: Parents Favor 'Niche' Schools, Fordham Institute Market Study Finds http://t.co/gNalwak3hL #SIC #edu #k12 #edchat.

Educational Technology

While going through the bulk of tweets comprising this study I noticed the huge presence of tweets revolving around educational technology. These are particularly tweets with links to educational web tools, ideas, tips, and mobile apps to help teachers leverage the power of technology in education. Participants in this category have shared a wide variety of educational technology resources. In this regard, some of the tools covered in these tweets include: applications for sharing large files, exit ticket tools, and tools to create teacher podcasts. A bunch of educational iPad apps were also mentioned together with their reviews. Another set of tweets outlined Edtech articles featuring tips for teachers skeptical of technology, statistics about technology use in education and posters and infographics for using technology in teaching. Here is a sample of the tweets shared in this thread:

Table 7. Sample Tweets from Educational Technology Theme.

Theme Name	Sample Tweets
Educational Technology	<ul style="list-style-type: none"> ● AngelynCheath: App Review: Visual Poetry #edtech #edchat #iosed #ipaded http://t.co/cKTnx1luva ● jessievaz12: My recent bookmark: Saliendo del bosque http://t.co/lnEx6ZZcmd #edtech #edchat #ibpyp ● LAChoicesExpo: RT @edutopia: Check out our helpful classroom guides for parents and teachers: http://t.co/qfIXA8biMR #BackToSchool #edchat ● kevintame: ExamTime Adds Groups for Resource Sharing http://t.co/8MODfcSdTn via @rbyrne #edtech #edchat ● NASAWavelengt: Challenge #elementary students to create design solutions w/ today's featured resource! http://t.co/rVeABZkhEx @MESSENGER2011 #edchat ● JosePopoff: For those of you interested on exit tickets, you can try: http://t.co/FY0Zii2RJK, http://t.co/yAHc2IUkQs, or http://t.co/4iKZvrbLrK #edchat ● Education Week: Calculator Use With Common-Core Exams http://t.co/VJ0zyTDY2b #mathchat #edchat #STEMed #CCSS ● kevintame: Two Easy Tools Teachers Can Use to Coordinate Parent Volunteers http://t.co/XvkHiURNRe via @rbyrne #edchat

Miscellaneous

This category is what Schreier (2012) called residual category. It features tweets that do not fit in any of the preceding threads. These tweets were not intended to generate any responses or engage participants in discussions. The main purpose behind them is to share links and resources with other users of the portal Edchat. Tweets shared in this category all come with embedded links. Each tweet includes, besides Edchat, at least another extra hashtag such as #edtech, #edapp, #educhat, #highered to mention but a few. Additionally, the topics covered here are multifarious and span a wide range of themes. Some salient examples of what participants in this thread shared include: materials for teaching with common core, uses of gamification in e-learning, tips for substitute teachers on how to better manage the classroom, and BYOD (Bring Your Own Device) resources for teachers. Other tweets include links to presentations and newspaper articles related to education. Also a couple of tweeters in this subcategory were seeking potential collaboration with other teachers using web tools such as Skype.

Table 8. Sample Tweets from Miscellaneous Theme.

Theme Name	Sample Tweets
Miscellaneous	<ul style="list-style-type: none"> ● FredEnde: 3-8 ELA almost complete with 1st half of year. 2nd half of year by December. 9th grade over Labor Day. #edchat #edu #NYedchat ● blairteach: Will be co-moderating #edchat for the next hour. Pardon heavy tweet stream. Feel free to join the conversation. ● msspeducate: @TellMeMoreNPR Thanks! Really enjoyed different conversation than other #edchat 's that are geared just to #teachers (Which are great too!) ● NickC1188: @tomwhitby is Montessori too unguided for learners who are behind already or in disadvantaged communities with less resources? #EdChat ● Sciology: #SCItlap is tonight at 8:00. Drop in & chat with your fellow pirates. #tlap #txed #edchat #rcisdchat #wisdtweets ● Infographic: Taking Time Out to Play http://t.co/3n3qx7sHWI via @GOOD #edchat @TiffanyReiss @mattwallaert @drdouggreen @dgpurginE And we should be vocal - sharing what we know with politicians! #edchat ● betterwritersp: @lemino @WonderingWinter THAT is an utter shame. From a parent perspective, why didn't a parent challenge her on that? #edchat ● edc_blog: Curation is the Key to Content Marketing for Campus Stores http://t.co/fCao43hKxq #collegestore #auxiliaryservices #edchat #highered ● shyj: @WonderingWinter @lemino That's a tough convo but one that needs to occur. You are not slamming the T, just need to make aware. #edchat ● Door_Eleven_P: MT @sixredmarbles: #VideoGames and #SocialEmotionalLearning. http://t.co/DmN4tdft9K #edchat ● eolsonteach: Please share with classes: http://t.co/vNR1sSf3yu Students should know about the world. Understanding Syria. #sschat #iaedchat #edchat ● pcclassroom: Join us for #popchat today @pcclassroom at 6PM Az Time. The topic will be Blooms Taxonomy and Higher Order Thinking Skills. #edchat ● drdouggreen: @eolsonteacher I wonder if Syria understand Syria. #edchat

As is evident from the analysis of the content of this Edchat discussion, it appears that participants covered a wide variety of themes and shared a number of links to external resources. However, content is only one defining aspect of Edchat portal the second important aspect is interactions. In the following chapter, I will analyze the interactional patterns of this portal and will focus on the socially situated roles participants take up while interacting with each other.

Interactions

In this chapter, I focus primarily on the dialogic interactions between the different participants in this Edchat discussion with the purpose of uncovering the various social roles enacted in this space. To this end, I will be drawing on the coding frame I designed for this study and will examine the different discussion threads with an eye on understanding how participants construct and reference socially situated roles that lead to meaningful participation in this space.

To better understand and capture the interactional patterns that drive the discussion in this Edchat session, I categorized participants into 5 major categories based on the social roles they enacted while interacting with each other. These roles are: Moderators, Silent Participants, Promoters, Help Seekers, and Provokers. For each of these categories I provided a short discussion together with sample tweets representative of how participants enact these roles.

1- Moderators

A moderator is a person who attends to the content organization and the interactional aspects of a space. As such, moderators do enjoy some tacit form of authority and implicitly exercise some sort of control over the discussions and interactions in the space they moderate. The source of this tacit authority comes from their own personal status within the space. Usually, moderators are knowledgeable and have a long experience in their field of expertise.

The Edchat discussion under study here was co-moderated by three persons: Tom Whitby, Cybraryman, and BlairTeach. As we will see later on, all of these moderators have, to varying degrees, features that enable them to take up the role of a moderator. They also used different strategies to enact this role within the Edchat space. For procedural considerations, I will be talking about each of these moderators in separate sections.

1-a. Cybraryman:

Cybraryman is an education consultant and a veteran Edchat moderator who has a well-established popularity within the Edchat space. He is best known for his edtech library (www.cybraryman.com) and has a large number of followers in different social networking platforms (over 41.000 in Twitter alone).

As a co-moderator of this Edchat, Cybraryman initiated the discussion with a tweet welcoming and thanking everybody for joining the conversation. The second part of his tweet was a polite reminder for new participants to include the hashtag #Edchat in their tweets. Immediately after this introductory tweet, he dashed off a second tweet announcing the Edchat topic of the week:

- **cybraryman1:** Welcome! Thank you for joining us. Please remember on each tweet to use the hashtag #edchat
- **cybraryman1:** #edchat Topic: Kids know how they best respond to their learning. How do we involve their voice in education conversation?

To move forward the discussion and probably control its flow, Cybraryman would intermittently contribute tweets in the form of questions aimed at tackling the topic from different angles. An instance of this is when he asked about whether students, teachers, and parents have a true voice in education policies.

- **cybraryman1:**@TiffanyReiss @adaptivelearnin Do we (students, teachers, parents) 16:45 really have a true voice in ed policies? #edchat

By including parents and teachers voice into education conversation, Cybraryman shifted the focus of the topical question of this Edchat from simply talking about students' voice to include other parties in the equation.

Besides posing questions, Cybraryman was also engaged in resource sharing in that he provided links to several external websites containing content relevant to what participants were talking about. Here are some examples of resources Cybraryman shared with others:

- **cybraryman1** : Blogging gives even the quietest student a global voice <http://t.co/k3didxy3bO> #edchat.
- **cybraryman1:** My What Students Want page: <http://t.co/gFCtWMha5L> Let's hear what they feel & then act on it. #edchat.
- **cybraryman1** :@EarthEcho Yes. My Community Based Service Learning page <http://t.co/KG1OaHXSog> #edchaT.

Providing answers to the questions participants ask was also part of the work Cybraryman did as a co-moderator. For instance, when BrandiJClark shared a tweet inquiring about ideas for helping students find their passion, Cybraryman responded with the following tweet:

- **Cybraryman1:**@BrandiJClark Using writing notebooks are a start to finding out what students are passionate about. #edchat #edchat.

Overall, by socially situating himself within the role of a co-moderator, Cybraryman had to engage with a variety of practices that were consistent with this role. Some of these practices include initiating the discussion, announcing the topic of the conversation, sharing resources with others, helping participants with their questions, and also signalling the end of the chat.

1-b. Tom Whitby:

Tom Whitby is one of the co-founders of Edchat and is also the founder of the [Educator's PLN](http://edupln.ning.com/) (<http://edupln.ning.com/>), a virtual space where educators and teachers from all around the world get to meet, discuss and share resources. As such, Tom enjoys a wide popularity among the education community on Twitter (over 45,000 followers as of the time I am writing these lines) and on several other social media platforms.

Like Cybraryman, Tom initiated the conversation with a tweet announcing the Edchat topic of the week. He then proceeded with another tweet which narrowed down the scope of the first question to focus on IEP (Individual Education Plan): "To consider each child's voice in education would we need IEP's for everyone?" In so doing, Tom was implicitly directing the conversation towards the discussion of IEP. Unlike Cybraryman who did not interfere with the direction of the discussion until an advanced stage in the chat, Tom, from the start, drew the participants' attention to one aspect of the topic he wanted them to talk about: IEP. All along the conversation, the moderator

was actively interacting with the different contributions to this discussion. At times he would address specific participants using their twitter handles to send them direct answers as he did with Dgspurgine:

- **Tomwhitby:** @dgspurginE Technology will only be driven to priorities. Unless we Long it a priority it will never happen sooner than later. #Edchat

Or he would challenge others with intriguing questions as is the case with Mike Sweet in this tweet:

- **Tomwhitby :** @_Mike_Sweet Why do you view universal IEP's a step too far? #Edchat

Tom also drew on his large network of followers to crowdsource help and to provide answers to questions he could not answer himself. For instance, when one of the participants shared a tweet searching for a potential teacher to connect with his elementary music classes, Tom copied his tweet and added "reply to" inside it and retweeted it to his network of connections giving, thus, the original tweet more prominence and increasing the likelihood of it being responded to.

- **Tomwhitby:** REPLY TO=@4BetterEducation: Anyone know any musicians who would be willing to tweet with my elem music classes? Thanks.

Inline with his role as a co-moderator, Tom had to signal the end of the chat and thank everyone for their participation:

- **Tomwhitby:** Big Thx to my friends and moderators on the #Edchat Team, @blairteach, @cybraryman1 Nancy & Jerry and all who participated in today's chat.

1-c. Blairteach

Blairteach is an education consultant who has recently joined the Edchat community. She does have a moderately large base of Twitter followers (over 9000 as of right now) but she does not enjoy the same reputation Tom and Cybraryman have within the Edchat community. Unlike the previous moderators, Blairteach's Twitter profile does not show any personal website related to her. As such, Blairteach status as a co-moderator is not well established, which probably explains why she initiated her thread with a tweet declaring herself as a co-moderator:

- **Blairteach:** Will be comoderating #edchat for the next hour. Pardon heavy tweet stream. Feel free to join the conversation.

Most of Blairteach's tweets (37 in total) were direct answers to participants' contributions. She was making sure to respond and interact with any tweet that contained her Twitter handle. In so doing, she often got involved in one-to-one exchanges with other tweeters as is displayed in the segment below:

- **Drdouggee:** @blairteach How about getting them to tell us what they don't like about school during a facilitated Twitter chat? #edchat.
- **Blairteach:** @dgsurginE Student focus groups and informal discussions w/students can help move past just lesson planning. #edchat.

Blairteach was also excessively retweeting tweets shared by others including the ones shared by Tom and Cybraryman:

- **Blairteach:** RT @cybraryman1: Blogging gives even the quietest student a global voice <http://t.co/k3didxy3bO> #edchat.

At the end of the conversation Blairteach thanked participants for joining the Edchat and shared with them a link to the transcript of this discussion:

- **Blairteach:** REMINDER: You can always review the transcript of the #edchat topic via the archives: <http://t.co/ycydYVtTiS>.

As is evident from the examples cited in this section, Tom, Cybraryman and Blairteach were entrusted with various tasks that, while being aligned with their role as co-moderators, also set them apart from other participants. Through sharing resources, helping others find answers to their questions and engaging participants in discussions, co-moderators were enacting socially-situated roles that required them to interact and use the Edchat space in different ways than others.

2- Silent Participants/ Lurkers/ Spectators

While examining the volume of tweets shared in this Edchat discussion I noticed the presence of a moderately large number of participants who were mere consumers of the content others produce. These people did not engage in any kind of dialogic exchanges with other participants and their contributions were limited to retweeting what others had generated without adding to it. I labelled these people silent participants. I also used the words lurkers and spectators interchangeably with silent participants.

By retweeting what others produce, lurkers are still considered participants but only silent ones because their participation neither engage nor add any insights to the discussion. And though they were not actively engaged in the production of new knowledge and ideas within this space, their retweets were still integral to the overall conversation. Retweets are a good way for lurkers to signal their affiliations and allegiance to what is being shared in the space. Through retweeting, lurkers mark their presence in the discussion and inform others of their silent participation..

There are different ways lurkers used retweets. Some of them retweeted the topic of Edchat discussion and thus assisted moderators in spreading the word:

- **Ojaison:** RT @tomwhitby: #Edchat Topic: Kids know how they best respond to their own learning. How do we involve their voice in the education.
- **LeviFletcher:** RT @tomwhitby: #Edchat Topic: Kids know how they best respond to their own learning. How do we involve their voice in the education conversation .
- **Fritidspedagog:** RT @tomwhitby: #Edchat Topic: Kids know how they best respond to their own learning. How do we involve their voice in the education conversation .

Other participants retweeted ideas they agreed with or supported. An example here is a retweet by Nathan:

- **Nathan_stevens:** RT @sr_tutor: Student voice should always have teacher scaffolding or else students may be misled / miss the mark #edchat.

In another example, Fishtree-edu expressed his support to DgspurginE's idea about the meaning of child's voice in education by retweeting it.

- **fishtree_edu:** RT @dgsurginE: #edchat - a child's 'voice' in education = continuing to find out what a child is and is not curious about <https://twitter.co>.

In some tweets like the one below, participants retweeted what others had already retweeted. For instance, Cellyme, in this example, retweeted what Cybraryman had already shared.

- **cellyme:** RT @cybraryman1: RT @drdouggreen @lemino @cybraryman1 I think we need to do more asking and listening and less telling.#edchat #edchat.

Ultimately, the social role these silent participants take up in Edchat discussion constitutes part of the interactional patterns that drive the conversation forward.

Retweets, though they do not add any new insights to the discussion, they can communicate a string of tacit values such as support, agreement, consent, acceptance, which, in turn, consolidate the social ties bonding participants in this space.

3- Promoters

As is the case with any open virtual space that aggregates a niche audience, Edchat is deemed an appealing hub for targeting an education-focused audience. This is probably why an array of promotional tweets made their way into this Edchat discussion. I define promotional tweets as tweets whose main purpose is to promote a certain product, content, or a digital platform for the sake of professional, financial, or personal gains.

After examining the bulk of promotional tweets shared in this Edchat session, I found out that promoters differ both in the kind of things they promote as well as the strategy they use to promote their products. There are basically two kinds of promoters here: individual promoters and institutional entities.

3- a. Individual Promoters

Individual promoters are participants who own a website or blog and who, through engaging in Edchat discussions, aim at gaining more prominence for their content and drive traffic to their digital platforms. This kind of content promotion is more personal in nature and is usually done implicitly through sharing embedded links directing users to specific pages and resources located in particular platforms usually operated by the promoters themselves. The strategy these promoters employ is socially significant in that it is based on a seamless integration of promoted content in the Edchat

conversation through active engagement in dialogic exchanges with participants.. In other words, by creating strong affiliations with the Edchat participants and maintaining an active participation in Edchat conversations, these promoters gradually build up a socially situated status that associate them with the cause of the Edchat space and therefore help them promote their blogs and websites without running the risk of sounding too promotional.

A number of Edchat participants were engaged in such kind of content advertising. Cybraryman, for instance, repeatedly recommended content from his website to other participants. In one instance, somebody asked about what IEP is and Cybraryman replied with a tweet containing a link to one of his blog pages on individualized education programs:

- **cybraryman1** : @JosePopoff My IEP page <http://t.co/7wLmGHQPqi> Individualized Ed Programs #edchat.

In another conversation about the use of blogging to make students voice heard, Cybraryman, again, directed participants to a resource on his own blog:

- **Cybraryman1**: Get your students to voice their opinions to a global audience. My Blogs page: <http://t.co/k3didxy3bO> #edchat #edchat.

Several other tweeters were engaged in promotional tweeting. For instance, in a discussion around the importance of teaching students to ask effective questions, Teachthought, a participant who owns a website under the same name, contributed with a tweet directing others to visit an article in his blog entitled “ 26 Questions to Ask Your Students on The First Day of School” :

- **Teachthought**: 26 Questions To Ask Your Students On The First Day Of School <http://t.co/1WAP8vGyeL> #edchat #teaching.

In the tweet below, Vocabgal used edchat discussion to draw attention to his YouTube channel to get more subscribers.

- **Vocabgal:** Subscribe to my YouTube page! <http://t.co/QvaRGQd0Dn> Who wouldn't want to watch awesome Authors talk about vocabulary and writing? #edchat.

Mattwallaert is an investor working with Bing for Schools (BFS). He was actively engaged in this Edchat discussion but almost all of his contributions contained mentions or links to BFS that he works for.

- **Mattwallaert:** @QuinnEng8 @fishtree_edu @dgspurginE Preaching to the choir . Bing for Schools lessons are designed the way they are for a reason. #EdChat.
- **Mattwallaert:** @Teachablelit @cybraryman1 @sr_tutor In BFS, I love to see them taught by breaking into groups, then regroup for main question. #EdChat.

3-b. Institutional Entities

The second category of promoters is what I called institutional entities. These are colleges, schools and corporate organizations that promote education-related products within the Edchat space. Unlike the individual promoters whose promotional strategy rely on building relational ties through direct engagement with topics being discussed in Edchat, institutional entities were not involved in any sort of interactions and their main contributions were blatantly promotional. Their purpose is to get the maximum conversion rates possible through turning Edchat members into possible customers. Maintaining a socially situated status within the Edchat community is not a priority for them. Here are some sample tweets from this category:

Wiziq, an elearning company that provides paid online courses and tutoring, shared a tweet informing participants in Edchat about the new feature they added to their platform that allows users to upload large files and gain more storage space.

- **Wiziq:** Now Upload and Share Larger Files with More Storage Space for 8/27/13 your Online course only with WizIQ <http://t.co/os4FMsNIOa> #edtalk. #edchat.

Maxscholarllc, a service that provides paid programs to improve students reading skills, shared a set of tweets all directed towards drawing attention to its products:

- **Maxscholarllc:** Invite students to reflect on their progress. That is one of the reasons why we have created #MyProgress at <http://t.co/QM9p5reuxm> #EdChat,
- **Maxscholarllc:** Our teachers, for example, encourage the students to write and reflect about their learningexperience <https://t.co/gYW2DYCN0R> #EdChat.

Finding Factory, a company that provides recycling services for schools and other institutions, promoted its products to the Edchat audience through a tweet encouraging them to use its services within their schools:

- **Findingfactory:** Why not add waste-free lunches to your school's green reputation this year? via @EPA #school #recycle #edchat <http://t.co/Jz8opA8fM9>

Although their purpose behind using Edchat differs from other participants, promoters' tweets make up an essential part of the content circulated within this space. As such, promoters, like moderators and silent participants, used this virtual community to enact social roles that fit in with the values they hold towards participation in Edchat.

4- The Help Seekers

Help seekers, as their name indicates, are people who leverage the power of the networked space, Edchat, to seek help from other participants using the same space. By seeking help from fellow teachers and educators, these users are associating themselves with a like-minded category of people in a network that thrives on information curation and management. Such collaborative knowledge building is

indicative of a commitment from the users of the space to help each other and crowdsource information and resources that others can openly and freely use. In a virtual space such as Edchat where information flows through networks and where resource sharing is a pervasive currency, 'who you know shapes what you know' (Castel, 2012).

There are several instances of tweets where participants sought direct help from their peers. Here are three illustrative examples of tweets shared in this regard:

- **Jpwxix:** Any asia region teachers out there wanna do skype debate on #humanities topics with hong kong students? #mypcha iBiologyStephen #edchat #hist.
- **Natalie Franzie :**Any school district have a form to give to teachers to grant access to use Byod in classroom? #EdChat #EdT ech .
- **Gcouros :** Who are some leading thinkers in the areas of #innovation and leading change? Suggestions? Teachers? Authors? #edchat #cpchat .

5- Provokers

Another socially situated role some participants took up in Edchat interactions is what I labelled "provokers". These are people who fuelled the conversation with challenging and provocative contributions. Their tweets would usually take the discussion into deeper layers and would challenge others to approach the topic from new perspectives. The contributions of provokers were essential for maintaining a steady flow of ideas and for enriching the discussion with new insights. Their participation broke the monotony of the conversation and opened up new avenues for argumentation.

Provokers' tweets come in different forms. Some used rhetorical questions like the one Dgspurgine posed to challenge Drdougren's idea about protecting kids from "evil forces of testing":

- **DgspurginE** : so you're saying part of teachers job is to protect kids from evil forces of testing and just let kids enjoy learning?

Lemino also posed a similar question inviting participants to think about the reasons why teachers teach verbally when majority of students are visual learners:

- **Lemino**:#edchat did you know more than 65% are visual learners, yet we teach verbally? Should the system listen or individual teachers?

In another tweet, NathanSandberg inquired about the reasons behind teachers attending IEP meetings:

- **NathanSandberg** :Attending IEP meetings should not be an option for teachers. Why do we make it so? #edchat.

Besides questions, provokers also used semantically-loaded statements to liven the conversation. For instance, in the midst of a discussion around assessment and testing, Drdouggreen shared a provocative tweet that resulted in a stream of responses:

- **drdouggreen**: @TiffanyReiss @dgspurginE Any teacher with tenure that favors test prep over cool lessons is in the wrong business. #edchat.

As is displayed throughout the various examples provided in this chapter, participation in this Edchat conversation was an opportunity for participants to engage in different socially situated roles that positioned and represented them as articulate members of a pluralistic space. Through their dialogic interactions in this space and based on the affiliations and meaning-making processes they were engaged in, participants were able to socially structure the space in such a way that it provided a safe, sportive and meaningful venue for generating new knowledge and for affiliating and commiserating with other participants around topics of similar interest.

Chapter 5: Discussion

Drawing on the analysis of content and interactions, I will now turn to the discussion of this data and ultimately answer the research question underlying this study:

Is Edchat portal a generator of content? And if so, what content does it generate and is it a strong or weak generator?

To do this, I will proceed with the discussion of content then move on to interactions and finish with a summative conclusion.

1- Content

There are two ways to look at the content of any space: “what signs it has and how they are organized “(Gee 2004, p. 80). To Look at the content of Edchat from this perspective, I will first discuss the content organization or design of Edchat and then explore the themes generated in this discussion.

1-a Design of the Edchat content

Unlike several other portals such as blogs, wikis, forums and listservs, Edchat does not have any virtual boundaries and hence its content organization poses real challenges to content generators. The lack of an inherent structure within Edchat where users can store content is attributed to the nature of the mother portal that hosts Edchat itself which is Twitter. This microblogging service is designed in such a way that exaggerates 'presentism': the idea that only what is happening now is worthy of

attention (Wellman & Gulia, 1999 cited in Gruzd et. al. 2011). Tweets eat themselves away and as soon as a tweet is shared then it gets buried within a fast moving stream of tweets. And as Gruzd et al (2011) argued "Two hours ago is normal reading time; a day ago is a long time; a month ago is ancient history" (p. 4). Because of this, some participants in Edchat conversation found it hard to keep track of the conversation as is the case with Lemino in this tweet: *"pew, #edchat is scrolling down so quickly I can hardly read all twits. I missed that energy people! Thanks!"* To circumvent these structural constraints participants used what Gruzd et al (2011) called 'Twitterspeak'. This is a set of linguistic signs created with the purpose of facilitating communication on Twitter. Some key linguistic conventions or folksonomies used in the organization of Twitter content include: RT- to mean a retweet or 'forwarded message', 'via' to highlight a 'highly edited message', and @name to refer to the username you are referencing or can also be used to send messages to that username (Gruzd et al. 2011). Participants in Edchat have extensively drawn on these linguistic conventions to organize the content they shared in the space.

Here is an example of a typical tweet that employs these conventions:

Poida : RT @EricTTung: Why You Need to Become an "Independent Publisher": <http://t.co/B4kvXcGqRh> via @copyblogger #success Global citizen... #edchat #education.

Here is the same message translated from Twitterspeak:

Translation: Twitter user Poida is forwarding ('RT') @EricTTung to his own followers using the sign @ to give EricTTung credit. Eric's tweet included a link to an article on independent publishing shared by Copyblogger. To acknowledge the source of this tweet, EricTTung used the sign 'via' together with the username of the original tweet

"via copyblogger". To extend the reach of the tweet to other spaces, Poida included other hashtags namely: "#edchat", "#education", "#success".

Another organizational work-around moderators of Edchat had recourse to in order to surpass the structural constraints of this space is the creation of another portal hosted on a wiki platform called PBWorks (www.pbworks.com). In this portal, moderators keep records and scripts of all conversations of Echat. These records are publically available online from this link (<http://edchat.pbworks.com/w/page/219908/FrontPage>). Based on the features underlying the design of the content in this space, it appears that the portal Edchat lacks one of the features of affinity space which is that by which content organization is transformed by interactional organization (Gee, 2004). That is, the content design of Edchat is not transformed by the actions and interactions of the participants and generators in this space. Unlike portals where generators contribute to the design of the portal (an example of this is Age of Mythology (Gee, 2004) in which the game designers modify the design of the portal AoM based on the suggestions and recommendations of game players), the contributions of the content generators in Edchat have no impact on the design of Edchat, and as such participants in Edchat had to use another portal to organize and access their archived content.

1-b.Themes

As is evident from the analysis of the different themes discussed in this Edchat session, it appears that the participants were actively engaged in generating and enriching the space with two major kinds of content:

Conversational content: These are tweets generated with the purpose of advancing the conversation taking place in Edchat. These tweets often contain participants' opinions and ideas on a certain subject or responses to other tweets. This kind of content is what Gee (2004) referred to as individual knowledge. This is a knowledge that is stored in participants' heads and is shared through discursive interactions with each other. Sharing individual knowledge within this portal allows users to collaboratively construct and enhance their partial knowledge and skills in such a way that they "become part of a bigger and smarter network of people, information, and mediating devices"(p. 86).

Resource sharing: These are tweets with embedded links to external resources. This type of content is predominant within the space. This finding confirms the fact that Edchat portal does encourage participants to use and draw on dispersed knowledge, 'knowledge that is not actually at the site but at other sites or in other spaces (Gee 2004, P. 86). In this way, a major portion of Edchat content exists in quite a wide and extensive network (such as blogs, websites, newspapers, forums, wikis).

Another thing worth noting here is that out of the 992 tweets generated in this Edchat session only 120 tweets were directly related to the topic set for this Edchat discussion. These tweets were generated by a limited number of participants. From the 122 participants in this conversation, only 35 of them were engaged in the discussion of the topic of Edchat. Also, the majority of the tweets shared in this session were thematically concentrated in two main categories: 'educational technology' and 'miscellaneous'. These statistics prove two things: First, Edchat is less of a discussion space and more of a resource sharing space. Second, Edchat is a strong generator of

content in that only 178 were retweets and the rest (814 tweets) were original contributions.

2- Interactions

Edchat is a dialogue space by default. It offers the possibility for participants to engage in dialogic exchanges with each other. To evaluate the level of interactivity between different participants in the space, I collected all conversational tweets which include the @sign and studied them closely. From the analysis of these interactions, I come to the conclusion that users of this space differ as to the way they interact with the content of the space and also with one another. This difference is clearly reflected in the social roles they take up within the space.

Moderators in Edchat portal are what Gee (2004) called leaders of affinity space. Their leadership stems from their long standing status in the space and from their heavy contribution to content production and resource sharing in the space. These people play a critical role in community building and information gate keeping. They would initiate discussions, pose challenging questions to elicit the maximum participation, share resources related to the topic of discussion, and also announce the end of discussion.

In the same vein, provokers would ignite the conversation with challenging and provocative contributions. Resource sharers helped with sharing materials and links to external resources. Silent participants, though they were not actively engaged in generating new content in the portal, their retweeting behaviour was like a thermometer that measures the influence of tweets within Edchat. Most influential tweets would get the most number of retweets which suggests that participants do influence each other.

Help seekers drew on the question-answer type of tweets to leverage the power of this networked space to crowdsource answers to their questions.

The seamless coordination of all of these socially situated roles within this portal gives the space its defining texture: rich content. Moreover, it is also noted from the analysis of these interactions that most of the contributions pivoted around providing support and help for space users. This is shown in the highest percentage of tweets volunteering useful information often in the form of URLs to external sites or articles (110 tweets). This proves that the Edchat portal is not only a space for connecting people with common endeavour but also for connecting these people to information. As Ridings and Gefen (2004 cited in Gruzd et al. 2011) noted, information can be seen as “a valuable currency or social resource in virtual communities” (n.p.). And as previous research on virtual spaces (e.g., Burnett & Buerkle, 2004; Wellman et al., 1996 cited in Gruzd et al. 2011) demonstrated, access to information is one of the primary reasons driving people to join and be part of a virtual community.

Given the multiplicity and variety of themes covered in Edchat discussion together with the different interactional practices that drove this conversation, it becomes clear that the portal Edchat is not only an entry point providing access to an affinity space but is also a generator of content. This production of content comes in different forms (conversational tweets, question-answer tweets, tweets with external resources, promotional tweets, and retweeted messages). Additionally, all participants (newbies and masters alike), though to a differing degree, took part in shaping the content of this portal. And although the content generated within this portal does not impact or inform the structural design and technical aspects of the space, Edchat is still considered a

strong content generator in the sense that participants were engaged in the generation of new knowledge and signs that made up the majority of the content shared in this space.

Conclusion

This qualitative research study set out to investigate the interactional and textual content of Edchat. Gee's affinity space conception is used as an analytical lens to inform and guide this research. Moreover, it is also a viable alternative perspective to the concept of communities of practice. More specifically, this study draws on the three defining components of an affinity space: content, generator and portal. Given that Edchat is a portal to a general education affinity space, the overarching question that guided this study revolved around whether this portal is also a generator of content or not and whether, in case it is found to be a generator, is a strong or weak generator. To this end, a qualitative content analysis method à la Shreier (2012) was employed in the coding and analyzing of the data.

As is displayed from the conclusions reached, Edchat is not only a portal that provides access to an education affinity space but is also a generator, a strong generator of content. This content spans different themes and varies across multiple contributions. It is also important to note that a large part of this content comes in the form of resources and links to knowledge saved in external portals. This kind of dispersed knowledge is an essential feature of affinity space and as Gee (2004) stated, "it encourages and enables people to draw on knowledge that is not actually at the site itself, but at other sites or in other spaces" (p. 86) " .

During their interactions within this affinity space, participants were self-assigned different socially-situated roles that shaped their content generation. These roles vary from moderators all the way to lurkers and silent participants. This variation proves that the routes to participation in this portal are different. Participants contributed to the discussion in different ways and at various levels. Some participated peripherally while others participated centrally, and as Gee (2004) argued, these patterns “can change from day to day or across longer stretches of time” (p. 87).

Overall, the main contribution of this research besides highlighting the learning potential of Edchat and understanding the ways participants use it to interact with each other and generate content, is to shift the focus of the affinity space studies from the game and play-based context to the realm of educationally oriented spaces. This was achieved through the translation and application of the concept and principles of affinity space in studying Edchat. While acknowledging some of the methodological limitations that faced this study mainly the small sample size and the use of only document analysis in the collection of data, it is hoped that future affinity space researchers would work on these limitations and make use of other heuristics that would better address these methodological issues. Also, I propose that, unlike the qualitatively ideographic approach employed in this research that focused on the study of only a single educational affinity space, future affinity space research can for instance use nomothetic approaches that would further help in exploring the potential existence of consistencies across various affinity space cases.

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