**What Do We Gain in Social Media:**

**The Case of r/education**

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# Abstract

# Preface

# Introduction

The joke is that no group activity can be done if a WhatApp group hasn’t been opened for its purpose. The truth is that this is not really a joke. WhatsApp and similar forms of communication seem to be a necessary pattern of behavior today. Web 2.0 and the use of social media is no exception to this phenomenon. Groups with similar interests congregate in social media sites to talk about the burning issues of interest or just use the platform to share and support. There is a plethora of groups and sub group on every topic possible. Teachers and educators are no exception to this phenomenon and to the need to congregate around important topics and issues. When a person decides to join a group there are different reasons why. And these reasons manifest in the type of group they join and the way they behave within the group. As a teacher, there are many reasons to use social media. I might look for classroom ideas or to see what is new in the world of pedagogy. On the other hand, I may want to ask my peers a question or share a personal story.

There are studies that show how social media is used as a teaching and learning tool (Carla & Barberat, 2014; Gruzd, Haythornthwaite, Paulin, Gilbert, & Esteve del Valle, 2014; Liu, 2010). In addition, social media has been researched from the viewpoint of politics and democracy (Boulianne, 2015; [Miller](https://journals.sagepub.com/doi/full/10.1177/1354856515592512), 2015) as well as from a journalistic standpoint (Straub-Cook, 2017). Reddit in particular draws researchers to questions about motivation in participation (Moore & Chuang, 2017) as well as a way in which to predict user behavior (Glenski & Weninger, 2017; Zhang, Hamilton, Danescu-Niculescu-Mizil, Jurafsky, & Leskovec, 2017). There is little synthesis between different areas of research and the engagement in the bigger question of what does a person gain when joining a social media group?

The exploration of the uses of social media are many. There are several positive aspects to the usage of social media, among them: sharing information, learning, and creating connections with others on a social level as well as a cognitive level. Today, through social media, a person can harness the knowledge of the masses in order to answer any questions they might have. In fact, this is a new form of learning. This kind of learning is informal and personalized suits each person on an individual level.

I decided to explore the social media site Reddit because this poses as a good example of social media where a person could gain something. Reddit, as a social media site that has anonymous user system that allows the person posting a link or posting a different form on content to do so without being exposed to private details. By doing so, the subscriber may engage in discourse with other users within the same group of interest with lower inhibitions. Another point that drew my attention was the declaration that this was the “front page of the internet” which implies that this is somehow connected to the way media is represented through social media. But on the other hand this social media site is organized according to areas of interest which made me wonder what is the functionality of this social media  site and how research has studied it thus far. Research has been done from several perspectives such as: behavior or motivation of users (Moore & Chuang, 2017; Thurkral et al., 2018,), methodologies of research (Medvedev, Lambiotte, & Delvenne, 2018), journalistic aspects (Suran & Kilgo, 2017), identifying social roles and social interactions (Buntain & Goldbeck 2014; Shelton, Lo, & Nardi, 2015) and behavior prediction (Zhang, Hamilton, et al. 2017). What is notable is that there is very little overlap between fields of research which is peculiar when I come to approach the question of gain in participation in social media groups.

Therefore in order to approach this question, there was a need to establish terminology for two phenomena which I found: the definition of citizen journalism (CJ) and online community. CJ is defined as acts that could be associated with mainstream journalism but is done by personal individuals instead (Carpenter, 2010), while online communities are online venues that provide a place of relevance and belonging (Wenger, McDermott, & Snyder, 2002). Education is a topic that comes up often in the media and has multiple reasons to be discussed, therefore I chose to focus on r/education. In addition, r/education provides a good example for how social media can act as CJ as well as an online community.

I decided to explore the social media site Reddit. Reddit, as a social media site that has an anonymous user system that allows the person posting a link or posting a different form on content to do so without being exposed to private details. By doing so, the subscriber may engage in discourse with other users within the same group of interest with lower inhibitions. Another point that drew my attention was the declaration that this was the “front page of the internet” which implies that this is somehow connected to the way media is represented through social media. But on the other hand this social media site is organized according to areas of interest which made me wonder what is the functionality of this social media  site and what else might emerge from this site.

I spent a few weeks as a fly on the wall in this subreddit, just observing, reading and following posts. I started noticing different behavior patterns that reflected the two concepts I have already observed; citizen journalism and community. These two concepts are referred to in literature of social media but never together.  The connection between these two concepts led me to how Connectivism Theory of learning (Downes, 2005; Siemens, 2005) provided the explanation to the synthesis of these two concepts and the question of gain in participating in social media.

In this paper I explore the uses of social media as a platform of citizen journalistic reporting as well as online community behavior. While exploring the subreddit group of education, I examine the behavior of the subscribers of the group through the posts that are submitted. By applying Connectivism Theory (Downes, 2005; Siemens, 2005) we can explain how these two behavior patterns reside side by side and contribute to each other by creating a place where learning can take place. This learning that may occur contributes to the group’s social capital and the individual's personal growth (Julien, 2015) which also answers the question of gain.

## 1 Literature Review

In order to better understand the fields of CJ and online communities that are the perspectives viewed in this research, it is necessary to explore the literary background of both these fields of research and to define the terminology accordingly. In addition, I needed a deeper understanding of how Reddit has been researched up to date and what research has been done on Connectivism Theory in order to better explain the findings in this paper. The purpose of this research is to add to the body of research that seeks to unveil the personal gain that one might have by being part of such groups. Examining this particular subreddit , with a topic that is very brood and nonspecific, can shed light on how social media sites provide a platform for people to use acts citizen journalistic behavior or acts of community behavior in order to contribute to a person’s personal gain.

### 1.1 Citizen journalism.

There have been many debates as to what might be considered citizen journalism (CJ). This stems from the fact that no one can say when or where this phenomenon originated. Carpenter (2010) says a citizen journalist is an individual who intends to publish online some information meant to benefit the community. Lasica (2003) calls it “random acts of journalism” while Bruns and Highfield (2012) call it “an assemblage of journalistic activities”. Nip (2006) states that people are responsible for gathering content, visioning, producing and publishing new content. If a person took a video of a disaster and posted it themselves this would be considered CJ. If they gave it to a newspaper, it would not. In short, they are people who are not professional journalists (i.e., not professionally trained as journalists) but do the acts of a journalist for the benefit of the others. These acts include: current affair based blogging, photo and video sharing and posting eyewitness commentary on current events (Goode, 2009). In addition, these acts can include among others; reposting, linking, tagging, modifying and commenting on the posts of others. Goode (2009) adds to the discussion about citizen journalism that it is not exclusively an online phenomenon, is not an alternative to news sources, and includes a certain amount of meta-journalism (the rating and commenting and retelling as a discussion about the news rather than the news itself). Providing a space for meta-journalism where the citizen journalists are acting as mediators to the professional reports provided, is an important part of the activities of social media especially when meta-journalism is part of CJ.

### 1.2 Professional journalism and citizen journalism.

Straub-Cook (2017) looked at the social media site Reddit in order to see if the “news” that was shared could be considered journalism per say and thus equalizing the role of citizen journalists to those of professional journalism.. Reddit, being a social media site and not a professional journalism platform, has a plethora of opportunities to show acts of CJ and provides a platform for comparing citizen journalistic acts to acts of professional journalism. Straub-Cook’s conclusion was that the acts of journalism as a whole, while in existence, were incomplete. They didn’t reflect a large range of interests or deal with minor issues that PJ might have addressed.

Straub-Cook’s research shows that there is a flaw in assuming that citizen journalism can compare to professional journalism. This raises the question of whether CJ can be a reliable source of information to the public. The importance of reliability is vital in journalism. The link between media and democracy is very clear, freedom of speech and the ability to form an independent opinion is one of the essential building blocks of a democratic society and the media must be a part of the process. Stone, O’Donnell, and Banning (1997) define journalism as a watchdog over the government. Indeed, in any democratic society it has been understood that the main role of journalists is to provide complete, unbiased information about specific topics for the citizens of a particular place in order for them to make decisions and be a full member of society. Nah and Chung (2011) refer to this as facilitating the conversation of democracy.

Over the years the “watchdog” role evolved and changed. Media became the property of elite groups with specific interests. In the 1970s the role of “watchdog” intensified with the media playing a monumental role in changes of public opinion and monitoring governments. For example, coverage of the Vietnam War and Watergate caused media to evolve dramatically (Stone et al., 1997).

Deuze and Witschge (2018) describes the diversity of what journalism is today according to researchers in this field. Journalism can be defined on a practical and a philosophical level. The philosophical side includes understanding how journalism contributes to democracy and informs citizens of fact-based information that enables them to act as citizen journalists. This is done with the practical side of investigating, analyzing, providing multiple perspectives, etc. Deuze and Witschge continue to explain that today there is a lot more global work involved in PJ because of the technological evolutions. This changes the way journalists work and even the way they perceive themselves in their own work.

Singer (2018) continues this line of thought by defining habits of thought and habits of practice. Singer too sees many of the changes rooted in the technological changes in the world and therefore changes in the norms of PJ. Even though access to information is now different, the “thought” hasn’t changed much. Journalism still needs “to provide with information the need to be free and self governing.”[[1]](#footnote-1)

The question remaining is whether CJ can do all this. Can regular people, not trained journalists, be instrumental to the sustaining of a democracy? Do they have the ability to provide unbiased information which will thereby provide people with the ability to make decisions that are good for society? Bybee (1999) presents a debate between the ideas of Dewey and Lippmann about democracy and communication. Bybee presents that Dewey believed that the public was able to understand the complexity of the events around them and they were not beholden to what the elite presented. In addition, he argued, when the public analyzed these events, the best ideas would rise to the surface and the public would be able to see demagoguery and self news, thus becoming “community journalists”. In citizen journalism, citizens share, discuss, provoke and argue with each other. Thus, the public play the role of “gatekeeper” by discourse and commentary, which is a form of meta-journalism. Goode (2009) states that if the life-cycle of a news item in mainstream media is short, it is because CJ determined the length of its existence. If in the past, relevance for news was dictated by the corporations behind the media sources, today this role is taken over by citizens who have become part of the process.

It is important to state that because of the complexity of the definition of CJ (as stated above), gatekeeping is only one of its roles but not its sole purpose. Burns and Highfield (2012) point out that there are reasons for the decline of industrial journalism: rise of technology and use of media, financial crises in the world, changing times and content are a part of them. These reasons created a need that mainstream journalism could not address, and an alternative emerged with the development of web 2.0 and the technological ability of “regular” people to add to the news that PJ created.

As mentioned before, research on CJ sees CJ as “random acts of journalism”, voluntary contributions and journalistic activities. When professional journalism is at a point where it is lacking, CJ steps in. This type of journalism proved as a support for professional journalism in major events, such as the events of September 11th. In addition, there was a place for CJ in places where there was a feeling that conservative journalism didn’t do justice to the situation[[2]](#footnote-2).

Another aspect to consider is the place of commentary in this type of journalism. Commentary usually provides a space for people to express their opinions on a news item that already exists. In doing so the readers/viewers are exposed to many different perspectives to the event that took place. Citizen journalism has a place to provide a different form of commentary that a professional journalist might not be able to achieve. The citizen commentator provides the perspectives that one might miss with just the mainstream coverage because of the news agency's agenda or financial backing. This also provides the grounds for a citizen’s personal development and learning (through the active discourse with others), which enable them to later make choices as a member of a democratic society.

### 1.3 Social media and gatekeeping.

By the definition discussed above, CJ becomes the gatekeeper to the world of media today. Professional journalism is a top-down system where decisions of relevance is done by professional editors that abide by the agenda of the cooperation that they work for, therefore it may lack the multiple perspectives that CJ can provide. On the other hand, CJ is a bottom-up system in which relevance, content and commentary is decided by the masses. As a result, in today’s reality, there is a mixture of mainstream journalism and citizen commentary in the public media.

If in the past when the use of internet and media was new, CJ included blog and blog-like sites which were very limiting, today it includes many more platforms specifically in social media, including Facebook, Twitter, and others, where the use of hashtags and “likes” are a way to confirm a news item or to gain popularity. The information that is collected is now not one person’s responsibility but an accumulation of information from many different sources – which provides a certain account of credibility (Leavitt & Robinson, 2017). News becomes a collaborative effort (Carlson, 2017) that is supported by the information of the masses and later can get edited by the masses. The credibility of the information given is determined by the way it is spread (i.e., the number of reposts and shares).

With the development of web 2.0, using social media became a perfect way to circulate news (item of information that is worthy of others knowing about it because it holds some kind of value; Harcup & O’Neill, 2017) and ordinary people were able to find a place in which they can publish their own perspectives on current events and even create their own news items. When a person posts a personal news item to their personal followers, they are creating news that someone finds worthy to read (e.g., Facebook post where my great aunt gets excited about the back-to-school pictures I posted), this might not be considered acts of journalism unless the interest in the posted item is not on a personal level but a universal one like following a celebrity's Instagram story or a story that has other points of value (Harcup & O’Neill, 2017). But when a person writes commentary on a non-personal event and posts it for others to read it becomes an act of CJ. The person writing is creating their own content (hence the term user-generated content [UGC[[3]](#footnote-3)] is used), and it becomes part of the very complex news industry. People today are reexamining what is newsworthy, and metajournalistic discourse helps make sense of it all (Carlson, 2017). By generating discourse about what is behind the news, meta-journalism develops and news can become more accurate.

One of the main problems that social media has as a news outlet is the circulation of false news. People post and repost a false news item that then even when refuted, can cause changes in the reader/viewer’s perception of the matter. For this, different social media sites have developed different types of gatekeeping mechanisms which range from algorithmic filters to modbots[[4]](#footnote-4) or moderators.

Suran and Kilgo (2017) conducted research on the Boston Marathon bombing and the role of social media during times of crisis. In their research, Suran and Kilgo (2017) analyzed the role of gatekeeping on the social media site Reddit and studied the CJ that occurred during that particular crisis. They checked if this social media site was able to perform a way that was different than mainstream news providers.

Suran and Kilgo (2017) argue that gatekeeping in social media is more complex because of the nature of this medium. Traditionally, gatekeeping is done when mediators decide what should be published and what should not (White, 1950). But when the content is user generated content and posted by citizen journalists as opposed to professional journalists, this becomes more complicated and the role of gatekeeping extends instead of changes. Ali and Fahmy (2013) claim that gatekeeping of UGC is pretty much the same as mainstream gatekeeping except that it is done by citizen journalists instead. Thus, gatekeeping is a necessary element in the use of social media as a portal for news and the role of CJ is intertwined in the job of gatekeeping.

### 1.4 Reddit as a news platform.

In this paper, I examine the social media platform Reddit. Reddit has a unique position as it is a self-proclaimed alternative media site that is “free from the press” (not professional journalism) or alternatively “front page of the internet” (news that is edited by the masses). Reddit is a social media site that was established in 2005 by two college friends, Steven Huffman and Alexis Ohanian. To date (December 2018) there are 330,000,000 active users with an average of 14 billion average posts per month. This social media site has the content provided by the users and is based on a voting system where the users (who are identified by user names and are mostly anonymous) vote up or down for a post and can comment as well. Comments form a discussion tree which users can reply to or write a new comment and therefore start a new tree. There is a notification system that allows users to follow the discussions that they are part of. The topics are organized by subreddits which are sub-groups of interest. Each subreddit has a creator (who can be anyone registered as a member of Reddit) and a set of rules that the subscribers must follow. There are also monitors that check whether the subscribers are following the rules. If there is a breach of the rules, the comment can be removed and the user is reported.

When opening a reddit account, one is asked to subscribe to at least five subreddits. This way the Reddit algorithm can offer subreddits that might interest the user. Each user can see two news feeds: one of the things that are popular on reddit in general and one of the personal interests of the user. The items that show up on the feed can be organized by “hot”, “new”, “top”, “best”, and “controversial”. There are two factors that influence the ranking position of a post: time and voting score. The more “upvotes” a post gets pushes the post to the top of the page but so does the time since posting because there are always new posts coming up.

The research that has been done up to now on Reddit is extremely diversified. Some of the methodologies of research have been  quantitative (Medvedev et al., 2018), while others are qualitative (Suran & Kilgo, 2017). Some focus on behavior or motivation of users (Moore & Chuang, 2017; Thurkral et al., 2018), while others focus on identifying social roles and social interactions (Buntain & Goldbeck, 2014; Shelton et al., 2015). Medvedev et al. (2018) and Singer, Flöck, Meinhart, Zetifogel, and Strohmaier (2014) considered the changes that have occurred in Reddit over time in the way people post and the content of these posts. Medvedev et al. (2018) explain how the aggregation of this social media site is unique because of the different fields of research it provides. The identity of each subreddit is very diverse. Each one has rules and ways of moderation that the creator of the subreddit determines. The result is that behavior pattern differ from group to group and therefore forms its identity. Tan and Lee (2015) show that users that participate in more than one subreddit speak differently in the different groups. Zhang, Hamilton, et al. (2017) describe that the distinctiveness of the subreddit will affect the dynamics of the group.

For this paper, I explore the subreddit of education (https://www.reddit.com/r/education/). Education in itself is a very wide term and there are many perspectives in which the group can function. For one it is not an exclusive group for teachers or administrators, there is no guideline as to which age group is focused on or any other indicators that have the potential to narrow down the group’s interests. From the diversity of literature on Reddit, there are no indicators on the type of discourse and interaction that can be expected.

As of December 2019 there are 96,100 subscribers to the subreddit education. This platform states that its purpose is:

The goal of r/Education is to provide a community in which educational stakeholders can participate in meaningful, reflective, and thought-provoking discourse about educational policy, research, technology, and politics. (Additional Keywords: teachers, students, education)

This group does have rules as well for the subscribers which include: Treat others with respect, posts are on-topic and relevant, links include a submission statement, and no Spam. breaking the rules can result in removing of post or comment and being blocked from the subreddit.

### 1.5 Online communities.

Social media and the internet have not only intensified the role of CJ in journalism, it has also changed the perception of what is a community and inherently redefining the concept to online communities. When it comes to defining a community (that is not necessarily an online community) it is often referred to place based communities (such as neighborhoods)  vs. communities of interest (such as stamp collectors; Blanchard & Markus, 2004). Although both can be called a community, it has been shown that place based neighborhoods (people living on the same street) don’t always exhibit the characteristics of a community in terms of support and giving and receiving help (Wellmen, Carrington, & Hall, 1988). Cohen (1995) defines a community as one who exists in the minds of the members and is constructed symbolically through shared meanings, norms and culture. Blanchard and Markus (2004) add that a community has a shared emotional connection and a feeling of belonging which they call a sense of community (SOC). Therefore the definition of a community is not solely based on the proximity of the members but the feeling that they have towards the group. McMillan and Chavis (1986) create the following criteria:  a feeling of membership – belonging and identifying with the community, a feeling of influence – either by influencing others or being influenced by the community, integration and fulfillment of needs – supported by others while also supporting them, share emotional connection - feelings of relationship, shared history, “spirit” of the community. Wenger et al. (2002) defines community as a group of people who learn to interact and build relationships which result in a feeling of belonging and mutual commitment.

Blanchard and Markus (2004) claim that these distinctions can be applied to online communities as well. By citing Jones (1997) who deduced that place based communities can be seen as settlement virtual communities, Blanchard and Markus (2004) explain that with certain criteria the virtual settlement can be called a community. These criteria include active participation of members and continuity of activity.

The shift in the paradigm of how a community functions since the development of the internet and web 2.0 was necessary. Plant (2004) sees this as a natural extension of human nature and describes the technical and the social implications: it allows real time communication across distances , transmission of data at a low cost. Stanoevska-Slabeva and Schmid (2001) make two distinctions between type of community and functionality of support. Hagel and Armstrong (1997) say that the interactions in virtual communities are part of four categories: interest (shared interest and expertise on a specific topic), relationship (the opportunity for people with similar experiences to come together), fantasy (opportunities to explore new worlds and entertainment) and transactions (trading information with others).

When it comes to participating in an online community, participation is a key point and lack of user activity and contribution can cause the failure of a community (Ling et al., 2005). Motivation is a key part in participation in a community and Koh and Kim (2004) categorize participation as: active (people who post and comment) and passive (people who view). Lastly, even within the concept of online communities there are different types of communities with knowledge platforms, networking and problem solving as some of the different types (Muller, Perer, Ehrlich, & Ronen, 2012).

### 1.6 Connectivism theory.

The members of the community have  opportunities to acquire knowledge and learn. In this case learning may take on a more informal style as the combination of the form in which a community learns and the online venue is different to other learning environments. Perhaps a different theory of learning is necessary such as Connectivism Theory of learning.

Siemens (2005) and Downes (2005) first coined the term connectivism as a learning theory because they believed that in the digital age the current theories were not encompassing enough, that the use of internet and web 2.0 in particular requires a different understanding to how one builds knowledge. While cognitive constructivism and social constructivism differ from each other in the construction of knowledge, they are based on the reconstruction of knowledge whereas connectivism is based on creating connections as a process of knowledge building. In order for a new theory to develop, the old theory needs to have elements that the old theory can’t explain but on the other hand it doesn’t discard them either (Kop & Hill, 2008).

In this theory, Siemens (2005) connects the idea of connectivism with those of community where similar areas of interests allow interaction, sharing dialog and thinking together. The community creates “nodes” – strands of connection in the network – that are strong and can vary in size and number. Knowledge is distributed across the network in several different digital forms and learning occurs in the diversity of opinion and dialog. Cognition and emotion play a role as well in the learning process. Time and amount of information are always changing and as a result the accuracy of new information constantly needs to be challenged. This requires people to look for current information and be able to filter it. In other words, “how” to know is more important than “what” to know. So now the learner’s ability to navigate between ideas, fields and concepts is the key skill. For example, Imram (2017) uses connectivism theory as a way to see learning of democratic values through social media.

In addition, this theory allows people to informally learn in what might be considered unintentional chaos which is not in the control of the learner. When I click on a link because the title grabs my attention I use the skill of filter through information then I may or may not agree with what I read and post a comment. This comment may receive an answer and through our discourse I may change my opinion or strengthen my resolve. Learning happened by my clicking on the link and creating this connection. Either way learning is occurring without my formal intention. In essence, connectivism theory can be used in different settings, especially when looking at formal and informal learning (Greenhow & Lewin, 2015).

Not everyone agrees, however, that this is a learning theory. Carla and Barberat (2013) address the difficulties that this theory has as far as epistemologically and psychologically. Using this network and nodes of connections, does not recognize the significance of the other person in the development of knowledge or oversimplify the interaction. Despite the disagreement in the literature of whether this is a learning theory or not, the general concept still help us understand how social media provides different ways to learn and the act of making connections is one of them.

For the most part this theory is demonstrated on different online learning environments such as MOOC courses and online tasks (Clara & Barberat, 2014; Greenhow & Lewin, 2015) or for pedagogical value (Kivunja, 2014) and although there is a connection to the use of social media and Connectivism theory (Imran, 2017), research does not focus on connectivism theory and the use of Reddit.

# Research Questions

As mentioned, the motivation for this research has been to gain insights as to person’s gains by joining a social media group, by delving into the participation in  one such social group, r/education. More specifically, there are two major uses provided thus far by in literature  on the uses of social media: Cj and online communities, each of which, as surveyed above, functions differently, namely, have a different “rules” of behavior patterns, participation and interaction. By looking at r/education with these two concepts in mind, I have come to ask the following  question: How does this group function? Is it as an outlet for citizen journalism as Reddit declares itself or is this a community for people with vested interests in education? Could there be a third option?

This subreddit was chosen because the topic of education comes up in the news quite often and as a social media site there is a wonderful opportunity for CJ to emerge. The topic of education is not only a newsworthy topic on its own, but also a possible field for people who are invested in education to have discussions of many kinds. The use of social media has not only broadened the paradigm of journalism and media but the paradigm of community activities have changed as well. Online communities on social media have become a natural occurrence and therefore not overlooked when observing a field like *reddit/education*.

In order to answer this question , two questions were posed:

1. What are the characteristics of the  participation and interactions in the group? (types of posts, themes in education, potential audience, and types of  interaction)
2. What are the patterns of behavior that are detected within the groups and what are the dynamics that emerge?

# Methodology

## 3.1 Sample.

This research is built on two parts of analysis. First, two random blocks of 25 days were chosen (one in November 2018 and one in July 2019) and all the posts from those dates we scraped from the site. Using the technique of “scraping”[[5]](#footnote-5) allowed me to gather consecutive posts that were taken at random. For each post, the information  scraped included the title, posted by, time of posting, post content, votes, number of comments, link (if relevant), and comment content. Any post that was less than one week was removed (since time is a factor for the popularity of a post it was important the the post would “reach its potential” as far as comments and upvotes - Thurkral el al., 2018).

After scraping the information from both random date sets and removing posts were duplicated, there were a total of 370 posts (197- link posts and 173 UGC posts). The choice of the random date do not affect the overall data. November, during the school year and July being summer vacation allow diversity and provide a broader variety of topics as well as the prospect of interaction between subscribers. The main difference between the samples was that in July there was more UGC than links which could be explained by the fact that summer is a good opportunity for change which could raise many issues that the subreddit could address.

## 3.2 Methods of Analysis

### 3.2.1 Step one: Categorization.

The posts were then coded in several dimensions: whether the post was just a hyperlink or UGC and then categorized by theme. The coding for these categories was done by the method of conventional content analysis; when a new theme came up, it was given a name. Each post received one code. Because the list of themes was created through a content analysis theory, there were themes that appeared only once or twice. When calculating the data, themes that appeared in fewer than five posts were clustered together and put under the name “Other”. This method is similar to Suran and Kilgo (2017), who used a method of differentiating between posts with hyperlinks to posts with UGC. The main difference between this method and that of Suran and Kilgo (2017) is that the UGC posts and the hyperlink posts in this research did not necessarily fall under the same categorizes in the throughout, the way they did in Suren and Kilgo (2017), and although there were some overlaps in the categories there were many differences.

This approach was appropriate for analysis of this data set because classification was needed in order to understand behavior patterns in this subreddit. According to Hsieh and Shannon (2005): “qualitative content analysis is defined as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns.” In addition,  conventional content analysis is generally used with a study design whose aim is to describe a phenomenon which is essential in order to understand this subreddit.

The categories established are presented in Table 1 for link posts and Table 2 for UGC posts:

Table 1

*Post Categories for Links*

|  |  |  |
| --- | --- | --- |
| **Type of link** | **Explanation** | **Example** |
| News | An item from mainstream news that provides new information on a topic in current events | Milestone: Sarah Fortney elected first openly gay School Board member in Florida |
| Analysis  | Contains and analysis of information or a synthesis of information for the sake of presenting different points of view | WSU may face more scrutiny despite deal on federal visa investigation |
| Information  | contains facts on a wide range of topics but does not include a personal perspective or current events | The Most Overlooked Aspects of Personalized Learning |
| Opinion  | Published as an opinion piece and includes a personal perspective | Why Students Are Terrified (to Speak Their Minds) |
| Advice | Provides tip or advice and offers suggestions | How to Study For The MCAT? Follow These Top 10 Study Habits |
| Sharing material | Offering usable material and ideas | A Discovery-Driven Approach to Blended Learning |
| Blog | Written in the form of a blog | We Should Teach Media Literacy in Elementary School |
| Feature  | A story that provides a subject of interest to the readers. | Clothing recycling program to benefit Leominster schools |
| Other  | Any other categories that didn’t have a frequency of appearance (advertisements, surveys, etc) | Elementary School Teacher Technology Self-Efficacy Survey |

These posts only provided a hyperlink and the subscriber who posted it did not provide an initial comment (with very few exceptions). That being said, the hyperlinks were from a variety of websites such as: online newspapers and magazines, news websites, educational websites, university websites and newspapers and local news sites.

Table 2

*Post Categories for UGC*

|  |  |  |
| --- | --- | --- |
| **Type of link** | **Explanation** | **Example** |
| Asking for help | Requesting help from members of the group that is technical/ | Help about online university courses? :) |
| Seeking advice | Asking the group to advise on a personal matter. | idea for an afterschool program/club focusing on Socratic dialogue, critical thinking skills, and Civil discussion -- need advice! |
| Question | Asking a general -  non personal question to the group.  | Why did you decide to become a teacher? |
| Other  | Includes personal stories and other posts that provide new information or insight. | I made a Twitter poll on education and its current state |

After determining the type of post, a closer look was given on the content of the post and in both UGC and links these themes in education appeared as presented in table 3. This too was done using a conventional content analysis:

Table 3

*Themes in Education*

|  |  |  |
| --- | --- | --- |
| Learning styles | How to help with learning and differentiation.  | Make, Play, & Discover: A Look at Nintendo Labo |
| Pedagogy | Posts related to methods of teaching and teacher discourse.  | A Discovery-Driven Approach to Blended Learning |
| Policy | Posts related to educational policy and administration | What would you think of a school board member who sends their child to a private school? |
| Politics | Posts with items of current events | Gee, former WVU governing board member continue push to eliminate HEPC |
| Technology | Posts that either teach or refer to using technology in education | Amazon says it’s making freely available the same machine learning courses that it uses to teach its own engineers |
| Wellbeing | Posts that appeal to the wellbeing of the reader. | What is real education? Motivational article. |
| Strategies | Posts that provide strategies for learning and teaching | The difference between teaching adults and kids |
| Professional development | Posts that relate to a person’s professional development | Hi! I'm on the way of being a teacher for nurses at a school for nurses. I heard the saying "if you teach adults, you can't teach children. if you can teach kids. You can teach everyone." that being said, I'll have my first internship next week at said school. Anyone got some tips or pointers for a fellow educational trainee? |
| Personal development | Posts that relate to a person’s personal development | Help about online university courses? :) |
| Other  | Posts that do not fall under any other theme | What is the main difference between will and going to? |

Finally, each post was coded by who the potential readers and responders might be. The potential audiences were: teachers, students (university and high school), administrators, parents and the general public. It might seem obvious that these are the potential participants in this subreddit, but in the interest of identifying behavior patterns it is vital to see who the post may appeal to and the interaction of the group as well.

*Comments and votes.* To better understand what happened to the posts in both groups, we went back to the original data and reorganized it by number of votes - the highest scores. Holding to the claim that the comments and the votes are the gatekeeping mechanism of reddit and determine the lifespan of a post (Leavitt & Robinson, 2017), a statistical, descriptive analysis was done to see how the subscribers interact with the posts. This analysis was done first to the vote and then to the comments in each group. Here too the hyperlinks and UGC were separated from each other. Because a large number of posts in both categories had very little reaction (in vote and/ or comment) a sample of 50 high vote posts (about 25% of the data) was taken from the hyperlink group and 45 (about 25% of the data) high vote posts were sampled from the UGC posts, thus keeping the ratio of posts between the groups.

### 3.2.2 Step two: Analyzing post content and comments.

Upon reflection on the findings of the first analysis that was done, a second level was needed in order to answer the questions that arose. It was apparent that a deeper analysis of the comments would possible provide insight as to the behavior patterns exhibited in this subreddit. Here I looked in the existing literature for a coding scheme that might be relevant for analyzing comments on reddit and saw that Zhang, Hamilton, et al. (2017) have created a coding scheme that also looked at the chains of comments and made the distinction of types of chains and their meanings. The one change that I did make (in the code of appreciation) because as I was coding, I noticed that there were different positive forms behavioral tones so I included them as appreciation.

The following analysis sets out to check if the interaction in the comments of each post will shed more light on the dynamics in this subreddit. Using the coding scheme of Zhang, Hamilton, et al. (2017; table 4), I coded all the comments of the posts in the corpus. I treated the comments as branches of trees where the comment was related to the level before it and thus creating a new branch. I did not include posts with less than 5 comments since after sampling these threads, I noticed that there was hardly any interactions between the subscribers (the branches were on a single level only and not responding to others in the post) and therefore believed that  these posts will reveal little information that will be useful for this research.

Using this coding scheme required some modification. It was felt that appreciation did not encompass the wide range of positive emotions and socially unifying acts that could possibly arise, therefore they were added to the original code of appreciation (see table 4). As a result, appreciation now includes encouraging and apologetic comments.

Table 4

*Coding Scheme*

|  |  |  |
| --- | --- | --- |
| **Name** | **Code** | **Explanation** |
| question | qus | Comment with request or question of help, feedback and other responses. |
| answer | ans | Responding to question and fulfilling a request |
| announcement | annc | Presenting some new information to the community (story, review, insight) not  relating to previous comment. |
| agreement | agr | Agreeing to previous comment with supporting evidence positive reinforcement or confirmation  |
| appreciation/ encouragement/ apologetic  | app | Expressing thanks, excitement or praise - interpersonal not informational. Expressing positive reinforcements to other comments and acts that are socially unifying. |
| disagreement | dagr | Correcting, criticizing or objecting to point made. |
| Negative reaction | nrc | Attacking, mocking or expressing negative emotion (disgust, or anger) |
| elaboration | elb | Adding additional information to previous comment |
| humor | hmr | Joke, sarcasm someone intending to be silly |

***Levels of discourse.*** In addition to coding each comment (at times a comment received more than one code although that was not common) I made a categorization for the length of each branch of comments. The levels were categorized by: level one: one response with no interaction between subscribers - someone responded directly to the original post and no one responded to the comment. Level 2-3: a basic level of interaction - one or two subscribers responded to the first comment. Sometimes it is the Person who posted the post and sometimes other subscribers. Level 4-5: higher level of interaction- either with more subscribers participating or two subscribers interacting between themselves in more than just question and answer type responses (Zhang, Hamilton, et al., 2017). Level 6+: high level of interaction - where there is a possibility of a more qualitative discussion (Guzdial & Turns, 2000) .

***Activeness of the OP.*** An analysis was done to see how active the op, who posted the initial post, actually is. By using a simple rating system of 0-2 each post was checked for the amount of times the op made a comment. 0 - no comments at all beyond the initial post, 1- at least one comment but less than 1 comment per every 5 comments, 2- more than 1 comment for every 5 comments. For example, if a post had 5 comments and the op commented once, the post received the rate of 2. If a post had 20 comments in total and the op commented 3 times, the post was rated 1. The reason for this rating system was that we can assume that the op can’t answer everyone but once in every five comments should be a decent level of activity in the post. In addition, since the cut off for this part of the analysis was five comments (as explained above), that the op should be part of these comments was deemed enough for showing activeness.

All the posts in this corpus had been divided according to post with link and post of UGC. This is based on the results of my first part of analysis that showed that there are distinct differences between these two groups in interactions through comments and diversity of themes to discuss.

In order to strengthen the establishment of the differences between the two groups, a comparison was made between the user names in both groups. This was done purely to see if there is an overlap between users posting links vs users posting UGC. This may shed some light on members’ behavior in this subreddit and to see if these two groups truly are independent from each other.

According to Zhang, Hamilton, et al. (2017), the initial post should be included in the analysis because for their research it was important to see the sequences of the comments. In this dataset, the initial comment is either a question (as seen in previous data) or an announcement (which according to Zhang, Hamilton, et al., 2017, a link is in that category) and therefore not necessary to add to the dataset of this research.

I have been looking at the theoretical concepts of CJ and online communities. While these concepts can be regarded in many different ways because of the vast definitions as seen in the literature, for this purpose I will exhibit a more narrow view of these terms. For example: CJ includes many different elements but here I look at the link sharing and argumentative discourse as the representative element of CJ (as defined by Goode, 2009). As for online communities, here too there are many components in the definition. Here I specifically regard positive discourse, personal and professional sharing as major elements of online communities(as defined by McMillan & Chavis, 1986).

The justification that I would like to suggest lays in the methodology. In this paper I use conventional content theory and by doing so I am limiting concepts by what might surface from the  data that was viewed. Therefore I refer to CJ as acts of CJ because there are only some acts represented in this paper. Consequently the same goes for online communities where I refer to acts of community.

# Findings

## 4.1 Categorization of Posts

The categorization analysis  of the hyperlinks, shown in table 5, reveal that news was the most common type of post, followed by opinion, information and analysis. When cross referencing these four themes for the source that they came from, it became apparent that all four themes came from online newspapers or news sites; indeed, even analysis and opinion came from mainstream news sources.

Table 5

*Results of Types of Posts*

|  |  |
| --- | --- |
| **Type of Post in Link** | **Type of Post for UGC** |
| advice | 5.60% | asking for help | 27.70% |
| analysis | 15.70% | seeking advice | 38.20% |
| blog | 3.60% | question | 25.40% |
| feature | 8.60% | other | 8.70% |
| informative | 14.70% |  |  |
| news | 19.80% |  |  |
| opinion | 17.30% |  |  |
| sharing | 9.60% |  |  |
| other | 5.10% |  |  |

The results of UGC, on the other hand, show that seeking advice got the most posts but asking for help and questions are also quite popular themes. What is evident is that the dispersion of themes in this group is much smaller than that of the hyperlinks. Indeed, there are only four main categories and the most popular hyperlinks of news, opinion, analysis and information were ignored completely. It is apparent that post that are UGC almost conclusively start with a question of some sort and very rarely a UGC post is shared as an announcement (5.1%).

## 4.2 Themes in Education

When it comes to themes of education, the results of the hyperlinks (table 6) show that policy and politics are the most popular topics to be posted in regards to themes of education in the group of hyperlinks, with a combined score of 55% of the posts in total. It is also apparent that learning styles, learning strategies and technology in education are the least posted and topics such as personal and professional development are ignored completely.



*Figure 1.* Results of themes in education.

The results of UGC posts show that policy is the most popular topic to be posted in UGC posts. Professional development and personal development are also very popular. In addition, wellbeing and technology in education were not posted at all, and politics - which appeared in 27.4% of the hyperlinks - didn’t get a single post either.

## 4.3 Potential Audience

The results of the analysis of the potential audience of the hyperlink posts (table 6) show that the majority of the posts could be geared to a general audience, since the potential reader could be anyone and the content should interest a large range of people. In addition, the source of the link is from mainstream media which is not exclusive to a specific audience by nature. The other two groups that the content could be directed to are teachers and students. What is surprising is that even though a large number of hyperlink posts were connected to policy, they were not necessarily directed towards administration.

Table 6

*Results of the Potential Audience*

|  |  |  |
| --- | --- | --- |
| **Audience** | **Link** | **UGC** |
| administration | 10.70% | 5.20% |
| general | 37.60% | 37.60% |
| parents | 5.10% | 5.10% |
| teachers | 23.40% | 31.20% |
| students | 23.40% | 23.40% |

Table 6 shows that, similarly to the hyperlink posts, general audience had the highest score of 37.4% with teachers coming next (31.1% of posts). On the other hand, the posts were not directed only to university students as a group but there were references to students in general. This student group included for the most part high school students, although university students could be included in this group as well.

To conclude, it is evident that there are several differences between the two groups. First, the type of posts are almost entirely different with very little overlap. Where the hyperlink posts reflect items of mainstream media and other websites related to education in general that might interest the group, the UGC posts have a personal fingerprint of the subredditors and opens a window into their lives. Second, in the category of themes in education, we see that policy is a popular topic in both groups while most other topics are very different. (UGC posts did not even mention politics, which was a very popular topic in the hyperlink posts.) Third, both groups posted mostly on topics that could appeal to a general audience and in both groups there was a strong appeal to teachers and students as well. Parents on the other hand, are not particularly addressed even though they should have an interest and high stakes on the subject of education in regards to their own parental experiences in the home and with the educational system.

Despite the similarities in some of audience appeal, the overall differences between the groups is apparent. Subscribers who post hyperlinks are sharing information from agendas that are part of the political and policy related agendas of mainstream media and there is no way of knowing why they posted these items of news or what their stand is on the matter unless they are asked or if they respond to comments and engage in comment discussion. However, with UGC posts it is clear what they are trying to say. When posting a question and opening a discussion or asking for advice or help, they are putting forth the topic that they want the group to relate to and “talk” about. They are also making themselves vulnerable to what others might think or say. This shows an enormous amount of trust that the subscribers have in the members if this subreddit and therefore creates a connection to why they are subscribers to this subreddit.

This data is a representation of the “what” questions of this research. What types of posts are posted on this subreddit? What are ways in which they can be categorized? And what kinds of readers might potentially read these posts? However, my main question was: Can this subreddit truly be considered an outlet for CJ? Can this subreddit be considered the "front page of the internet" in the topic of education? Is this “an educational magazine” that the masses are its editors? In order to understand what is actually happening in this subreddit, I need to understand what happened after the posts were made and how the subscribers of the group related of these posts.

This is done in two parts. The first is in depicting the popularity of the post through the number of votes and comments and the other is a deeper analysis of the comments themselves.

## 4.4 Comments and Votes

As stated before, one of the ways to keep a post “alive” is by its popularity. This is determined by the up votes that the posts receive. In addition, the number of comments provide a scope of more active participation that allows us to see if this topic is “front page” worthy by the subscribers.

Table 7

*Description of High Votes and Comments in Both UGC and Link Posts*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **UGC High vote** | **Link High vote** | **Ugc High Comment** | **Link high comment** |
| Mean | 38.92 | 92.53 | 23.67 | 20.44 |
| Median  | 23 | 87 | 18 | 15 |
| Std Deviation | 40.887 | 49.912 | 16.819 | 16.094 |

As far as upvotes are concerned (table 7), the links have a higher percentage of votes on average which would pull these types of post higher up on the webpage. That being said the STD in both UGC and links is very high which indicated that the number of votes in both groups are very dispersed and therefore evident there is a large group of posts that were barely acknowledged at all and got very few votes. It seems that when a post is popular, it can gain a lot of popularity by number of votes but there is dispersion within both groups of high votes and it is more likely that posts will receive fewer votes than the average.

Comments, on the other hand, are a lot less dispersed then the votes. the mean is almost identical (20.44 for hyperlinks and 23.67 for UGC). The standard deviation is still high, indicating that the dispersion of comments is high and out of 370 posts in total only 129 posts had more that 5 comments in them. The amount of comment is significant for several reasons: one as stated, it helps keep posts “alive”. The other is that the quality of discussion can be determined by the quantity of participation in the discussion. Guzdial and Turns (2000) consider a good discussion as one that is continuous, and if there are very few contributions the quality of the discussion will go down. In this case we can see that the quality of the interactions in the comments is something that should be addressed because if this subreddit is to be considered a hub of CJ then the dynamics and behavior patterns of the subscribers needs to be taken into account.

## 4.5 Comment Analysis

After coding all comments that were posted in the posts that had more than five comments, the following data as seen in figure 2:



*Figure 2.* UGC by codes.

In the group of posts that were UGC, 44.4% of the comments were answer to the original post which for the most part was some sort of question. Elaboration to the previous comment is 12% and rebound questions (a question asked as a result of an answer or another question) is at 11%. There was some disagreement (10%) and some agreement (8%). As far as tone is concerned, the tone is overall positive with appreciation at 10.5% and a low negative reaction.



*Figure 3.* Links by codes.

The posts of links, on the other hand, has shown a very different pattern, as presented in figure 3. Here the top coded comments were categorized as disagreements (at 33.7%) while answers are a mere 9.4%. Another difference is in the tone, where there is a stronger negative reaction (9.3%) and very little appreciation. Elaboration has the second highest amount of coding with 19.6%. Questions (9.8%) and answers (9.4) are almost even. Here we see discourse that is substantially more argumentative and more negative in tone.

## 4.6 Levels of Interaction

When it came to  the length of the branches (levels as seen in table 8) which indicate the interaction between the participants and the OP or each other, there are differences between the two types of posts.

Table 8

*Levels of Interaction*

|  |  |  |
| --- | --- | --- |
| **Level** | **UGC** | **Link** |
| Level 1 | 50% | 26% |
| Level 2-3 | 38% | 46.% |
| Level 4-5 | 8% | 16.% |
| Level 6+ | 4% | 12% |

Here too there are distinct differences between posts that are UGC to links. In the UGC posts, 50% of the comments are directly to the OP with no other interaction. This might be simply and answer to the original post question. Only 4% of threads reach a level of 6+ comments which indicates very low interaction between the participants. Level 2-3 show that some kind of interaction took place but at a low level. As for the link posts, level 2-3 has the highest percentage with 46% which indicates a minimal level of interaction but the combined amount of levels 4-5 and 6+ show that in general there is more interaction within this group of posts. These findings correlate well with the findings in the coding category since question and answer patterns tend to be shorter than argumentative ones (Zhang el al.)

## 4.7 Activeness of OP.

As for the OP’s activeness, the findings were clear cut in the differences between posts with a link and UGC. Posts with links that were n=48, 30 were rated 0, 13 were rated 1 and 5 were rated 2. This show very little activeness on the OP’s part.  For the most part the OP shared the link but did not engage in any part of the discussion. In the UGC post the findings were very different. Out of n=77, 15 were rated 0, 26 were rated 1 and 36 where rated 2. In the UGC posts the OP was very active.

This being said, we cannot tell from this data what social role the OP played or how they acted as within the discussion. However it is apparent that when posting a hyperlink the op did not engage in conversation that either explained his or her opinion on the topic or the reason for posting it. In a way the op simply moved information that was out there on the world wide web for others to see and determine its importance.

When it came to the overlap between the users in both groups (links and UGC), there is a distinct line drawn in the sand. After cross referencing the user names in both groups there was only one overlap. All other user names remind within the same groups they posted in. if a user posted a link, they never posted a UGC post and vice versa.

UGC Users who posted more than once: Very few UGC users posted more than once and the topics of their posts were diverse. There were only 7 users who posted  2 posts and 1 user who posted 4 times. The topics of the post were not necessarily consistent and does not show a particular characteristic that may define the user.

Link users who posted more than once: 25 users posted more than one link. Of these 25, 20 posted between 2-5 posts while the other 5 posted between 10 and 19 posts. Out of the 5 highest posting users 4 were consistent with the topic in education while the one who posted 19 links was not as consistent. This leads to believe that these four users might have an agenda that they are pushing in the group.

## 4.8 A Deeper Look and Synthesis of the Data

According to the findings in this research, there are two ways in which subscribers post on the group: hyperlinks and UGC. Each one of these post types exhibited unique patterns as to how the subscribers reacted to the posts. Hyperlinks (except for five posts) did not have an explanation to why they were posted – there was no post content – and they were shared from many different sources with a large number of them coming from mainstream media. In addition, the topics of discussion were diverse, with a majority about educational policy or politics, which is not surprising since that is part of the statement of the group. When looking at the content of the post and who it might interest, the main audience was mostly for the general public (more than one specific group of people who may take an interest in the topic). As far as votes and comments, here too there was dispersion with a high std deviation of 49.9 for votes and 16 for comments. On average the votes were higher than the UGC group but the comments are about the same. This leads me to believe that people are pushing the topics of the hyperlinks but not so much engaging in discourse about it. Subscribers upvote and push the topic forward but don’t necessarily talk about it.

This is true for the op as well. The contributions of the op to the discourse is very low and the op is not engaged in the discussions that the hyperlinks spark. In addition, the length of branches (although higher than in the UGC posts) are not long. Level 2-3 comments being 46% of the branch lengths. This too shows the low activity of the subscribers in the subreddit. When it comes to the discourse itself we can see very specific behavior patterns. In this group the discussions are more argumentative and have a lot less patterns of question and answer. When comparing the tone - negative reaction and appreciation,  there is a more negative tone. People don’t mind being more aggressive and disparaging to others.

The UGC posts were a lot more diverse in topic, with policy still a popular topic but not exclusively. Here too the potential audience were mostly general but teachers did stand out as an individual group as well as in combination with others. The choice of theme allowed the user to articulate the request they were making from the group, and very few subscribers posted a personal story (announcement) without a request form the group. Here too there is a high std deviation for the votes – 40.8 and for the comments – 16. This shows how dispersed the findings are in the UGC posts. The main difference here is the interaction of the op with the commenters. Here there is a higher level of interaction which shows that the op is more invested in the discussions that the post lead to while this might be a simple “thank you” a response, it is still an interaction. In addition, the length of the branches (levels as mentioned in the methodology) are very short with very few branches of 6+ comments which also indicates a low level of interaction between participants that are not OP. UGC post show a different pattern of behavior when it comes to the discourse itself. Here there is a strong pattern of answers and questions with very little disagreement and the tone is more positive.

In both cases of hyperlinks and UGC posts the OP’s post foreshadows the sequence of discourse. Out of the 25 highest scoring comment posts of links, only 2 posts are not on the topic of politics or policy.  According to Zhang’s coding scheme, the hyperlinks are considered an announcement, which in their research had a connection with disagreements specifically found in controversial subreddits (politics and atheism). Here too the hyperlink that got the most comments were ones that presented themes that could be controversial because the topic related to policy of education or politics in education and even current news. For example: ***“Why the Silicon Valley titans who got our kids addicted to screens are sending their own children to tech-free Waldorf schools”*** received 161 upvotes, 63 comments which included 23 disagreement codes and 6 negative reaction codes.  ***“School District Won’t Punish Students In Nazi Salute Prom Photo Due To First Amendment”*** received 91 upvotes and 43 comments of which 10 disagreements and 3 negative reactions. ***“Democrats Are Using Betsy DeVos in Their Campaign Ads and It’s Working”*** received 205 upvotes and 26 comments of which 10 disagreements and 4 negative reactions. The highest amount of comments was for the link: ***“Why Are We Still Teaching Reading the Wrong Way?”*** this link was categorized as learning styles even though there was a connection with policy. This link received 103 upvotes and 82 comments of which 29 disagreements and 7 negative reactions. Other topics that have higher comments are: funding (*Michael Bloomberg Gives $1.8 Billion To Financial Aid At Johns Hopkins University)*, student loans (*A teacher defaulted on $55,000 in student debt—loan rehabilitation offered hope, but now he owes $130,000*) race and discrimination (*America's Separate And Unequal Schools NPR sent photographers to seven locations across the country to document the stark differences between school districts right next to each other*), all topic that are controversial in nature.

In the UGC post, the coding for answers to questions was the most prominent code which makes sense since most of the post started with some sort of question (asking for help, seeking advice or general question that opens a topic of discussion). This is comparable to the findings by Zhang et al. who show a similar mapping of codes with UGC. In this case, the topics are more diverse and the OP’s participation in the discussion is higher. As far as themes, pedagogy, policy and personal and professional development rank the most discussed according to the amount of comments and asking for advice and asking a general question are ranked high as well. Within this group of posts the codes of answer and elaboration are high with much less disagreement. In addition there was more appreciation (and positive tone) in this group as well as OP’s participation in the comments. For example: **“*How do I increase the engagement of African American students?”*** Received 56 upvotes and 63 comments in which 22 answers, 8 elaborations and 16 appreciations. ***“Why did you decide to become a teacher?”*** received 37 upvotes and 43 comments in which 22 answers, 8 elaborations and 4 appreciations. Here there where 10 agreements as well. ***“Books for middle schoolers?”*** received 24 upvotes and 44 comments of which 27 answers, 5 elaborations and 3 appreciations. ***“What music do you listen to while studying?*”**  received 16 upvotes and 37 comments of which 25 answers and 5 appreciations. What is apparent is the large range of topics that are addressed as well as the clear pattern of answers to a question posted. Asking a question rather than making an announcement (like a hyperlink) creates a chain reaction that similarly to Zhang, Hamilton, et al. (2017) is more answer and informational oriented and much less argumentative. In this setting subscribers can agree more and elaborate on things that others are saying.

# Discussion

I have set out to explore the question of what does a person gain by joining a group of social media by categorizing the overall behavior patterns of the subscribers of the subreddit of education and how within this group they act as citizen journalists and members of a community in order to contribute to this particular social media site. While the topic of education seems very specific, the diversity within the topic is vast.

The analysis of the data provide three main findings which lead to the question of gain:

1. There are distinctive behavior patterns and patterns of discussion within r/education in the way subscribers post and the way they interact with each other.
2. Acts of citizen journalism and the users who have taken upon themselves the role of  gatekeepers, become “editors” of their own educational magazine while on the other hand acts of online community activities create a sense of community.
3. When people speak about CJ or community in a social media group, they look at it as either or (e.g., …). Here is a different phenomenon - both are happening within the same group. As a result there, we can see that there is a limit in the conception of what is CJ and community is, without making the possible connection between the two. It is possible to use the same venue to achieve two different goals.

These three layers put together can be explained by making the connection to Connectivism theory. These layers explain how this platform can become  a potential place of learning for personal growth and for group knowledge acquisition through this theory.

## 5.1 Two Distinct Patterns

It is clear that there are two very distinctive behavior patterns within the activities of the subscribers and the discourse itself. While engaging in UGC, the subscribers are factual and answer orientated with polite tendencies. However, when faced with hyperlinks there is argumentative discourse with a negative ton. Same goes for themes in education that are focused  on different topics with policy of education being the common denominator. It is almost as if this were two separate groups. Other researchers showed the differences between groups while here the differences are within the group itself. In their research “Learning in the wild” Kumar et al. (2018) tested their coding scheme on reddit as well. In their study they examined the results on 5 different subreddits and found that there is a difference in patterns of discourse based on the topic of the subreddit. For example r/politics was very argumentative with a negative tone while r/askacademia was neutral and positively social. From this one can understand that the focus of the group could possibly dictate the patterns of behavior within the group. Zhang, Hamilton, et al. (2017) studied the loyalty of participants on reddit focusing on how the use of language can possibly rate loyalty within the subreddits but the results included each subreddit as its own group and did not check the behavior within the group. Tran and Ostendorf (2016) presented results of language and community reception but did not exhibit behavior patterns within the groups.

Here, as opposed to the literature up to date, we have two practices within the same group. One when the group is presented with a hyperlink and the other when a question or request is given to the group. One is based on the discourse of the politics and policy of education and one is based on asking for advice and asking knowledge-thirsty questions.

The last piece of this puzzle lies with the users who post in both groups. As seen in the findings, very few UGC users post more than once while link users have a few members who are highly active in posting and by doing so pushing their agenda. u/DeathByEducation posted links all related to student loans, a topic that overall received a lot of votes. User u/chizabez78 posted 10 link posts on tech and education while u/dwaxe posted links that are all political in nature. Since a distinction between the two groups has been established, this information adds a great deal to understanding the dynamics within these groups. If UGC posts are personal in nature, it makes sense that a person would ask their question, get the answer and have no need to post again until a new question arose. On the other hand, some of the link posters have an agenda to put forth and will keep on posting on the topic, whether they then participate in discourse or not. It seems that to them keeping a topic in the public sphere is sufficient in influencing the public’s opinion and thereby allowing people to make educated comments later on. This inherently is acts of CJ.

Another important factor is that except for one user, there is zero overlap between posters in each group. Posting UGC has a personal vibe to it and allows a certain amount of exposure. This exposure can be done in the confines of a community type environment. There is no necessity for an agenda because the agenda is using the communal knowledge for personal growth. In a way, the line has been drawn in the sand. The posters either act as citizen journalists or online community members. What is not clear is whether the subscriber who conduct the discourse in both groups overlap. That however is a question for further research and not part of this paper.

## 5.2 Citizen Journalism and Community

Moore and Chuang (2017) studied what motivates users to participate on Reddit. They found four different motivational reasons that they then explored: informativeness, socializing/community building, status seeking and entertainment. In their findings they showed only a weak connection between motivation and informativeness, but there were strong connections with socializing/community building, status seeking and entertainment, with socializing/community building being the strongest. it seems that the aspect of socializing/community building may explain some of the findings in this paper.

The UGC post, for the most part, requested something from the group - be it advice, help or group public opinion (through a general question). These posts have a stronger correlation with other users’ correspondence (by number of comments) despite the fact that the subscribers are anonymous. More people reacted to these types of posts with more than just a vote. Commenting requires more of an effort, thereby creating more of the social/community building that some subscribers might be looking for.

Lee, Vogel, and Limayem (2002) reviewed literature in regards to virtual communities and how are they defined. In their findings that concluded that a virtual community includes: public discussion, personal relationships, member-generated content and the moving of information. In addition, they add that “content or topics are driven by participants.” In the subreddit of education, it is apparent that that is what the participants are doing; they are creating a sense of community by allowing members to: a) create public discussion - commenting on each others’ posts, whether UGC or hyperlinks; b) members generating content - by posting their own posts; and c) moving information - by sharing hyperlinks, and thereby having topics driven by participants - by upvoting and downvoting them. As a result this subreddit could be considered a virtual or online community where the subscribers provide support and answers that others are looking for.

This indicates that here we have a community of interest (Blanchard & Markus, 2004) in which the participants are not connected by proximity, but by the common goal of education related topics. These topics can be about policy but can also be personal questions and advice seeking. By doing so, anyone can answer. In the corpus of this paper subscribers ask questions that can be answered  specifically by Americans (e.g., How is the Civil Rights Movement taught in a place like Arkansas or Alabama?) or a specific group of people within the realm of education (Anyone did Education Pioneers here? What was the experience like and was it worth the low stipend?). There are other questions that can be answered by anyone in the world with the same experience (How to teach English in China!) or question so general that anyone can answer regardless of age, location or occupation (What music do you listen to while studying?). Even though the activity of the members might not be high, answers are given and the OP in many cases, shows appreciation which creates a sense of community (Blanchard & Markus, 2004).

On the flip side, Harcup and O’Neill (2017) created a list of news values that in various combinations can show if something is newsworthy. One of these values is relevance, or “stories about groups or nations perceived to be influential with or culturally or historically familiar to the audience.” To make something relevant, one must create a connection with the audience and relate to the needs of the group, consequently, the audience can decide for themselves what they find relevant. This can be done on the social media group Reddit if the group upvotes it. Those who participate in the group are participating in acts of CJ. Carpenter (2017) describes CJ as something being posted to benefit the community. Bruns and Highfield (2012) include in this act: blogging, sharing and providing commentary. Goode (2009) adds that CJ includes: reposting, linking, commenting others posts. In this subreddit where the subscribers chose to be a part of a group that reflects on topics of education, they are in a sense creating their own education magazine that allows topics ranging from policy and politics to the use of technology in the classroom. They appeal to teacher and university students alike and allow diversity within the group. By upvoting or downvoting and by engaging in comment discussion, they are acting as the gatekeepers of the “education magazine” of their creation. The acts of citizen journalism in this subreddit define what the community wants to put forth on the topic of education. This fits in with the viewpoint of Dewey that the public (and in our case subscribers) is capable of filtering information and understanding complexity, thereby transforming into citizen journalists.

In the hyperlink posts, the acts of CJ are done by reposting and, at times, engagement in commentary; in the UGC posts, the role of the comments is the creation of relevance and connection to the group. It is the combination of both that provides the balance for the diversity of participants, themes and topics relevant for education.

Lastly, there is the platform itself that allows for these posts to have “life” at all. The lifespan of a post is dictated by the time it was posted as well as the upvotes it receives. This is similar to the lifespan of news elements in journalism in general (Goode, 2009) except that in the case of this subreddit, the added value is that the content is user driven from the get go and its lifespan is user driven as well.

As far as gatekeeping is concerned, the group does that with the upvoting and comments. The highest amount of comments was for a post about reading strategies (a topic that was not categorized as one of the two main themes in education that subscribers responded to - policy and politics). This topic provided an opportunity for the group to surface the importance of reading and how reading is taught today. The diversity of the discussion shows how passionate people view this topic and as a result, push it to the “front page” of this subreddit.

In contrast, the group also corrects and informs the subscribers from the potential problems that their post might have. For example, the post relating to schools in the periphery, had a faulty link and warned of malware which led to the OP reposting the information from a different source.

In conclusion, it seems that this subreddit is very neatly divided into two groups: Links are categorized as acts of CJ and UGC as acts of community.

## 5.3 r/education: A Venue for Two Goals

The literature up to date has many definitions to what counts as acts of CJ and what counts as acts of community. In addition, there is much research that focuses on behavior patterns within social media sites with reddit being no exception. Medvedev et al. (2018) has a comprehensive summary of research done on reddit which include: predictability of posts and popularity predictions, user behavior and networks of community. In this summary there is no mention of diversity within a group. This paper has looked at r/education as an individual entity without looking at individual user patterns because the focus was the group itself. Tan and Lee (2015) saw how the same users have different behavior patterns when in different groups and Zhang, Hamilton, et al. (2017) showed how groups have distinctly different behavior patterns from each other but there is no research that shows a duality of behavior within the same group. This duality is exhibited in this research and it seems that this point of view might be somewhat different to how research has been done up until now.

There are several explanations for why this different approach may occur:

***The uniqueness of r/education as a group.*** as mentioned before, this group has the potential diversity of subscribers. As seen in the actual posts, the subscribers can be anyone from teachers to parents, administrators to students. It can be people who are looking into career changes and all they want from this group is advice about what to learn. For example: “How to Succeed As a Working Student” is a linked article which offers advice to university students. This post received 43 upvotes and 13 comments. “From South Carolina to California, charter school-loving billionaires are plowing money into midterm local and education races” is an article from the Washington Post and would cause concern to many groups of people like: administrator, civil activists, parents, teachers and even students. This post received 81 upvotes and 26 comments.

 On the other hand some of the UGC posts provide a different perspective of the diversity of the group. For example: “Why did you decide to become a teacher?” is clearly meant for teachers to answer and provides a wonderful opportunity for discourse about the comings and goings of the profession. This post received 37 upvotes and 43 comments. On the other hand, *“ Why do children say words like ‘please’ like ‘pwease’?”* received 0 votes but 28 comments when clearly this can relate to education but is a bit of a stretch. This post too can be addressed by anyone. An interesting post that received  69 comments was *“Got LitCharts Premium. Anyone want anything? I’ll send via google drive link.”* the whole post as based on subscribers asking for LitCharts and the OP sending them the link. The OP and the subscribers involved are most likely college students and this serves as another example for the diversity of this group.

It is clear from the link posts as well as the UGC post that there is a large range in the diversity of the group and this range allows many different people who have some sort of connection to the umbrella topic of “education” to find a voice. This connection can be through sharing of information and material, sharing knowledge, creating discourse on controversial topics and even just sending out a word of encouragement to a person in need.

***Link vs. UGC.*** the findings in this paper has shown how the link posts and the UGC posts are different and several ways. Firstly in the themes of education that are posted. Policy might be a connecting link between the two groups but advice seeking and personal and professional development in the UGC posts reflect the one of the main differences in this subreddit. Secondly, the discourse is also a major difference with argumentative and negative tone vs. question and answer patterns, elaboration and positive tone. Lastly, OP’s participation within these two groups with nearly no crossover between the two groups when OP of links do NOT post UGC and vice versa. In addition, OP’s the discourse is substantially different between these two groups and the involvement in the discourse of the post comments is distinctive. This indicates that people behave differently in different settings which is similar to the findings of Kumar et al. (2018), Zhang, Hamilton, et al. (2017), and Tan and Lee (2015), which in this case would be posts of links and posts of UGC and not different subreddit groups as in their research.

***Achieving more than one goals in one venue.*** being that the setting of this research is reddit which is a social media website, one should consider how this might help explain these differences. The role of social media in our day to day lives is extremely diverse and people go on social media sites for different reasons. Two of these roles that have been discussed at length is the roles for CJ and online communities. If only by looking at the current literature one might say that this is a sort of contradiction because the only analysis done thus far has suggests that a group should be one or the other. How can these two social media acts coexist? The answer lies in the observation that this is not a contradiction but coexistence.

As it has been explained, the posting of a link on a social media site can be defined as an act of CJ, whereas posting UGC can be seen as an act of participation in an online community. The patterns are clear cut, but this also means that the expectation of behavior within the group are clear cut as well. When posting any post - link or UGC - one should realize what to expect from the group as far as popularity and style of discourse. It seems that certain topics get very little recognition while others become very popular. Some questions will grab the attention of the subscribers and move them from passive browsers to active one who comment and vote (Glenski & Weninger, 2017) while others will not. Reddit as a system that pushes some posts forward while not promoting others creates an inevitable “front page” which acts like editing of a targeted group magazine and thus acts as a citizen journalistic web page might act. But this does not contradict that the group is the one who pushes forward subjects that are of interest to them. Therefore fulfilling the area that is shared between the two concepts of CJ and community - relevance (Harcup & O’Neill, 2017).

As long as there is relevance and interest in the post, it is a topic that an online community will uphold and push forward. Same goes for acts of CJ. the “journalists” help create the information that then will be read by the community. Expectations are clear. Links are less personal and can be argumentative. There are no expectations from the OP to uphold the topic in conversation and there is a likelihood that people will browse and look at the article shared - if it is on certain topics. With user generated content, there is a higher likelihood that subscribers will engage in a more informative yet friendly way. People try to help other people. Although this wasn’t checked, but there is a chance that the fact that the OP is more involved in the discussions allows for a more friendly interaction. Acts of CJ and acts of community create a unique environment that a diverse group of people can come together and talk about education in the broadest of terms and in a way that creates relevancy for many.

Thus I conclude that by looking at CJ or online communities as a way to understand the uses of social media alone is not enough since it only tells part of the story. For online communities the interaction between the participants is vital, while in CJ the interaction between people and the information they are pushing forwards is what allows CJ to achieve its goals. Therefore it is necessary to allow an expansion of the terms citizen journalism and online communities since they can reside together in the same social media group and should not be related to as two individual perspectives in social media research. They can complete each other and contribute to each other in the knowledge building of the social media users. By making this connection the group can achieve two different goals: making community connections while still using CJ as an additional tool for relevance and newsworthy information that eventually leads to greater ability of being part of the democratic process. By separating them, we do not capture the whole social fabric of what really happens in social media therefore we need a way to make the connection between the two.

Once this connection is made, the question of gain can be addressed.  I suggest Connectivism Learning Theory as a way to make this connection and by doing so we can see that what a person gains here is connectivistic learning as part of a person’s value system. This learning may manifest itself in an informal way but it doesn’t mean that it is not happening. The form of  learning that occurs within this subreddit is in fact informal and when applying Connectivism theory we find reason to connect between acts of community with acts of CJ.

## 5.4 Connectivism and a Place of Learning

By making the connection between community and CJ there is an additional perspective to view this subreddit. And it is the place of learning. This subreddit has the potential of providing grounds for learning in several different ways. Whether it is from creating knowledge from acts of CJ (Imran, 2017) or acts of community (Muller et al., 2012). Be what it may, something happens when a person goes in to the subreddit and scrolls through the different posts.

Connectivism Theory that emerged as a way to explain a different way of learning, is directly connected to the use of web 2.0 and social media (Goldie, 2016). Connectivism as a theory is discussed often in the context of online learning such as MOOCs , but this is not exclusive. Greenhow and Lewin (2015) bring Colley, Hodkinson and Malcolm’s chart of attributes of learning in formal, informal and social media settings. The idea is that students experience learning in formal, informal and non-formal settings through a wide range of contexts which allows them the authority to how they learn, what they learn and with whom. This chart looks at the way each setting has attributes in different areas of learning: purpose, process, context and content. In the context of non-formal learning, the same breakdown is done:

Purpose includes: communication, creating, sharing and connecting, self determination with a varied audience that may be known or not known. Purpose, as defined, falls in line with the findings in this research since here we have we have a diverse group who through acts of CJ and acts of community create, share, connect and engage in communication.

Process of learning includes: self initiated and directed, peer influence and network support such as rating, and commentary, expertise through participation and multimodeling (use of images, videos, tags and hyperlinks). Here too the findings relate to these attributes as well. Whether it is UGC or link posts there is self and peer actions. The subscribers are helping each other by using their personal knowledge and experiences or creating commentary that then gets argued about and creates communal knowledge. The voting system on r/education allows for peer influence and in this subreddit, it determines what the group is interested in and what becomes “front page.”

Context includes: online, individual recognition and social recognition as well as a varied curriculum. For r/education being online is obvious but this also means that there are restrictions like posting times and time differences around the world. This does not seem to be a problem in this specific group since a lot of the posts related to USA policy and politics and although there are other nationalities that commented on the posts time differences didn’t seem to be a problem. Curriculum poses an interesting question. What is the curriculum of a social media site? In the case of r/education the answer should be - education. But on its own is too wide a topic so the group itself narrows it down to what really concerns them and thus creates their very own unique curriculum from which participants have the ability to choose what they want to actively learn. Recognition can manifest as relevance which is vital in both CJ and community.

Content includes: UGC and re-mix (links) social construction and distribution, knowledge as a collective agreement and varied outcome. The upvoting and downvoting systems allows the collective agreement of the group to surface. This is an aspect of CJ where people using an online venue serve as gatekeepers of the information that passes through. In the particular case of r/education it is clear which topics make it through and which ones do not.

Since this subreddit has distinctive patterns of behavior that emerge from the findings in this paper, here too there is a difference in the way that learning may occur. On one hand we have group behavior and characteristics but on the other hand we have individual looking for connection. On a group level there is construction of social capital and distribution of knowledge while on a personal level there is  individual recognition. Julien (2015) describes the term “digital social capital” where online interactions allows people to make to make expressions of social capital that specifically affect and extend relationships through online venues. These expressions are unique to this setting because it requires a different type of knowledge. This is because people benefit from these interactions and don’t remain indifferent but participate and make judgements - like agreement or disagreements, providing answers and expansions and even creating social discourse by using tone. This interaction makes them members of the community which is based on the group’s collective knowledge. Social digital capital exists because people have a vested interest in the topic.

Connectivism theory is based on the premise that knowledge requires interaction (Downes, 2005). Interaction can happen when people bring their prior knowledge and have it interact with other knowledge which leads to the interpretation of the information. It is important then to sift through the information in order to make choices. This concept is similar to the construction of knowledge through CJ[[6]](#footnote-10) which requires citizen journalists to sift through the information that they come across and decide what is relevant to pass forward. Social knowledge is the combined knowledge of more than one individual that put together can create a concept. Downs gives the example of what it means to fly from England to Canada. There are many pieces of knowledge required to explain how this is done. Each piece is brought by an individual that when put together create the knowledge of flying to Canada - this is the creation of social capital. In being part of r/education, each individual brings unique prior knowledge that they have to help create a new concept, which is the environment of r/education. According to Downs this requires:

Diversity - multiple points of view: this is apparent in the multiple points of view exhibited in the argumentative discourse as well as in the question answer patterns that allow different points of view on the same topic.

Autonomy - participants choose to be there: being a subreddit, this platform is a choice for the subscriber. There are rules but these rules are not related to who may participate but about the decorum of the participants. There are no obligation of the subscribers to how active they need to be or how they are required to interact.  The choice of participation is entirely on the subscribers themselves.

Openness - environment that allows perspectives to be presented: the ability of subscribers to choose how they want to participate in r/education enables different perspectives to be represented. For one, people who wish for a more community oriented group may do so while others with a clear policy, political and professional (pedagogical related topics for example)  agenda may do so too.

Interactivity - knowledge constructed by interactions: by having such a diverse group of members and such distinctive behavior patterns, the constructed knowledge and the building of digital social capital falls on the interaction of the group. In the case of r/education the different behavior patterns show how the group interacts and by doing so, how knowledge has the potential of being constructed. Connections are made  between subscribers and the group by posting links or UGC, between subscribers and posts with upvotes and downvote and between the subscribers within themselves by participating in the discourse and making comments.

When putting all these elements together we see that subscribers of this subreddit have multiple benefits of learning. By looking at learning through Connectivism Theory, we can detect two types of learning: the creation of digital social capital and personal growth. The two are linked together in this setting because of the duality exhibited. There are acts of CJ alongside acts of community. While digital social capital is created through the group interaction, personal growth occurs as well. In fact, group knowledge facilitates personal growth.

# Conclusion

In this paper I have come to explore what might a person gains by joining the subreddit r/education while looking at the categorization  of topics, themes of education and content analysis of the comments. In the world of social media today when there is a large variety of choices pertaining to which groups of interest one might join, the element of self gain plays a major role. In the case of r/education, two main patterns emerged: acts of CJ and acts of communities. The appearance of these two patterns have been confirmed in previous research as ways to observe peoples’ behavior on social media, however in this case there seems to be some distinction. Here these two terms reside side by side in the same group and contribute to the bigger picture that r/education presents.

In this research I spoke about interaction between subscribers in the form of posters, voters and commenters. There is no way of knowing what the backgrounds of these people are but what can be said is that they provide a social knowledge and as a group, put together the tapestry of digital social capital which allows personal growth. There are also lurkers, those people who are part of the 96,100 subscribers to r/education but choose not to interact actively. From this data there is no way of telling how many of these people have read the posts but if relating to Connectivism theory, they may benefit from the discourse of the other subscribers which consequently allows learning to occur by the connecting of nodes (Siemens 2005). Therefore duality of r/education  provides a space for CJ and community to come together as a place of learning and therefore personal growth.

So what do people gain from joining this subreddit? People who post links gain a place that they can push forward topic that they think are important in education today. By doing so they help create social capital as the subscribers engage in discourse on the topic. The hope is then the people will be more informed and be able to make choices that will benefit society. People who post UGC gain a sense of community by interaction and connection. This provides a place for people to have their personal needs and thoughts acknowledged.

Social media as a whole is usually is looked upon as a singular niche in research but what has been observed from the data is that acts of CJ and acts of community  are connected to each other and by making this connection the question of gain can be answered. If the definitions of CJ and community within the bounds of social media are looked upon from a different perspective, then we can see that together they add up to something much bigger than research has defined up until now. By the application of Connectivism Theory and the understanding of how one gains social capital in this theory, CJ and online communities facilitate the understanding of what a person might gain and this question  gets answered. By seeing that r/education contains both acts of CJ and acts of community a subscriber gains a place where learning can take place in a fashion of their choosing.

# Further Research and Limitations

There are several limitations that one must keep in mind. For one, this research has a sample of just under 300 posts that were gathered from two different chunks of 25 day in two different times of year (November and July). This sample has its limits and it is possible that a repeat for the data analysis would prove prudent in order to confirm the results of this study. In addition, the active number of participants is not very high and the interaction between subscribers is limiting. Further test such as: number of people going into the posts and people going into the links, might strengthen the data by showing the activity of the members of the group. This research has referred to the overlap between posters in the UGS posts and the link posts but this was done to the posters alone and not the commenters. Looking for overlap between the two groups commenters would add to the significant differences between the groups.

One of the main findings in this research has been how acts of CJ and acts of online communities can reside side by side in the same group without causing contradictions but rather adding to each other. If these two fields of research in social media can be connected, then what else can connect and contribute to each other to create learning possibilities. The literature on the matter has social media divided into fields of research that are studied separately while the connection between fields may add to a deeper understanding of what a person might gain by participating in social media.

Connectivism Theory has been explored in relation to online learning (ex. MOOCS) and community. It has not been explored in the setting of how CJ can promote learning. Since the claim of this paper has been that acts of CJ and acts of community reside side by side and contribute to each other for the purpose of learning, there may be grounds to explore the connection between learning theories such as Connectivism to acts of CJ.

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1. Singer (2019) quoting Kovach and Rosenstiel 2014:9 [↑](#footnote-ref-1)
2. Bruns and Highfield (2012) give the example of the “Battle of Seattle” where mainstream news coverage was not enough and alternative news coverage was provided by the protesters. [↑](#footnote-ref-2)
3. As defined by Suran and Kilgo (2017) [↑](#footnote-ref-3)
4. Term used for an artificial intelligence moderator. [↑](#footnote-ref-4)
5. Term used for an artificial intelligence moderator. [↑](#footnote-ref-5)
6. Deuze and Witschge (2018) talk about a person’s ability to use the information presented in order to make informed decisions as part of the democratic process.  [↑](#footnote-ref-10)