

Social Media Branding Strategies of Universities and Colleges in Ontario,
Canada in 2019–2020

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Abstract

Higher education institutions (HEIs) in Ontario, Canada have invested in a social media presence for multiple purposes, such as branding, student engagement, and recruitment. To have a full picture of the social media strategy implemented by HEIs in Ontario, Canada, this study used a mixed-method approach to analyze Facebook posts' characteristics and content. A total of 1,789 Facebook posts of six selected HEIs from September 2019 to April 2020 were collected for analysis and coding based on five predetermined brand positions: elite, nurturing, campus, outcome, and commodity. The study also calculated the engagement rate for each social media practice to measure its engagement effectiveness. The results show that the HEIs generally followed similar practices such as posting frequency, length, types, and timing. However, the distributions of brand positions and content targeting future students versus current students were varied, although the HEIs employed all five brand positions and targeted the same lists of audiences. Some practices such as evening post for colleges and nurturing content for universities attracted significantly higher engagement. This study provides not only a review of current social media and branding strategy but also recommendations for practice that can generate higher engagement.

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Dedication

To my beloved To and Ly's family; without your emotional support and absolute belief in me, I could not have got this far. I feel proud of being a part of our loving family.

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CHAPTER ONE: INTRODUCTION

As a student specializing in science subjects in high school, a marketing officer of an insurance company who was familiar with business practices, a teacher who cared for the intellectual development of students, and a graduate student in Education, I experienced the conflict between emotional feeling and reasonable thinking, between art and science, as well as between the humanities and commerce. For me, a corresponding conflict occurs when it comes to marketing in the field of higher education because higher education institutions (HEIs) are operating in a quasi-commercial market (Brookes, 2003). While marketing can have an image of a for-profit business, HEIs still need to survive by talking about their services in an increasingly competitive market. This makes studying marketing in higher education even more appealing due to its unique nature, which cannot be explained fully from the perspective of either non-profit or for-profit industry.

Higher education marketing is where I find the integration of my previous professional and academic experience, as well as my interest in business and education. It is not to say that I support the idea of education as business; rather, I am curious about how the field of education reacts to the trend of commercialization, especially when it comes to higher education as it is not basic education such as kindergarten, primary, and secondary education. In other words, compared to basic education, higher education is now considered a private gain rather than a public good (Gereluk et al., 2015). While the roots of higher education is still “education,” it is interesting to see how HEIs are going to adopt the trend of commercialization effectively without sacrificing their core values.

Thus, I would like to see how HEIs are conducting marketing and branding on social networking sites (SNSs). These sites, as two-way communication platforms, provide publicly available audience engagement metrics, while other means of communication such as websites provide only one-way distribution of message and no publicly observable engagement data. Specifically, I aim at analyzing social media as well as branding strategy of HEIs on SNSs, which are major topics of lively discussions in higher education marketing (Chapleo, 2010; Peruta & Shields, 2018).

Higher Education in the Modern World

Gone are the days when one university serves a single large community. As the number and enrolment of students in educational institutions have increased significantly—whether with or without any intention—universities are forced to join a competition of student recruitment (Kinnell & Macdougall, 1997). This results in the need of being seen as a unique and distinguishable entity to attract students (Chapleo, 2007). Today, “marketing is at the forefront of activities for most higher education institutions” (Fagerstrøm & Ghinea, 2013, p. 2). Despite many concerns surrounding the commercialization of education (Gereluk, et al., 2015), the majority of HEIs are now actively involved in marketing activities.

As Chapleo (2010) notes, higher education is inherently complex and “the application of commercial approaches” in marketing may be over-simplistic due to the unique nature of higher education (p. 411). The distinctive characteristics of higher education include: the reliance on both public funding and students’ tuition payment (Brookes, 2003), the comprehensive system of various internal and external audiences (Kotler & Fox, 1995), and the prolonged relationship with students as special customers

(Nguyen et al., 2019), to name a few. Hence, the complexity makes it hard to define branding for higher education in concrete terms (Steele, 2008; Temple, 2006). Many universities are seeking to express their brand positioning via various communication channels, including social media platforms (Bélanger et al., 2014).

Additionally, Generation Y (those born after 1983; Bolan & Robinson, 2013) and Generation Z (those born between 1996 and 2012; Schwieger & Ladwig, 2018) are regarded as tech-savvy generations, who are now a large part of the higher education population (Hesel & Williams, 2009). Gen Y students are among the most energetic age groups, characterized as preferring instant and updated information as well as two-way communication (Bélanger et al., 2014). Gen Zs prefer a “seamless experience” and are willing to provide their personal information online to get “personalized experience” (Schwieger & Ladwig, 2018, p. 46). Social media exists to serve those needs, which has been becoming one of the most important communication mediums of the majority of HEIs (Bélanger et al., 2014). To demonstrate, 98% of 69 U.K. universities reported using social media as a part of their marketing strategy (Shaw, 2014); 100% of 106 universities in Canada have Facebook and Twitter accounts (Bélanger et al., 2014); and at least 67 colleges in Canada have their social media presence (eQAfy, 2019).

Among leading social media platforms, Facebook is the most popular channel in Canada in general (Gruzd et al., 2017). The Facebook pages of HEIs may reveal their branding strategy through post content and their social media strategy through their post characteristics. The benefits of having a good presence on social media are various, ranging from increased students’ sense of connectedness to the schools (Wilson & Gore, 2013), to reaching out to more potential students (Peruta & Shields, 2018). Thus, HEIs are trying to adapt an effective strategy to have higher user engagement, as well as having

a consistent branding message communicated to students and other targeted audiences (Peruta & Shields, 2017).

Purpose and Significance of the Study

The popularity of using social media of higher education has been highlighted in recent years (Bélanger et al., 2014; Nguyen et al., 2019; Peruta & Shields, 2017, 2018). Having an active and engaging social media pages is essential: “It is harmful for the universities to have no social media presence and equally harmful to be on social media with a profile that is reflected as just for the sake of it” (Bélanger et al., 2014, p. 27). There is always a temptation of writing and scheduling a post on a social media page based on “gut feeling” instead of carefully researched rationales (Peruta & Shields, 2017, p. 140). Providing the context of a highly competitive market of educational institutions, HEIs need to have a consistent message and both engaging and technically effective posts on social media (Bélanger et al., 2014). Overall, HEIs still lack of a strategic approach on social media (Lund, 2019), though the social media market shows signs of maturing (Peruta & Shields, 2018). Marketing officers are also in need of a reference for engaging content categories, post format, and engagement plans to develop their social media strategy (Peruta & Shields, 2018). Hence, the analysis of posting strategy and engagement in specific context of HEIs in Ontario Canada can provide practitioners a review of the most recent practice and reference for future social media activities.

Research has shown that universities and colleges in North America have been actively involved in social media activities to define their brand position. Although HEIs are seeking to define a strong and distinctive brand positioning (Chapleo et al., 2011), branding research in higher education has received limited academic attention (Nguyen et al., 2019; Palacio et al., 2002). This research aims to provide a real-time, current data

analysis of HEIs' brand positions on social media platform, which can provide information for other HEIs in terms of branding strategy.

There are four recent and relevant research studies analyzing the social media strategies of higher education institutions in Canada and the U.S. The first study conducted by Bélanger et al. (2014) explored how universities in Canada (n=106) used Twitter and Facebook. They collected 6 months of data from the beginning of August 2013 to the end of January 2014. The study examined content categories of the posts from universities and user group-initiated conversations. Another study by Veletsianos et al. (2017) explored 77 Twitter accounts of public universities in Canada, during their lifespan. In particular, the research calculated the number of tweets to define the top prolific universities, and the number of replies to define top interactive universities. The study also analyzed the tweet characteristics and their relationship. The authors wrote script for visual media (images and video) to define narratives constructed. Another two research articles by Peruta and Shields (2017, 2018) explored how the top 66 colleges and universities in America use Facebook in two separate months: September 2013 and April 2014. The authors analyzed content categories, post types, the relationship between engagement and content categories, as well as social media practices such as post types and post timing.

The above-mentioned studies were large-scale with a consensus approach of including all HEIs in specific contexts. This study will join the conversation to examine social media in a smaller but novel context of HEIs in Ontario, Canada, as well as in a more recent academic year: 2019–2020. In general, the number of research on social media practices and content on Facebook pages of HEIs is still limited, so there is a need for more studies about social media in higher education (Lund, 2019), especially in different context and timing. Furthermore, while the research concerning branding in

commercial sectors is enormous, studies surrounding branding in higher education remain more limited (Joseph et al., 2012), especially in the context of Ontario, Canada.

In short, the analysis of Facebook posting strategies and content of HEIs in Ontario, Canada in 2019–2020 can provide a reference for practitioners in Ontario specifically, as well as in other contexts. Additionally, branding strategy of selected HEIs in Ontario can reflect how they are trying to define themselves in higher education market. From this analysis, practitioners can have a review on recent social media activities and implication for future practice.

Research Questions

Given the importance and popularity of social media communication as a part of marketing in higher education, this research examined how HEIs are doing their social media activities through their post contents and posting strategy on SNSs. HEIs may have different branding positions, which is reflected through their communication message, either on their website (Rutter et al., 2017) or on social media platform (Bélanger et al., 2014), and collaterals such as view book or brochure (Steele, 2008). HEIs, depending on their competitive roles—leader, challenger, follower, and nicher (Kotler & Fox, 1995)—may choose one or several branding positions. As defined by Kotler and Fox (1995), an institution possessing a brand position may be satisfied with it or may try to change it. Hence, regardless of the competitive roles and existed brand position, HEIs should be doing branding activities continuously (Bennett & Ali-Choudhury, 2009). This research first looked at how some selected universities and colleges in Ontario chose their brand positions through the content on their SNSs. Second, the research also analyzed social media strategy such as post frequency and post timing to examine the common practices

of HEIs in Ontario, Canada. From the posting strategy analysis and content categorization of branding positions, the level of posts' engagement was examined to measure the effectiveness, which reflected how audiences of specific institutions reacted to an angle of content as well as posting strategy. Specifically, the research aimed to answer the following questions:

1. What are the marketing strategies of HEIs on Facebook in Ontario in 2019–2020 (including post length, post frequency, the use of hash tags, post types, posting day and time)?
 - 1.1 What are the corresponding engagement rates of these practices?
 - 1.2 Which post types have higher proportional engagement rate?
2. What are the branding strategies of HEIs in Ontario on Facebook in 2019–2020 reflected through their brand positioning?
 - 2.1 What are the corresponding engagement rates of these brand positions?
 - 2.2 Which brand positions have higher proportional engagement rate?
3. What are the distributions of content targeting current students, future students, and both types of students?
 - 3.1 What are the corresponding engagement rates of these contents?
 - 3.2 Which types of targeting content have higher proportional engagement rate?

Research Scope and Methods

This research explored the quantitative and qualitative data on Facebook pages of three selected universities and three selected colleges in Ontario, Canada, throughout 8 consecutive months from September 1, 2019 to April 30, 2020 or an academic year. The universities and colleges were chosen based on a grouping method. The groups were big-

sized, medium-sized, and small-sized universities; and big-sized, medium-sized, and small-sized colleges. The size was based on the number of students enrolled in the year 2019 of the institutions. The post characteristics as social media strategies were collected and analyzed using a social media management tool and excel. In the content analysis, coding was manually conducted based on a conceptual framework as a guideline, which required time and effort to read every single post. To find the relationship between the engagement rate and several variables, the data was exported to SPSS to compute the inferential statistics.

Chapter Conclusion

As a practitioner in Marketing for several years, I understand how important it is to have strong brand positioning, which is well presented through communication on social media. Moreover, a detailed analysis of posting strategy is essential for practitioners in the same field reviewing what they have done compared to other players and learn lessons for future practice. Chapter 2 explores the nature of the higher education business, as well as marketing and branding in this field to provide foundational knowledge. Chapter 2 also looks at social media as a part of marketing and branding activities in higher education alongside current debates and challenges. Details of research methodology are outlined and discussed in Chapter 3, including the data collection and data analysis process. Chapter 4 presents the interpretation of research results and discussion based on relevant literature. Chapter 5 serves as the conclusion of this major research paper, suggesting implications for future practice and research.

CHAPTER TWO: LITERATURE REVIEW

This chapter reviews relevant literature about the higher education sector, HEIs' brand positioning, as well as their social media communication strategies and students engagement to the HEIs. These areas are fundamental to the interpretation of HEI's communication messages in terms of branding strategies on their social media pages.

The Nature of the Higher Education Business

HEIs are service providers that operate in a "quasi-commercial market" (Brookes, 2003, p. 134). In a context of government funding reductions (Balaji et al., 2016), HEIs attempt to attract more students who are willing to pay for their service (in the form of tuition; Bennett & Ali-Choudhury, 2009). With both funding from government and revenues from students' tuition, public HEIs have some features of both for-profit businesses and not-for-profit businesses (Brookes, 2003).

By their nature, universities and colleges are organized as a whole service community, in which the main stakeholder is the student (Hughes & Brooks, 2019). The system of educational institutions consists of "an internal environment, a market environment, a public environment, a competitive environment, and a macro environment" (Kotler & Fox, 1995, p. 23). These environments include various groups, which are: "Foundations, alumni, local community, general public, mass media, prospective students, current students, accreditation organizations, parents of students, administration and staff, faculty, trustees, competitors, suppliers, business community, government agencies" (Kotler & Fox, 1995, p. 25). Similarly, Guilbault (2017) claims that the "customers" of a university include potential, current, and former students, external organizations who are employers, and other stakeholders. It can be said that

HEIs, as a central knowledge resource (Saad et al., 2008), have diversified types of audiences. Different audiences have different needs and wants when they are in touch with the schools. The audience diversity makes communication messages of the university even more comprehensive (Chapleo, 2015), which needs to be carefully planned to live up to each type of audience's expectation and fully utilize the resources from the relationship between HEIs and the publics.

One key distinctive character of higher education business is the co-creation of value (Fagerstrøm & Ghinea, 2013; Hughes & Brooks, 2019; Naidoo et al., 2011). From the perspective of students as actors in value creation, students play a central role in creating value and the HEIs are providing necessary resources throughout that journey. As Temple (2006) notes, students can be understood as special customers who do most of the job and "the outcome of education is heavily dependent on the student themselves" (p. 16). The outcome of education could be referred to as the competency of students after graduation, which results from the students' activeness and willingness to learn and engage in academics as well as extracurricular activities (Fagerstrøm & Ghinea, 2013).

Even in the for-profit sector, people are emphasizing the active role of customers. The concept of co-creation connection was first created in the service-dominant logic of Vargo and Lusch (2004), which suggests that companies in the 21st century should shift their attention to managing customer experience (Prahalad & Ramaswamy, 2002). The relationship of customer and company does not end at the point of purchasing but sustains their interaction in the value creation process. The prolonged relationship between service provider and customers is one unique nature of higher education (Chalcraft et al., 2015). Also, while most for-profit businesses accept any customers who

are willing to pay for their service, HEIs can reject applicants who do not meet their admission requirement (Nguyen et al., 2019). Unlike any other customers, students may need to work hard academically and prepare careful applications to be able to “buy the service.” From that nature, students have pre-existing knowledge and skills before joining HEIs (Temple, 2006). For prestigious HEIs, they have more power to choose the student applicants (Nguyen et al., 2019), although the admitted students are also HEIs’ customers as these students pay for the service. From the students’ perspectives, when they pay the tuition, they somehow expect to be satisfied by the school’s service (Bolan & Robinson, 2013; Pucciarelli & Kaplan, 2019).

Branding in Higher Education

HEIs are paying attention to branding activities in an attempt to yield long-term benefits of “well-branded” institutions, including “increased admission applications, increased retention rates, increased faculty recruitment, recognition and donors” (Joseph et al., 2012, p. 3). Branding efforts are proven worthwhile because when doing it right, branding can bring very “positive affective, reputational, and conative consequences” to the HEIs (Bennet & Ali-Choudhury, 2009, p. 97). Understanding the importance of it, the question of how to do branding in HEIs is having some lively discussion.

In the context of the modern world when higher education market is highly competitive (Whisman, 2011), students have more options for their higher education. Thus, HEIs may need to think of a dedicated marketing and branding plan (Bélanger et al., 2014). In fact, many universities and colleges have increased their participation in marketing and branding activities despite all the hesitation and challenges (Bélanger et al., 2014; Pucciarelli & Kaplan, 2019). Some studies have proved that branding efforts

with the focus on the students can enhance brand trust (Idris & Whitfield, 2014), as well as increase “a sense of belonging & encourage their commitment towards the university (Roy et al., 2019, p. 210). Regardless of ranking or reputation, institutions’ administrators are advised to employ marketing and branding activities (Roy et al., 2019). Marketing and branding activities are said to strengthen students’ identification and engagement to the HEIs’ brand (Roy et al., 2019).

Audiences in higher education fields are familiar with the basic running of universities and somehow show no interest in the same brand communication message from HEIs (Pucciarelli & Kaplan, 2019). The competition in higher education can explain why differentiation has been highlighted as a priority in branding positions of HEIs (Bélanger et al., 2014; Chapleo et al., 2011; Pucciarelli & Kaplan, 2019; Steele, 2008). Kotler and Fox (1995) note that “a position describes how a person or group perceived the institution in relation to other institutions” (p. 145). Strong brand positioning can help prospective students distinguish one school to the others and feel easier to choose which institution is more suitable for them (Steele, 2008). Traditional brand positioning theory from Ries and Trout (2001) suggests that a brand must possess “a single key attribute or a core brand promise, preferably one that is credible, valuable, and distinctly different” to win a place in customers’ mind (Steele, 2008, p. 2). The underlying logic behind this theory, as Ries and Trout (2001) argue, is to combat the information-overload problem. With more and more brands of similar products in the market, a brand that can make the customers confident with their decisions and reduce the risk of testing a product will win more market share (Suri & Monroe, 2003). The traditional brand positioning theory explains why HEIs are trying to amplify specific attributes such as excellent in research

and teaching or strong school spirit, in the context of increasing competition in higher education (Melewar & Nguyen, 2015).

Despite the importance of being different, many HEIs are playing the branding game safe by following similar practices (Bolan & Robinson, 2013). HEIs may want to look similar and different at the same time according to strategic balance theory, which highlights that brands aim to be “as different as legitimately possible” (Deephouse, 1999, p. 148). By referring to “legitimate,” Deephouse (1999) claims that a brand should perform in accordance with a set of standards to demonstrate that they belong to a specific field. Although a brand must have some conformity to be considered a player in a particular field, they also need to be different to reduce competition (Deephouse, 1999). Drawing upon the work of Deephouse (1999), Leitch and Motion (2007) promote another model for corporate branding described as “strategic ambiguity” which suggests that institutions who deal with various audience should develop different identities in different “discourse contexts” (p. 76). In each discourse context, the identities also need to follow the rule of balancing between the two ends: normality and uniqueness (Leitch & Motion, 2007). As norms are socially constructed within a specific context and community (Leitch & Motion, 2007), HEIs that deal with various types of audience may have different established norms. Strategic ambiguity enables “divergent interpretations to coexist without these interpretations leading to conflict” (Leitch & Motion, 2007, p. 77). Hence, given the complex nature of multiple stakeholders in education (Chapleo, 2015), strategic ambiguity is an appropriate theory to explore and understand higher education branding (Leitch & Motion, 2007).

In line with strategic ambiguity theory, HEIs may have different brand positions, which are reflected through their communication message, either on their websites

(Rutter et al., 2017), on social media platforms (Bélanger et al., 2014), and collaterals such as view book or brochure (Steele, 2008). HEIs, depending on their competitive roles—leader, challenger, follower, and nicher (Kotler & Fox, 1995)—may choose one or several brand positions. Most brands communicate the two important dimensions of brand value, which are functional value and emotional value (Nguyen & Leblanc, 2001). As defined by Chapleo et al. (2011), functional (cognitive) value is “the basic running of universities in order to manage quality and innovation” and emotional (affective) value is “the empathy characteristics that brands offer to their publics” (p. 29). Specifically, the six variables that HEIs should communicate via their websites are: (a) teaching and research, (b) management, (c) international projection, (d) university environment, (e) innovation, and (f) social responsibility (Chapleo et al., 2011, p. 32). In the context of the modern world, international projection and innovation is significantly relevant (Chapleo et al., 2011). Ninety-five percent of universities in Canada indicated that internationalization is a key element in their strategic planning (Association of Universities and Colleges of Canada, 2014). Innovation and technology are directly related to research, which is a prominent characteristic of HEIs (Chapleo et al., 2011), and in turn helps them attract more funding from stakeholders. Social responsibility is one of HEIs’ key emotional (affective) value, which is an intrinsic characteristic that HEIs should maintain, even in the context of increasingly dominant commercialization (Chapleo et al., 2011).

There are two relevant studies about the content categories that HEIs used on their social media pages: Peruta and Shields (2018) and Bélanger et al. (2014). Peruta and Shields (2018) found 17 themes emerging from 5,932 Facebook posts of HEIs in the U.S., including “promotion, overall information, athletics, campus events, student

achievements, school spirit, new related, research/scholarly/creative, alumni, programming, admissions, academic events, performances and exhibits, student organization, development, entertainment” (p. 183). In Bélanger et al. (2014), the main themes communicated Canadian universities are “campus news & announcement, events related, faculty & staff, students’ engagement” (p. 21).

The literature discussed above provides a picture of content categories from the side of HEIs. The following section outlines what their main audience—students—expect to see from HEIs’ branding messages.

Branding in Higher Education From the Perspectives of Students

One of the most important questions of branding in higher education is: What do the students want from the educational service? (Bock et al., 2014). In Steele’s (2008) study of prospective students in Canada, the students categorized HEIs into five different school types: elite, outcome, campus, nurturing, and commodity (p. 8).

A survey among college applicants in Ontario in 2015 provides similar results when college applicants were asked why they chose their first-choice institutions. The main themes are: “Reputation, Academic, Financial, Outcome, Campus, Extracurricular, and Nurturing factors” (Colleges Ontario, 2016, p. 12). Compared with Steele’s (2008) model, reputation and academic factors can fit into elite school; the financial factor belongs to the commodity school type. The following section discusses the five school types posited by Steele (2008) in greater detail.

Elite Schools

Steele (2008) defines the elite schools as those ideal schools that every student would want to enter. HEIs’ organizational identity is to be determined by whether “they

are elite and exclusive or inclusive and comprehensive” (Bennett & Ali-Choudhury, 2009, p. 88). Elite schools have high reputation in both student experience and in academic quality, and thus have high requirement for admissions (Steele, 2008). The attractiveness of elite schools is their “prestige and academic rigor” (Steele, 2008, p. 6), which brings students a proud feeling of being a part of an elite school. Students in elite schools are supposed to have a holistic development in academics, extracurricular activities, and being care for as individuals (Steele, 2008).

In the education market, elite schools are acting as leaders among four competitive roles as defined by Kotler and Fox (1995): leader, challenger, follower, and nicher. Leaders have an advantage of having a large applicants pool and distinguished faculty so that they are able to set higher admission standard (Kotler & Fox, 1995). However, unlike leaders in other fields who are supposed to be ideal for the majority of customers, the elite position might not be desirable to all types of student applicants (Drewes & Michael, 2006). High admission standard is regarded as a “positive attribute” only among high school students with more than 80% average grade (Drewes & Michael, 2006). Meanwhile, lower grade students avoid spending money and effort in applying to those institutions (Drewes & Michael, 2006), and thus they do not pay much attention to branding activities of elite HEIs.

Among high-achieving students, competitive and high admission standards from elite HEIs can motivate them in pushing harder academically and providing satisfaction when getting admitted to these institutions. A recent video shared from a top world-ranking university on its Facebook page—“That feeling when....”—would be a great example of an elite school position. The video captures the moment of students when

they knew they got accepted into the university. These students, from a diverse ethnicity, showed their exceptionally excited but very genuine emotions, such as crying, screaming, or jumping many times. These reactions can show how happy the students were when their hard work had paid off, and their dream had come true.

Elite HEIs may enjoy the advantage of having a well-established reputation, but with less reputable HEIs, branding and marketing still play a role. Less reputable HEIs can focus on the actual quality of program and offer accredited qualifications because these two factors are ranked even higher than reputation in the U.S. (Bock et al., 2014). According to Bennett and Ali-Choudhury (2009), branding activities can have the potential to change the game if HEIs can do it consistently and strategically over the long run. However, there are contradictory perspectives from students in the U.K., as research by Veloutsou et al. (2004) in the U.K. suggested that reputation of university and department were ranked pretty high, at the 2nd and 3rd positions among 36 different important factors. Similarly, reputation as a decision factor in choosing first choice college in Ontario was ranked 2nd, which accounted for over 70% of applicants' responses (Colleges Ontario, 2016).

It is important to note that ranking of institutions of different sizes is perceived differently by prospective students (Drewes & Michael, 2006). According to research by Drewes and Michael (2006) in the context of Canada, among old and large institutions with broad doctoral and medical programs, students' preference was increased if the ranking of an institution was lower. Students did not pay much attention to ranking when applying to comprehensive, middle-sized HEIs but focused a lot more on ranking when applying to small-sized HEIs (Drewes & Michael, 2006).

Research results and publications could be a factor of the elite school position because it can prove the academic excellence (Bélanger et al., 2014). Elite schools tend to show more research results and institutional achievements (Bélanger et al., 2014). Bélanger et al. (2014) argue that such position can attract “book-smart” students who “would want to be a part of a prestigious school” (p. 24). However, according to an empirical study by Drewes and Michael (2006), research related content is not attractive to both low and high achieving students in Ontario, Canada because they might worry about the fact that the institutions valued research above teaching.

Outcome Schools

As defined by Steele (2008), students consider some outcome factors: “High quality jobs for graduates”; “graduate and professional school placement for graduates”; “co-op programs or internships”; and “relevant industry in the area” (p. 6). According to Steele (2008), outcome schools have a high reputation for academic quality but relatively low reputation in students’ experience. In other words, the outcome schools do not pay much attention to nurturing content as well as promoting campus activities.

Evidence from numerous studies has highlighted the increasingly important role of outcome school as a brand position. “Beginning in the 1990s, the most frequent reason given for attending college had changed to “make a lot of money” (Gereluk et al., 2015, p. 69). “Prospect on graduation” is recommended to use in building HEIs’ brand because it is among what prospective students' value most (Bennett & Ali-Choudhury, 2009, p. 97). Similarly, Bolan and Robinson (2013) state that many students “are said to see higher education primarily as a steppingstone for a successful work career” (p. 576). In

fact, “outcome” is ranked first as a determining factor when choosing a college among college applicants in Ontario in 2015 (Colleges Ontario, 2016).

Most recently, statistics published by Colleges Ontario (2019) found that career preparation was a dominant reason for attending college among college applicants in 2017, accounting for the highest percentage of the survey: 74%. This was higher than that of other traditional values such as personal, intellectual, and knowledge purposes. Similar insights have been found in surveys conducted by LinkedIn and CarringtonCrisp (2016). The 9,898 participants in these surveys were members of LinkedIn across 12 countries, including 325 business school admissions and career service staff in the U.S. and Canada. As defined in LinkedIn and CarringtonCrisp (2016)’s study, “tangible motivators” for gaining a degree such as “increase salary” outperformed “intangible motivators” such as “a passion for learning” (p. 15). This research suggested that HEIs should include tangible motivators in communication message to attract “success driven prospects and students” (p. 15). In response to the students’/customers’ demand, some universities in Ontario adapted the outcome school position, which geared towards job-related messages (Bolan & Robinson, 2013). For example in Ontario, in 1997 Windsor University ran a campaign with a key message “a degree that works,” while in 2001, Western University in the same province promoted the message “Get a Job” by offering internship opportunities (Bolan & Robinson, 2013, p. 576).

The outcome position may not satisfy some educators, although students seem more concerned about career preparation than any other values that higher education offers (Gereluk et al., 2015). The educators argue that education is much more than just launching the students into their jobs (Gereluk et al., 2015). This situation is a great

example of the complexity in doing HEIs' branding, which raises the question about how to take the perspective of various stakeholders into consideration.

Campus Schools

A lively and comprehensive campus life is the strength of campus schools (Steele, 2008). HEIs facilitate students in not only academic study but also in various non-academic activities to provide higher social interactions and connectedness to the school community (Kahu, 2013). As defined by Steele (2008), campus schools focus more on “attractive campus,” “good quality residence,” and “social and extracurricular activities on campus” (p. 6). A campus school promotes a strong spirit and creates great atmosphere for the students to enjoy their student life (Steele, 2008). “Social environment” includes the availability of various students' associations and clubs, as well as the opportunities for social interactions among students, faculty, and staff, which should be promoted in communication message by HEIs (Bennett & Ali-Choudhury, 2009). In an analysis of content that attract higher student engagement, Peruta and Shields (2018) find that “athletics” and “school spirit” can engage students more effectively than “campus events” or “academic events” (p. 186). The majority of “university-led postings” on Facebook among Canadian universities are about “campus/student news and event” (Bélanger et al., 2014, p. 14).

Facility and attractive campus could be influential factors in choosing HEIs among prospective students (Joseph et al., 2012). Students in the U.S. rank “University Campus” as the 4th most important factor in choosing a HEI (Veloutsou et al., 2004), which is just lower than a supposedly most important factor for them: academic reputation (Joseph et al., 2012). The finding in Joseph et al. (2012) reconfirms the importance of HEIs' facilities from the students' perception, when “facilities” is at the 5th

position among 24 different factors in choosing a HEI. The images of university campus, especially new buildings or the buildings with new improvements, are a “prominent subject in the media” of Canadian universities (Veletsianos et al., 2017, p. 13). For example, the photos of “modern and attractive” facilities and natural landscape are captured professionally on social media pages of several HEIs in Canada, which are commonly taken on days with beautiful weather (Veletsianos et al., 2017).

Nurturing Schools

Students describe a nurturing school as “friendly and homey” and “a place to foster individuality” (Steele, 2008, p. 7). A nurturing school highly values individual development, which is a central aspect of their strategy. Some nurturing features could be small-size classes or campus safety and security (Colleges Ontario, 2016; Steele, 2008), the promotion of diversity, inclusion, and social justice, caring for students’ mental and physical health, and professor–student interaction (Colleges Ontario, 2016). Specifically, college applicants in Ontario, Canada pay most attention to professor–student interaction among other nurturing factors (Colleges Ontario, 2016). However, the photos on social media account of Canadian universities focus on mainly peer-to-peer interactions among students, and rarely show faculty-student interactions (Veletsianos et al., 2017). A noticeable effort in depicting a diversified student population has been seen on social media photos of public universities in Canada (Veletsianos et al., 2017), although male and White faculty members are represented in the majority of social media photos (Veletsianos et al., 2017).

In Bennett and Ali-Choudhury (2009), the student supporting service is regarded as the 2nd critical factor of choosing HEIs. Prospective students in the U.S. voted

friendly environment among the top 4 decisive factors (Bock et al., 2014). Although class size may reveal the level of caring for individuals of HEIs, class size had only a small impact on female students while male students shared that class size would not influence their decision in choosing a HEI (Drewes & Michael, 2006). Prospective students in the U.K. do not rank nurturing factors as high as students in the U.S. and Canada, particularly “contact with the lecturers” which ranked 20th among 36 factors (Veloutsou et al., 2004). A study by Bennett and Ali-Choudhury (2009) highlights the importance of diversity promotion in branding message when most student applicants care about the percentage of students with non-traditional backgrounds, such as those with parents who do not hold any higher education qualifications.

A study by Veletsianos et al. (2017) show that collective messages on the media of Canadian universities reveal a feature relating to the nurturing schools brand position, which is positive experience. Positive experience of campus life is commonly promoted on the media of Canadian universities, in which the students are smiling and enjoying their conversations with other students, as well as with faculty members (Veletsianos et al., 2017). These features show the emotional value (Chapleo et al., 2011) and affective aspect of the HEIs’ brands (Bennett & Ali-Choudhury, 2009).

Commodity Schools

According to Steele (2008), commodity schools attract students purely because of financial factors, such as bursaries, scholarships, low tuition fees, low cost of living, and proximity to students’ home. Commodity schools are usually a backup plan for students if they are not accepted into other schools (Steele, 2008). Commodity strategy is in line with the notion of commodification of knowledge, in which the knowledge is a “private good” possessed by the teachers and “can be directly transmitted or sold to the students”

(Gereluk et al., 2015, p. 72). Steele (2008) claims that “no university really wants to see itself as commodity” (p. 7) but some students may choose a university because of commodity factors. When there is demand for commodity factors, some institutions may try to meet that demand so that they get enough students recruited to their program (Bennett & Ali-Choudhury, 2009).

All else being equal, the proximity to students’ home and affordable tuition fees stand out as even more important criteria to prospective students compared to other quiddity features of HEIs (Bennett & Ali-Choudhury, 2009). These quiddity features or the practical and current values might include: the “diversity” of student population; “internal value”; “traditional or contemporary value”; more teaching or more research; “theoretical or practical”, “student dropout rates”; and “faculty qualifications and publication record” (Bennett & Ali-Choudhury, 2009, p. 88). Noticeably, students with lower academic performance “focus more narrowly in a geographic sense” (Drewes & Michael, 2006, p. 795). In Bock et al. (2014), 246 students in the U.S. voted location as the second most important factors in choosing HEIs, as well as financial aid and scholarship among the top 10 criteria. Sixty-four percent of college applicants in Ontario, Canada said that the proximity to home would have a positive impact on their decision and around 54%–56% of them are concerned about financial factors (Colleges Ontario, 2016). Interestingly, merit-based scholarship has the least impact, with 55% of applicants stating that they would not care much about it (Colleges Ontario, 2016). Hence, we can say that the commodity element in higher education branding may not be desirable and or have a big impact on students’ decision.

Social Media in Higher Education

With the emergence of online communication, social media is seen as an effective platform for universities to communicate with students, parents, alumni, and other stakeholders (Bélanger et al., 2014; Peruta & Shields, 2017). Most HEIs want to increase their presence on social media “as an attempt to further market their brand” (Peruta & Shields, 2018, p. 1). The adaption of social media in higher education is one way to catch up with the changes in consumer behaviour, in which the online “word-of-mouth” is shown to “have greater impact on consumer behavior than other traditional marketing means such as printed advertisements” (Bélanger et al., 2014, p. 15). Social media allows uncontrolled communication, in which individuals can talk and share about the institutions without the control of these institutions (Nguyen et al., 2019). Nguyen et al. (2019) highlight the “pivotal role” of social media platforms such as Facebook, Instagram, Youtube, and LinkedIn “in dealing with the potential harm of uncontrolled communication to the brand positioning of HEIs” (p. 258).

As discussed earlier, the main stakeholder, customer, and co-creator of value of HEIs are students. Understanding students’ preferred channels of communication and what they value in higher education is necessary for HEIs’ marketing and communication. The “college-age users” are mostly Generation Y and Generation Z, who have “been crowned as digital natives, a generation who has never known a world without the Internet” (Davis et al., 2012, p. 7). According to a study by Gruzd et al. (2018), in Canada, 88% of Facebook users who are between 18–24 years old and 92% of Facebook users who are between 25–35 years old actively engage on this platform at least monthly. The popularity of social media among young people can explain why

universities are using social media to cater to their current and potential students (Bolan & Robinson, 2013).

Considering that most students are now part of the generation who cannot live without the Internet (Davis III et al., 2012), social media is an appropriate and effective channel to communicate with them. Prospective students used to seek higher education institutions' information from newsletter and websites, but these one-way communication channels can no longer satisfy information-seeking demand of potential students (Galan et al., 2015). Social media enables a two-way communication, which has been preferred by the students (Bélanger et al., 2014) and predicted to continue serving students' information-seeking needs in the future (Peruta & Shields, 2017). Social media interactions of HEIs is in line with the idea of “conversational marketing,” where HEIs can build trust through “healthy dialog” and establish “lifelong relationships with their stakeholders” (Whisman, 2009, p. 369). Furthermore, compared with websites, social media platform enables nurturing relationship between the HEIs and their various stakeholders through day-to-day conversations such as posts from HEIs, like, share, and comment from the audience (Whisman, 2009).

The purpose of using social media in higher education can vary from students' recruitment (Peruta & Shields, 2018); student engagement (Bélanger et al., 2014); branding, broadcasting, and promotion (Veletsianos et al., 2017); and giving learning instruction (Dunlap & Lowenthal, 2009). The preference of using social media to find HEIs' information among prospective students is clearly shown (Hayes et al., 2009), which confirms the importance of using social media in higher education for recruitment purposes (Sandvig, 2016). As Kotler and Fox (1995) have stated, “marketing goes

beyond attracting more applicants” (p. 9), not only in student recruitment; the usage of social media can increase the connection between students and the school (Wilson & Gore, 2013). The feeling of connectedness and belonging can possibly increase students’ engagement. In several studies, connectedness can be increased via positive interaction with peers and faculty members, and social media has been claimed to have positive effect on students’ engagement with the school (Wilson & Gore, 2013). Galan et al. (2015) note the importance of social media as a tool for engaging students through interactive conversations as well as helping them establish relationship with other people such as peers and faculty members. More specifically, social media platforms allow students to create the content by themselves, and communicate with each other, instead of passively receiving information from the university (Galan et al., 2015). As social entities (Kotler & Fox, 1985), HEIs can give their students, internal faculty and staff, and other relevant partners a sense of brand community (Balmer & Liao, 2007) via communication and interaction on their social media pages.

Student Engagement

Student engagement is defined as both “physical and psychological effort” that students have made into their “academic experience” both inside and outside the classroom (Koranteng et al., 2019, p. 1133). Kahu (2019) defined engaging students as those who invest “time and effort” into “interaction and participation” to achieve a “deeper learning and self-regulation” (p. 766). Additionally, the level of engagement can influence their “enthusiasm, interest and belonging” that which lead to “learning achievement and social satisfaction” as an immediate outcome, as well as “higher retention, work success and lifelong learning” as long-term effects (Kahu, 2013, p. 766). In line with Kahu (2013), evidence from some research has shown a positive relationship

between students' engagement and their learning outcomes as a result of higher connection and collaboration between peers (Koranteng et al., 2019). Trust can be established through the communication on Facebook pages of HEIs, which is proven effective in enhancing students' trusts towards the institutions as well as their retention (Nevzat et al., 2016).

Knowing the importance of social interaction, and community belongingness in building a meaningful and fruitful students' experience, many HEIs use social media for the purpose of enhancing student's engagement to the school's activities (Rios-Aguilar et al., 2011; Wilson & Gore, 2013), in both academics and extracurricular activities. Interestingly, the interaction between students and the faculty as well as peer-to-peer relationship play a crucial role in building a strong sense of connectedness for the students, regardless the students' previous academic performance, gender or financial difficulties (Freeman et al., 2007). Besides traditional classroom, any "additional interventions target peer support and interaction may also benefit university connectedness" (Wilson & Gore, 2013, p. 193). Online social networking site is proven to be a great tool to facilitate students' social interactions and engagement (Wilson & Gore, 2013), which is less intimidating for some students who tend to avoid face-to-face activities (Valkenburg & Peter, 2009). An empirical study by Clark et al. (2017) indicates the potential of using social media to enhance the perceived quality relationship between students and their HEIs. Specifically, the more HEIs' social media accounts the students follow, the higher the relationship quality (Clark et al., 2017). The underlying reason, as suggested in this study, is the satisfaction students get from exchanging information and strengthening relationship with peers and faculty members (Clark et al., 2017).

Hence, due to the important purpose of engaging students on social media, the engagement metrics of social media practices of HEIs was further explored, as indicated in the research questions of this study.

Challenges of Marketing and Branding in Higher Education

Acknowledging the essence of marketing in higher education, there are still a lot of challenges when it comes to marketing and especially branding in this field. First, successful branding could be referred to some cases in which corporates own a word in the mind of customers (Ries & Trout, 2001; Temple, 2006). It is hard to find such a consensus in universities' branding because the HEIs' mission and value are diversified into various dimensions (Roper & Davies, 2007; Steele, 2008; Temple, 2006), including but not limited to students' academic development, social justice, research hub, producing employable graduates, and much more. In addition, higher education can be too diversified and complex to be defined by a brand position (Chapleo, 2015; Wæraas & Solbakk, 2008). HEIs serve multiple audiences (Kotler & Fox, 1995) as defined earlier in this paper, which makes branding for HEIs even more challenging (Wæraas & Solbakk, 2008). The reason is that each "public" has their own needs and wants, as well as different relationship with HEIs, and thus they ultimately hold various, and at times conflicting, viewpoints.

A second challenging factor for higher education marketing is that the key results of HEIs' services, which are students' skills and knowledge, are dependent on many different factors, not just the institutions' effort (Temple, 2006). Unlike the roles of other service providers and customers, students are pretty much responsible for their own development during the time at universities and colleges (Naidoo et al., 2011; Temple,

2006). No single factor such as education, family support, or a student's own talent can fully explain their success in academics, and their career after graduation, not to mention the fact that different students can have different definitions of success. This fact leads to a vagueness and complexity in communicating outcome of education (Temple, 2006). Considering the active role of students in co-creating value as well as the possessed knowledge and skills before joining HEIs, it could be simplistic and not convincing to claim that HEIs play a dominant role in the success of any students.

The third challenging factor is choosing which values to promote in marketing activity. In the value creation process, "value is always uniquely and phenomenologically determined by the beneficiary" (Hughes & Brooks, 2019, p. 162). The education experience and students' life in HEIs is uniquely different from student to student as beneficial, even for those in the same program of study. This is due to the varying degree of students' involvement in campus life and their expectation of academic results. Even when students get benefits from the knowledge they learn at HEIs, there is no clear measurement "for the usefulness of knowledge provided well ahead of utilization" (Hughes & Brooks, 2019, p. 162). When the students are able to use the knowledge, it usually takes years after graduation to prove the usefulness (Hughes & Brooks, 2019).

Debates of Marketing in Higher Education

Marketing is a "central activity" of HEIs to "survive and succeed" in the market (Kotler & Fox, 1995, p. 7). As defined in Kotler and Fox (1995): "Marketing is the analysis, planning, implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with target market to achieve institutional objectives"; however, "marketing has the image of being primarily a function for profit-making enterprises" (Kotlet & Fox, 1995, p. 6). For that reason, Kotler

and Fox argue that although education administrators are practicing similar structure with business organization in terms of finance, accounting, planning, and public relations, they are still hesitant in adopting marketing.

Historically, it appears as though universities did not pay significant attention to marketing activities (Hirsch, 1895; Williams, 1913). Thus, while the “private sector could not survive without a proven marketing practice such as branding, institution took some time to warm to this concept; when they did it, it was not without some controversy” (Bélanger et al., 2014, p. 16). Faculty members have expressed their concern in adapting such a corporate-like strategy of marketing (Chapleo, 2010). The school administrators and faculty members often feel that students should seek out schools for the sake of their education, which is ultimately beneficial for them (Kotler & Fox, 1995), instead of the HEIs looking for their students.

Temple (2006) also raises concerns about marketing activities in HEIs, stating that “the search for knowledge is an end itself and the need for university to sell them in the market are the two conflicting views of what the university should be trying to do” (p. 17). Marketization in higher education raises concerns about “the very essence of what higher education for” (Chapleo & O’Sullivan, 2017, p. 159). Some administrators, faculty, and alumni claim that “marketing is incompatible with the educational mission” (Kotler & Fox, 1995, p. 13), because marketing is “hard selling” and “cheapen education” (Kotler & Fox, 1989, p. 14). Promoting a study program in the market intensively may be contradictory with the idea that educational values are considered “to be good in themselves, or valued for their own sake, rather than for some predetermined aim or objective” (Gereluk et al., 2015, p. 74).

Due to the above-mentioned challenges and debates of higher education marketing, some researchers claim that branding in education should be referred as reputation management (Temple, 2006). There are overlapping factors between reputation management and marketing. While marketing is easier to manage, “reputation management is often more comfortable for internal audience to discuss” (Chapleo, 2011, p. 412). However, HEIs may want to employ more marketing and branding activities as they want to change their existed brand positioning (Kotler & Fox, 1995), regardless of their reputation. Also, in the context of increased competition, there may be more HEIs with the same level of reputation, which leads to a need of differentiation (Pucciarelli & Kaplan, 2019). HEIs cannot prove and showcase their distinctive features of to the public without marketing and branding. Over the years, smaller efforts of brand management can lead to a higher reputation for HEIs (Bennett & Ali-Choudhury, 2009).

Chapter Conclusion

This chapter discussed the nature of the higher education business, which is integral knowledge for understanding higher education management. Generally, HEIs are considered as service providers who are dealing with multiple publics and are operating in a quasi-commercial market. The value co-creation of knowledge between HEIs and their “publics” who include students, employers, community partners, funding bodies, to name a few, has made higher education a unique industry and also brought a lot of challenges to marketing and branding. Particularly, various publics and the comprehensiveness of educational outcomes are the two main features making it difficult to unify marketing and branding communication messages.

The higher education market is in a highly competitive context where every institution needs a strategic marketing and branding communication plan (Nguyen et al., 2019). Despite controversy of commercialization and marketing in higher education, HEIs are still actively involved in more and more marketing and branding activities both to recruit new students and engage current students. The social media presence is a big part of marketing communication, where most prospective students will look at when they are searching for HEIs. Hence, a study of social media strategy and brand positioning on social media are necessary for practitioners in marketing of HEIs, for the purpose of reviewing and planning social media communication.

While Chapter 2 provided foundational knowledge in the area of branding and social media in higher education, the next chapter presents the details of research methodology and implementation.

CHAPTER THREE: METHODOLOGY

This chapter provides a comprehensive description of the research implementation plan, including the mixed-method approach; a theoretical framework of strategic balance and strategic ambiguity as per branding strategy; and a conceptual framework as a guideline for brand position categorization. The rationale of choosing Facebook and sample selections are also given with explanations. The variables of posting strategy and proportional engagement metric are defined for the process of collecting and analyzing data. Limitations are then discussed at a deeper level from Chapter 1, and finally, the last section of this chapter concludes the main findings of this research.

Mixed Methods Research

This study investigated the social media strategies of selected universities and colleges in Ontario in 2019. To have a complete picture of social media strategy, both posting strategy as quantitative data and content strategy as qualitative data were collected and analyzed. A mixed methods approach was used in this research to answer the research questions mentioned in Chapter 1, which was specifically the convergent parallel mixed methods design (Clark & Creswell, 2015). Using this method, both quantitative data and qualitative data were collected at the same time (concurrent timing) and hold an equal level of priority in answering the research questions (Clark & Creswell, 2015). The results of both qualitative and quantitative data analysis were combined to develop valid and complete conclusions for the subject matter (Clark & Creswell, 2015)

The use of mixed methods research design was found in similar studies about social media in the field of higher education. In Veletsianos et al. (2017), the authors examined HEIs' strategy on Twitter such as post frequency and narratives constructed

through their post content and images. Peruta and Shields (2017, 2018) focus on two important aspects of social media practice: posting strategies and content on Facebook pages of universities in the U.S. Similarly, this paper also investigated the social media strategy of HEIs using both quantitative data and qualitative data.

To analyze social media strategy of HEIs, this research collected quantitative data as metrics of Facebook posts, following Peruta and Shields's (2017) "descriptive statistics of posting strategies and engagement" (p. 137). The statistics include the number of posts, post types, and engagement as main variables. To define HEIs' brand positioning, qualitative data as post content on the HEIs' Facebook pages was also examined.

Rationale of Facebook Selection

According to Gruzd et al. (2017), Facebook is the most popular social media platform compared to Twitter, LinkedIn, and YouTube, and 79% of Canadians visit Facebook daily. As much as 95% and 94% of young Canadians who are 18–25 and 25–34 years old, respectively, are active users of Facebook (Gruzd et al., 2017). Acknowledging the popularity of Facebook among younger people, at least 106 universities in Canada have Facebook pages (Veletsianos et al., 2017). According to a study by Morris et al. (2010), in a university in America, persistent students are more likely to involve in "university-based relationship" on Facebook than non-persistent students (p. 311). Morris et al. (2010) highlight that Facebook is a tool for HEIs' administrators to enhance students' experience through social interactions and connections.

Meanwhile, LinkedIn is the second most popular platform in Canada according to Gruzd et al. (2017). However, LinkedIn is a professional social media platform, in which HEIs could be inclined to post more career-related content. HEIs' communication on LinkedIn may not reflect all five content angles from Steele's (2008) conceptual framework of school positioning and may choose to be more of an outcome school due to

the purpose of a more career-oriented communication platform. Twitter is also another popular social media platform in Canada, which is ranked fourth after YouTube in popularity (Gruzd et al., 2017). Research has shown that “Twitter is generally much more popular to carry conversations, but Facebook remains the preferred website for university-initiated postings” (Bélanger et al., 2014, p. 26).

This paper chose to analyze Facebook pages because it investigated post content created by HEIs, rather than analyzed what people were talking about on HEIs, which is claimed to be the focus of Twitter communication (Bélanger et al., 2014). Also, Facebook posts allow the usage of more characters than that of Twitter. Hence, Facebook is a more suitable platform to analyze HEIs branding strategy via content of their posts.

Theoretical Framework

From the analysis of literature on branding in Chapter 2, “strategic balance” (Deephouse, 1999) and “strategic ambiguity” (Leitch & Motion, 2007) were chosen as the two theories to guide this research. From strategic ambiguity theory, in the higher education field, conflict of demands from multiple stakeholders (ex-students, alumni, parents, and internal staff) can make it difficult to find a unique brand position that can satisfy all types of audiences (Leitch & Motion, 2007). HEIs may show different brand positions on their media communication, and each position can be a balance point within a discourse context (Leitch & Motion, 2007). For example, the career preparation aspect of outcome school position can serve the students well as their attention to this area is the highest (Colleges Ontario, 2016). However, career preparation content may not satisfy some faculty members who think that education is more than just landing students a job after graduation (Gereluk et al., 2015). Similarly, innovation and technology aspect of elite school position is a great way to showcase to stakeholders who have invested in the

HEIs or have the potential to give funding and collaborate with HEIs (Chapleo, 2011). Meanwhile, students may not pay much attention to this aspect compared to career preparation (Colleges Ontario, 2016).

From the strategic balance theory, some HEIs can value one brand position more than the others or they want to promote that brand position stronger than other positions (Deephouse, 1999). That is when they need to selectively choose one identity and sacrifice others (Leitch & Motion, 2007). On the same communication channel, one brand position can make them unique, because it is easier for all types of audience to recognize. For example, a prestigious HEI with a high ranking may choose to follow elite school position, showcasing innovation and new technology projects as a result of dedicated research activities (Bélanger et al., 2014). A small HEI in a remote area can be proud of its nurturing teaching and studying environment, when audiences can see a lot of smiles from students and faculty on their media channels (Veletsianos et al., 2017).

Hence, it can be said that the two theories are necessary to be the foundation of understanding branding direction of HEIs. HEIs may employ more of strategic balance or more of strategic ambiguity as per their branding strategy.

Conceptual Framework

To define the brand positioning of HEIs via Facebook post content, a conceptual framework about branding were to be generated. This paper used pre-determined coding (Clark & Creswell, 2015) and opened to any emerging codes during the process. Based on the literature review about branding of HEIs in Chapter 2, the five school types (Steele, 2008), communication variables of HEIs (Chapleo et al., 2011), and content categories on HEIs' Facebook pages (Peruta & Shields, 2018) were used to guide the content analysis of this study, as shown on Table 1.

Table 1*Descriptions of Brand Positioning by Content Categories*

Institutional brand Positioning	Content categories
Elite (Steele, 2008)	Teaching and research (Colleges Ontario, 2016); innovation & technology (Chapleo et al., 2011); ranking, award (Colleges Ontario, 2016)
Outcome (Steele, 2008)	Career preparation (Steele, 2008)
Nurturing (Steele, 2008)	Friendly environment, caring for individuals, security (Steele, 2008); diversity and inclusion (Colleges Ontario, 2016)
Campus (Steele, 2008)	University environment (Steele, 2008); international projection, social responsibility (Chapleo et al., 2011); athletics, campus events, school spirit, alumni, programming, performances and exhibits, student organizations, entertainment (Peruta & Shields, 2018)
Commodity (Steele, 2008)	Proximity to home, scholarship, funding, promotion (Steele, 2008)
Other information	Admissions, administration (Peruta & Shields, 2018); management (Chapleo et al., 2011)

Ranking and awards of HEIs, faculty, staff, students, and alumni were included in the categories of elite school because it can induce proud feeling for all relevant audiences. Management, recruitment information such as program and admission, administration, and student story do not fit into the five school positions (Steele, 2008), which are all regarded in one category as other information. This research used Table 1 to guide the process of categorization of brand positioning on the content of Facebook posts.

Facebook Engagement Metrics

Engagement metrics are commonly monitored to measure the effectiveness of social media strategies (Peruta & Shields, 2017). In Leckie et al. (2016), the customer brand engagement was shown through the involvement, participation, and self-expression of the customers. Hence, the more online audiences involved in the social media activities of HEIs, the more likely that the brand engagement level of the HEIs increased. Based on the “Framework of Factors of Customer Brand Engagement” suggested by Perreault and Mosconi (2018), metrics that can measure the engagement level of audience on social media pages of HEIs are: “number of followers, number of likes, number of views, number of comments, number of shares, number of fans, click-through-rate, posting on the page, conversion/buy” (p. 3572). In a meta-analysis of relevant literature about engagement metrics, “comment,” “like,” and “share” receive the most attention from the researchers by having the most mentions in relevant researches (Perreault & Mosconi, 2018). It is important to note that the publicly available data at post level include only the number of likes, comments, and shares (Peruta & Shields, 2017). The descriptions of metrics are summarized below:

- Likes: The audience reaction to a user content by clicking on the “like” option of the post, which shows a positive feeling towards a specific post (Peruta & Shields, 2017). In the context of 2020, Facebook have numerous types of feeling reaction

such as “love,” “haha,” “wow,” “sad,” and “angry” in addition to the “like” option. Hence, in this paper, the number of reactions was to be examined as a total number of all types of feelings, not just “the number of likes.” The reaction on post requires the least effort from the audience (Peruta & Shields, 2017), which is typically the largest number among that of shares and comments.

- Shares: The action of disseminating a page’s post through the audience’s social media accounts, by clicking on the share option of the post. This action requires a little bit more effort than reaction as users need to click twice to complete it (Peruta & Shields, 2017)
- Comments: The action of “making a remark on the original post content” (Peruta & Shields, 2017, p. 133). Making a comment requires more effort than shares and reactions because the users need to create content and spend time to type it (Peruta & Shields, 2017).

In Peruta and Shields (2017), the engagement level of each post is calculated as proportional engagement rate, which is equal to “(Likes + Comments + Shares)/ Number of page likes at the end of the sample date” (p. 134). This formula considers the fact that just the total number of likes, comments, and shares cannot prove the effectiveness of engagement, which need to be divided by the number of page likes. In this study, the number of reactions replaced the number of likes, and the denominator of the formula was changed to the date collecting data of this research (May 15, 2020) due to the availability of this data. Hence, the formula now becomes:

$$\frac{\text{Reactions} + \text{Shares} + \text{Comments}}{\text{Number of page likes at the end of May 15, 2020}}$$

Quantitative and Qualitative Data—Variable Definitions

To answer the Research Question 1 (RQ 1) about posting strategy of HEIs, several types of quantitative data and qualitative data were included. According to Peruta and Shields (2017), any “post-level data” from the HEIs can be called “posting strategy” (p. 136). The posting strategy in this research includes: length of the post (number of characters), post types, post timing, and the use of hash tags. Specifically, following Peruta and Shields’s (2017) research, to have a full picture of posting strategy and its effectiveness, the types of data collected were:

- Post -level quantitative data:
 - Post types: Photos, links, statuses, and videos;
 - Post engagement (number of reactions, shares, and comments);
 - Post timing: Time, days of the weeks, date.
- Page-level quantitative data:
 - Page likes on a particular day (May 15, 2020) to calculate proportional post engagement rate.
- Post-level qualitative data:
 - Text of the post;
 - Hash tags.

Post timing is an important indicator of social media practice as it indicates the frequency of posting, as well as what days of the week and what time of the day the HEIs prefer to post as per their strategy. Post frequency is a topic that attracts some discussions from previous researchers (Peruta & Shields, 2017). Bélanger et al. (2014) argue that although being active on social media page can help HEIs gain some

advantage over its competitors, posting too frequent can be counterintuitive. Peruta and Shields (2017) found a negative correlation between posting frequency and post engagement, which means that HEIs that post more frequently can have less engaged than those who post moderately.

Regarding the post types, Peruta and Shields (2017) suggested using photographs to increase engagement on post and limit the post with link to another webpage. The authors also found that universities in the U.S. posted photos most frequently, at over half of all the posts, while videos (at 8%) and status (at 4%) were the least frequently used.

Hash tags are frequently used as a mean for audiences to follow a particular topic/issue (Veletsianos et al., 2017). Veletsianos et al. (2017) found that HEIs in Canada did not use hash tags for navigating to a particular topic, instead they were more likely to use hash tags that includes their own names.

Sample Selection

Previous research such as Bélanger et al. (2014) and Velesianos et al. (2017) used a census approach, in which all the universities in Canada were chosen to study. This research aimed to look at more deeply about social media strategy of some selected universities and colleges in Ontario, given first the limitation of time and resources of a major research paper, and second the possibility to generalize research findings. To select some representative colleges and universities, the grouping of these institutions was to be conducted.

Table 2*Number of Students in Universities in Ontario as of September 2019*

No.	University	No. of students	Group (small-, mid-, or large-size university)
1	University of Toronto	84,300	Large
2	York University	47,400	Large
3	University of Ottawa	38,100	Large
4	University of Waterloo	37,800	Large
5	McMaster University	33,100	Large
6	Ryerson University	31,400	Large
7	Western University	30,200	Large
8	University of Guelph	27,000	Large
9	Queen's University	26,400	Large
10	Carleton University	25,600	Large
11	Brock University	17,100	Mid
12	Wilfrid Laurier University	16,700	Mid
13	University of Windsor	14,700	Mid
14	Trent University	9,420	Mid
15	University of Ontario Institute of Technology	9,420	Mid
16	Lakehead University	7,400	Small
17	Laurentian University	7,040	Small
18	Nipissing University	3,880	Small
19	OCAD University	3,620	Small
20	Algoma University	1,100	Small

Table 3*Number of Students in Colleges in Ontario in the Fall Term 2019*

No.	College	No. of students	Group (small-, mid-, or large-size college)
1	Humber College	26,749	Large
2	Seneca College	23,300	Large
3	George Brown College	21,421	Large
4	Sheridan College	20,355	Large
5	Centennial College	20,046	Large
6	Algonquin College	19,385	Mid
7	Fanshawe College	18,150	Mid
8	Conestoga College	15,386	Mid
9	Mohawk College	14,456	Mid
10	St. Clair College	12,441	Mid
11	Durham College	11,624	Mid
12	Georgian College	11,351	Mid
13	Niagara College	10,679	Mid
14	St. Lawrence College	8,795	Small
15	Sir Sandford Fleming College	6,679	Small
16	Cambrian College	6,223	Small
17	Lambton College	5,406	Small
18	Canadore College	4,892	Small
19	Confederation College	3,360	Small

HEIs with a similar number of students supposedly have a similar number of potential audiences on their Facebook pages. HEIs can learn from the social media analysis of another HEI that they consider at the same competitive level with them in terms of the ability to attract new students and retaining current students. Hence, the size of the HEIs was chosen to be criteria for groupings. Universities and colleges reach “the optimal economy of scale” when their sizes are within 9,000 and 20,000 (Bascia et al., 2005, p. 385). Hence, this paper used 9,000 and 20,000 as breaking points for small-, mid-, and large-size HEIs. Table 2 is a ranking of Ontario universities based on the number of students enrolled in 2019, including full-time students, at both undergraduate and graduate levels. The data of university enrolments were extracted from the Universities Canada (n.d.) website. The university list was arranged in a descending order of sizes. Similar process was repeated for college groupings. The data of college enrolments in 2019 includes the number of full-time students at both undergraduate and graduate levels. The data were extracted from the Government of Ontario’s (2019), which excludes French Colleges: Collège Boréal and La Cité Collégiale.

In each group, one institution was chosen randomly to be in the sample of this study. A pseudonym was assigned to each institution to ensure confidentiality, which could keep the brand name of HEIs in the study being untouched in any analytics and results discussion. The pseudonym used for a randomly selected large-sized university is UL, mid-sized university is UM, and small-sized university is US; similarly, a randomly selected large-sized college was selected as CL, mid-sized college was CM, and small-sized college was CS.

Data Collection Procedures

The quantitative and qualitative data were collected from the official Facebook pages of the six HEIs in Ontario. The data were organized in the following order on an Excel file: Post content, Number of character per post, Number of comments, Number of reactions, Number of shares, Post type, Month, Date, Date, Time, Brand positioning, Further content description, and Audience targeted. Previous research such as Bélanger et al. (2014) and Peruta and Shields (2017, 2018) use Facebook API to extract data from Facebook page of HEIs. According to the research, no permission from page administrators is required to extract data from a public Facebook page using Facebook API. At the time conducting this research, Spring 2020, according to the page Facebook Developer, only three page roles, namely administrator, advertiser, and analyst can access the data from a Facebook page. Being an independent researcher, I only collected the publicly available data, which everyone can easily see on the Facebook page of the chosen HEIs. Within the scope of this research, I used a social media management tool named Napoleon Cat to extract post-level data of selected HEIs. The post-level data of each selected HEI were imported into an excel file, in chronological order based on the posting date and time.

This research study collected data from the Facebook posts in 8 consecutive months (September 1, 2019 to April 30, 2020) in order to have a complete picture of one academic year, which included the main academic terms: Fall and Winter terms. Most often, Spring and Summer are optional times to register for courses. Hence, the 8 months can potentially cover major academic and extracurricular activities of HEIs in the context of Ontario, Canada. Peruta and Shields (2017, 2018) looked at Facebook post-level data

in 2 separate months, September and April of the same academic year, while Bélanger et al. (2014) collected data from Facebook and Twitter in 6 consecutive months: from August to January to cover one full semester. The 8-month data in this research were used to ensure the coverage of the majority of HEIs' activities, starting from the first month coming back to school (September) to the end of the Winter term (April). Also, branding and social media strategy of each HEI can be more clearly revealed with more data throughout a longer time span. HEIs are likely to have different social media strategies during different terms of the year, which may serve specific marketing purposes in that period (Peruta & Shields, 2017). For example, HEIs may focus on being a nurturing and campus school in September to welcome new students but more of an elite and outcome school in April to attract attention of prospective students.

Data Analysis

The data analysis is presented in two sections: (a) content and post type categorizations, and (b) descriptive statistics.

Content and Post Type Categorizations

After having all the data on the Excel file, I started to organize the data and conduct in-depth thematic analysis for “identifying, analyzing, and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). Based on previous research to pre-defined codes (as described in Table 1), I used the deductive approach to categorize the post, and allowed the emergence of new themes, to provide a “rich description of the data set” (Braun & Clarke, 2006, p. 83) rather than focusing on one particular aspect. The objective of the analysis was to identify “semantic themes” of the posts to form the

description of the data and then come to the interpretation, providing meaning and implication (Braun & Clarke, 2006, p. 84).

The data analysis started with a coding process of post content. I used the Model of the Process of Coding, Refining Codes, and Building Qualitative Findings in Clark and Creswell (2015, p. 361) with specific modification for this research as described below:

- All posts' text collected from the Facebook pages of six HEIs from September 1, 2019 to April 30, 2020; the collecting process familiarize me with the posts' content.

- Each post is a segment.

- “The researcher labels the segment with codes” (Clark and Creswell, 2015, p. 361), using the content categories as described in the 2nd column in Table 1.

Specifically, I read the content of every post and see if it matches with any of the codes. Content that does not fit into any pre-determined codes was assigned a new name as an emerging code.

- “The researchers reduce the redundancy among the codes,” with any codes that sound similar to each other (Clark and Creswell, 2015, p. 361). For example, employer award and research award of HEIs were labeled award which fit into the category of Elite school position;
- Based on the codes, the researcher categorized these content into either the five brand positioning or other information.

After the content was given codes and themes, target audience of the content was considered. From the discussion of literature in Chapter 2, HEIs have various types of audience. This research focused on only the current students as per HEIs' engagement

activities and prospective students as per their recruitment activities. Specifically, in this research, any content about Recruitment was directly related to Prospective students, content about Administration, Campus and Nurturing were related to Current students, other content assumingly targets both types of audience.

Regarding the categorization of post types, any post that uses a combination of two or more types, the type of post was coded according to the types on the right-hand side of the order: status, link, photo, video. For example, a status is a post with only text. “Link” posts include a link, may or may not have any text. “Photo” posts include photos, may or may not have texts and links. “Video” posts include a video, may or may not have texts, links, and photos. The next step is the calculation of the number of characters per post. Then the proportional engagement rates at post level were calculated using the formula of Facebook engagement metrics as defined earlier.

Descriptive Statistics

Following Peruta and Shields (2017), a descriptive statistic of posting strategy and engagement data were created in a separate excel file, counting the number of posts in each data types as variables and the proportions of them. Particularly, the variables include:

- Total post, post frequency, number of characters per post, average hash tag per post;
- Post type: status, link, photo, video, and percentage of these types;
- Post schedule: day and time of posts; and percentage of these schedules;

- Post engagement: page like, total comment, like, share, proportional engagement; engagement of post types, engagement of post time and post day, engagement of brand positioning;
- Branding positioning: Elite, campus, nurturing, outcome, commodity, and Other information (administration, recruitment, management, and other emerging codes).
- Target audience: current students, prospective students, and both types of audiences.

Once the calculated number of variables and their proportions were revealed, the data provided patterns of the HEIs' social media practices as a part of this research's findings (RQ 1.1, 2.1, and 3.1). To see if there are any significant differences of engagement level when using different social media practices (RQ 1.2, 2.2, and 3.2), I imported the proportional engagement rate of the variables into SPSS and run the independent sample t-test. The t-test results provided proofs of effective practices, which served as recommendations for future practices.

Limitations

Regarding the sample selection, data collection procedure, and data analytics, there are some limitations of this research. The first is that within the context of higher education in Ontario, Canada, the selected universities and colleges may not represent other institutions with the same students' population, in terms of their posting strategy and brand positioning. The ability to generalize is limited. For example, School A and School B could be both middle-sized universities, but School A may prefer talking about its campus activities while School B focuses more on career preparation. Also, School A

may post two to five posts per day, but B thinks that only one post per day is effective enough to engage their Facebook fans. Providing the limited time of this major research paper, the selection of 6 institutions was appropriate and manageable.

The use of the social media management application to collect data instead of using Facebook API could expose some risks of inaccuracy. I applied the method of randomly cross-checking the data collected from the tool to the actual data on Facebook pages. As the application does not allow downloading data directly to Excel file, the process of copy and paste data from the Napoleon Cat application to an Excel file may have some unwanted mistakes. To minimize the risk, randomly cross checking the data in the Excel file to the data on Facebook pages was conducted.

Regarding the engagement rate, some important factors such as click-through-rate, views on video, impressions on post were neglected because these data were not available to the public. Engagement metrics in this paper was simplified due to the availability of public data but the metrics were more comprehensive than just Reactions, Likes, and Share (Perreault & Mosconi, 2018). For the proportional engagement rate of each post, it is more accurate to use the number of fan at the end of the same day rather than using the number of fan on a chosen date after collecting the data to apply to all posts. The number of fans may change after several months. Hence, the actual proportional engagement rates of some posts may be different than the calculated data in this research.

It is important to note that the first quarter of 2020 witnessed an outbreak of the COVID-19 pandemic. As social entities where various people such as students, faculty member, and staff interact every day, HEIs need to have necessary communication

message to mitigate the negative impacts during this hard time, and “electronic communication” seems to be the most effective way of disseminating information (Van et al., 2009). Hence, the pandemic situation may shift HEIs’ attention to addressing students’ need during this challenging time rather than following their well-planned branding strategies. However, the ways they communicated during pandemic may reveal some aspects of their brands in the special time, which showed how HEIs as organizations flexibly reacted to unexpected circumstances (Austin & Jin, 2017).

Chapter Conclusion

This chapter served as a full description of the methodology and method applied in this research. Mixed-method approach was needed to answer the research questions. The adaptation of both the strategic balance (Deephouse, 1999) and strategic ambiguity (Leitch & Motion, 2007) theories was proposed to have a broad view for understanding branding directions of HEIs. The five school-type positioning proposed by Steele (2008) were added by detailed descriptions of each positioning, which were combined with several relevant studies to form a conceptual framework guiding the thematic analysis. The sample includes six representative institutions in Ontario, Canada, given the scope of a major research paper. Facebook was chosen to study due to its popularity in Canada, as well as the feasibility and appropriateness to study brand positioning through post content on this platform. As per the data collection process, a social media management application was used to aid the 8-month data extraction process from six Facebook pages. To do the data analysis, a manual coding process was employed, using the procedure suggested in Clark and Creswell (2015) and thematic analysis in Braun and Lescault (2006), as well as running several Excel calculations for post characters and proportional

engagement rates per post. Then the data were imported into SPSS to provide inferential statistics of several posting practices and engagement. The next chapter presents the research results based on the research questions in details.

CHAPTER 4: PRESENTATION OF RESULTS

This section presents detailed answers for the three research questions in Chapter 1 as well as their sub-questions. In general, social media and brand positioning strategies of selected HEIs in Ontario in 2019-2020 were revealed through the collected data and statistics.

Social Media Strategy

To answer RQ 1, quantitative information about characteristics of individual posts was collected, which potentially provides full picture of the institutions' social media strategy as shown in Table 4. There were 1,789 posts collected from the Facebook pages of six institutions over 8 months (September 1, 2019 to April 30, 2020), which was equivalent to 243 days. On average, these institutions posted 1.23 times per day, with the highest number of 2.13 posts and the lowest number of 0.79 posts. Both universities and colleges preferred using photos with posts, representing 74% and 66%, respectively. In general, universities posted more links and fewer statuses than colleges, but they both had the same percentage of video posts (at 12%). These institutions preferred to post on weekdays (over 90%), especially on Wednesday and Thursday, rather than weekends (under 10% totally). Colleges were more likely to post in the afternoon (56%) while universities chose to post in the morning (70%); neither rarely posted in the evening (under 10%).

Social Media Strategy of Universities

From Facebook pages' data of the three universities (UL, UM, US), 1,108 posts were collected. Overall, the post frequency of universities is higher than colleges, at 1.52 posts, with shorter posts, at 198 characters on average. Universities use 0.6 hash tag per posts, which doubled that number of colleges. Details of all variables for each university are presented as follows.

Table 4*Descriptive Statistics of Social Media Practices*

Items	UL	UM	US	CL	CM	CS	University	College	Overall
Posts									
Total post	236	517	355	221	193	236	1108	681	1789
Post frequency	0.97	2.13	1.46	0.91	0.79	0.97	1.52	0.93	1.23
Characters/post	231	209	159	295	355	231	198	326	246
Hash tag/post	0.36	0.27	1.25	0.38	0.23	0.36	0.60	0.37	0.51
Post types									
Status	0	8	4	28	11	0	12	39	51
Links	154	38	44	9	43	154	236	58	294
Photos	31	445	254	150	118	31	730	503	1233
Videos	51	26	53	34	21	51	130	81	211
Percent									
Status	0	2	1	13	6	0	1	6	3
Links	65	7	12	4	22	65	21	9	16
Photos	13	86	72	68	61	13	66	74	69
Videos	22	5	15	15	11	22	12	12	12
Post day									
Monday	40	87	57	43	43	55	184	141	325
Tuesday	45	98	59	37	30	49	202	116	318
Wednesday	44	110	67	46	27	63	221	136	357
Thursday	45	111	63	38	32	50	219	120	339
Friday	45	88	63	48	42	33	196	123	319
Saturday	10	12	32	9	10	14	54	33	87
Sunday	7	11	14	0	9	3	32	12	44
Percent									
Monday	17	17	16	19	22	21	17	21	18
Tuesday	19	19	17	17	16	18	18	17	18
Wednesday	19	21	19	21	14	24	20	20	20
Thursday	19	21	18	17	17	19	20	18	19
Friday	19	17	18	22	22	12	18	18	18
Saturday	4	2	9	4	5	5	5	5	5
Sunday	3	2	4	0	5	1	3	2	2
Post time									
Morning	144	459	172	74	98	89	775	261	1036
Afternoon	86	51	168	130	86	164	305	380	685
Evening	6	7	15	17	9	14	28	40	68
Percent									
Morning	61	89	48	33	51	33	70	38	58
Afternoon	36	10	47	59	45	61	28	56	38
Evening	3	1	4	8	5	5	3	6	4

As can be seen from Table 4, UL as one university in the large-sized university group posted 236 times throughout 8 months, with 0.97 post per day on average. The frequency was the lowest compared to UM and US, although UL had the largest student population and fans on its Facebook page. Meanwhile, UL tended to use longer posts with more characters, which were 231 characters on average, with an average of 0.36 hash tag on each post. The most preferred type of posts by UL was links, which accounted for 65% of all posts. Video was the second most popular type of post, making up 22%, which doubled that of photo, at only 13%. It is important to note that, even when using only links, the posts show an image from the page that the links direct to. UL had a pretty equal distribution of posts during the weekdays, ranging from 17% to 19% each day. Much smaller percentages of posts were found on Saturday and Sunday, at only 4% and 3%, respectively. Most frequently, UL chose to post in the morning, at 61%, 35% was posted in the afternoon, and very rarely UL posted in the evening, at only 3%.

Noticeably, UM as a mid-sized university, posted most frequently, at 2.13 times per day, which resulted in a significantly higher number of posts after 8 months compared to that of UL, at 517 and 236, posts respectively. With higher post frequency, UM wrote shorter posts, at 209 characters on average. Not as many hash tags were used, at only 0.27 hash tag per post. The majority of posts used photos, accounting for 86%, while status, link and video made up below 10%. Similar to UL, UM had almost equal distribution of post during weekdays, ranging from 17%–21% per day, with more posts on Wednesday and Thursday. Most of the posts were scheduled in the morning instead of afternoon and evening, representing 89%, 10%, and 1%, respectively.

US, which was a small-size university, had fewer posts than UM but more than UL, at 355 posts in total during 8 months (equivalent to 1.46 posts per day). US preferred

short content and the use of hash tags, with only 159 characters on average and almost every post having hash tags (1.25 average). US shared a similar pattern of post type with UM, with the majority of posts had photos (at 72%). They also gave a fair share of posts for videos, representing 15%. Status was not preferred, which is similar to UL and UM, accounting for a negligible number of 1%. US also scheduled posts on weekdays, with the most posts on Wednesday. US had a higher percentage of posts on weekends compared to the other two universities, at 13% totally. Approximately equal percentages of posts were aired in the morning and afternoon, at 48% and 47%, respectively.

Social Media Strategy of Colleges

In general, colleges had dramatically fewer posts compared to universities, at 681 and 1,108 posts, respectively, during the same period. Instead, they tended to write longer content. CL as the largest college in the sample, posted 221 times (0.91 post per day) with an average of 295 characters per posts. CL had a moderate number of hash tag per post, standing at 0.38 on average. The majority of posts were photos, at 68%, while links were rarely used, at only 4%. Noticeably, CL posted much more content with text only, representing 13% of all posts, compared to CM and CS. Regarding the timing of posts, CL had a pretty equal percentage of posts during weekdays, with more posts on Wednesday and Friday. CL's practice was to post in the afternoon, accounting for 59% of all posts.

CM as a medium-sized college had the lowest number of posts compared to other colleges, standing at 193 posts and 0.79 post per day on average. However, CM wrote the longest content with 355 characters per post. Hash tags were used not very frequently, at 0.23 hash tags per post. CM preferred using photos and links, at 61% and 22%, respectively; 6% of posts contained only text. The institution posted mostly on Monday and Friday, accounting for equally 22%, whereas a much smaller percentage belonged to

weekends, at 5% per day. A similar proportion of posts were scheduled in the morning (51%) and afternoon (45%).

CS was the smallest college in the sample, but posted the most frequently compared to the other two, with 267 posts and 1.1 posts per day. CS especially preferred to write long content and use hash tags, at 330 characters per posts, with an average of 0.46 hash tags per post. CS did not use any status and rarely used link (2%), instead 88% and 10% of posts were with photos and videos respectively. Posts were most likely on weekdays, rather than weekends (6% totally), with the highest percentage of posts on Wednesday, at 24%. Most posts were aired in the afternoon, at 61%, while only 33% of posts in the morning.

Engagement Rate

The figures of engagement rate metrics were collected to measure the effectiveness of social media strategies and also address RQ 1.1, as shown in Table 5. In general, on May 15, 2020, the small-sized university US and college CS attracted similar number of fans on Facebook pages, standing at around 22,000–23,000 fans. A similar pattern was seen in the number of fans of the mid-sized university UM and college CM, at around 55,000–65,000 fans. However, the large-sized university UL had a significantly higher number of fans on Facebook page compared to the other large-sized college CL, at around 500,000 fans and 55,000 fans, respectively. That can partly explain why UL had a much higher average number of comments, reactions and shares on each posts, standing at around 15, 282, and 36 times, respectively. Other institutions did not have much difference in engagement per posts, ranging from 3 to 7 shares per posts, 23 to 48 reactions per posts, and 1 to 4 comments per post. Noticeably, CS as the smallest college among six institutions had the second highest number of reactions per post, at around 48 reactions.

Table 5*Engagement Metrics Statistics and Engagement Rates of Social Media Practices*

Variable	UL	UM	US	CL	CM	CS	University	College	Overall
Page like	496899	54739	22500	85540	63195	23627	574138	172362	172362
Total comments	3732	720	293	801	496	597	4745	1894	1894
Total reactions	66568	18161	8379	7187	4282	12836	93108	24305	24305
Total shares	8611	3040	1075	1018	1325	1417	12726	3760	3760
Total engagement	575810	76660	32247	94546	69298	38477	684717	202321	202321
Average comments per post	15.8	1.39	0.83	3.62	2.57	2.24	4.28	2.78	1.06
Average reactions per post	282.07	35.13	23.60	32.52	22.19	48.07	84.03	35.69	13.59
Average shares per post	36.49	5.88	3.03	4.61	6.87	5.31	11.49	5.52	2.10
Average engagement	1.16	1.40	1.43	1.11	1.10	1.63	1.19	1.17	1.17
Proportional engagement on post type									
Status post	0.000	0.036	0.081	0.092	0.221	0.000	0.051	0.129	0.110
Link post	0.070	0.107	0.147	0.037	0.035	0.198	0.091	0.052	0.083
Photo post	0.086	0.076	0.121	0.038	0.047	0.246	0.092	0.137	0.111
Video post	0.047	0.069	0.108	0.056	0.037	0.153	0.076	0.082	0.078
Proportional engagement on post timing									
Monday	0.065	0.071	0.143	0.048	0.088	0.239	0.092	0.135	0.111
Tuesday	0.055	0.061	0.121	0.036	0.030	0.269	0.077	0.133	0.097
Wednesday	0.059	0.083	0.110	0.050	0.035	0.204	0.087	0.118	0.099
Thursday	0.067	0.063	0.145	0.052	0.033	0.300	0.087	0.150	0.110
Friday	0.071	0.105	0.125	0.052	0.051	0.217	0.104	0.096	0.101
Saturday	0.165	0.136	0.091	0.041	0.031	0.083	0.115	0.056	0.092
Sunday	0.042	0.087	0.049	0.000	0.057	0.120	0.060	0.073	0.064
Morning	0.068	0.070	0.137	0.045	0.044	0.202	0.084	0.098	0.088
Afternoon	0.065	0.132	0.112	0.047	0.050	0.222	0.102	0.123	0.114
Evening	0.075	0.198	0.054	0.061	0.115	0.600	0.095	0.262	0.193

Meanwhile, CL attracted the second highest number of comments, with 3.62 comments per post. CM with 6.87 shares per post took the second highest place in the whole sample. It is important to note that the total proportional engagement rate, which was equal to the total engagement per fan, created an opposite picture. In particular, the small-sized college CS attracted the most attention from its fans, with 1.63 engagement per fan, the second highest was small-sized university US, with 1.43 engagement per fan. UL although with a large number of fans, each fan was not as engaged, with 1.16 engagements per fan.

Regarding the proportional engagement on post type, photo posts seemed to be the most effective in engaging fans of UL, at 0.086, whereas video posts had only half of it, at 0.047. Links appeared to engage the most fans on UM and US pages, at 0.107 and 0.147, respectively. Fans of CL and CM tended to engage more on statuses, while CS's fans preferred photos. Overall, small-sized institutions, CS and US earned the highest numbers of proportional engagement rates with all post types. Fans of six institutions were least engaged in videos.

Regarding the days of post US, CL, and CS earned more engagement if they posted in the middle of the week. Meanwhile, UL and UM had more engagement on Saturday, although they rarely posted on this day. Only CM showed a higher engagement rate on Monday posts. CS continued to show its ability to attract engagement, with the highest engagement rate on 5 weekdays compared to the other five institutions. Even though institutions hesitated to post in the evening, the content posted in this time appealed to more fans. Five institutions in the sample had the highest proportional engagement in the evening, whereas only US's fans engaged more in the morning.

Table 6*Inferential Statistics of Post Types and Post Schedule*

No.	Variable	M	SD	t	df	p	Results
University							
1	Status	0.051	0.047	-0.892	1106	0.373>0.05	No significant difference
	Other post types	0.090	0.142				
2	Link	0.091	0.117	0.108	1106	0.914>0.05	No significant difference
	Other post types	0.089	0.160				
3	Photo	0.092	0.171	0.834	1106	0.404>0.05	No significant difference
	Other post types	0.084	0.106				
4	Video	0.076	0.085	-1.080	1106	0.280>0.05	No significant difference
	Other post types	0.091	0.158				
5	Weekday post	0.089	0.151	0.321	1106	0.748>0.05	No significant difference
	Weekend post	0.095	0.160				
6	Day time post	0.089	0.153	-0.179	1106	0.858>0.05	No significant difference
	Night time post	0.095	0.101				
College							
1	Status	0.128	0.195	0.184	679	0.854>0.05	No significant difference
	Other post types	0.122	0.229				
2	Link	0.050	0.113	-2.516	679	0.012<0.05	Significantly different
	Other post types	0.129	0.234				
3	Photo	0.136	0.252	2.751	679	0.006<0.05	Significantly different
	Other post types	0.082	0.128				
4	Video	0.082	0.086	-1.689	679	0.092>0/05	No significant difference
	Other post types	0.127	0.239				
5	Weekday post	0.126	0.234	1.891	679	0.059>0.05	No significant difference
	Weekend post	0.060	0.053				
6	Day time post	0.113	0.177	-4.073	679	0.000<0.05	Significantly different
	Night time post	0.262	0.602				

Relationships Between Social Media Strategy and Engagement Levels

Universities and colleges in the sample showed similar practice of posts types, with more photo posts (over 50%), not much status posts (under 10%), and moderate video and link posts. To test which posts type can attract more engagement to answer RQ 1.2, several independent sample t-tests were run to measure the significant levels of posts types in college data and university data. As can be seen in Table 6, results from universities' data showed no difference in engagement in different post types.

Results from colleges' data showed no significant difference in engagement of video and status posts, whereas colleges' audience is more likely to engage in photo posts and less likely to engage in link posts: link posts ($M=0.051$, $SD=0.113$) versus other post types ($M=0.129$, $SD=0.234$), $t(679)=-2.516$, $p<0.05$; photo posts ($M=0.136$, $SD=0.252$) versus other post types ($M=0.082$, $SD=0.128$), $t(679)=2.751$, $p<0.05$.

Regarding the posting schedule, over 90% of all the posts from six institutions was scheduled during weekdays as a routine. To measure the effectiveness of posting schedule during weekdays and weekends, I raise an additional research question:

RQ 1.3: Do posts scheduled on weekends show a higher proportional engagement rate than the posts scheduled during weekdays?

Independent sample t-test was used to test if there was a significant difference between the two posting schedule. The results showed that the engagement levels of both universities' and colleges' audience on weekends and weekdays were not significantly different.

Similarly, posts were not frequently scheduled in the evening, with under 10% of evening posts overall. To test whether this practice was effective in engaging audience, I

propose a research question:

RQ 1.4: *Do posts scheduled in the evening show a higher proportional engagement rate than the posts scheduled in the morning and afternoon?*

Independent sample t-test was also used to answer this question. There was no significant difference in audience preference over the evening or daytime posts, according to universities' data. However, for colleges' audience, they significantly preferred to engage on posts in the evening: Evening post ($M=0.262$, $SD=0.602$) versus daytime posts ($M=0.113$, $SD=0.177$), $t(1106)=4.073$, $p<0.05$).

Branding Strategy and Targeted Audience

This section aims to answer RQ 2 (about brand positioning) and RQ 3 (about target audience). The data collected indicate that universities and colleges had different branding strategies according to their content posts on Facebook pages, as presented in Table 7 and Figure 1.

As per Table 7 and Figure 1, universities tended to focus more on elite position compared to colleges (16% vs. 1%, respectively), whereas colleges posted more other information content, including administration, recruitment, students' stories (an emerging code), and management (46% vs. 15%, respectively). It could be said that universities focused more on the five branding elements (85%) rather than administration information and recruitment announcement (15%). Specifically, colleges devoted 36% of their posts for recruitment purposes, whereas universities only used 12% for this content. Universities and colleges showed a clear preference for nurturing and campus posts, with a total of 49% for colleges, and 64% for universities.

Table 7*Descriptive Statistics of Brand Positioning and Target Audience*

Items	UL	UM	US	CL	CM	CS	University	College	Overall
Elite	75	60	45	3	4	75	180	9	189
Campus	63	250	111	69	24	63	424	174	598
Nurturing	81	134	69	77	27	81	284	155	439
Outcome	1	10	21	4	13	1	32	26	58
Commodity	2	10	9	3	0	2	21	4	25
Management	4	6	0	1	1	4	10	5	15
Recruitment	3	29	96	31	104	3	128	248	376
Student story	5	0	2	2	12	5	7	15	22
Administration	2	18	2	31	8	2	22	45	67
Other information*	14	53	100	65	125	14	167	313	480
Percent									
Elite	27	48	31	31	12	30	38	26	33
Campus	34	26	19	35	14	19	26	23	25
Nurturing	0	2	6	2	7	3	3	4	3
Outcome	1	2	3	1	0	0	2	1	1
Commodity	2	1	0	0	1	1	1	1	1
Management	1	6	27	14	54	42	12	36	21
Recruitment	2	0	1	1	6	0	1	2	1
Student story	1	3	1	14	4	2	2	7	4
Administration	6	10	28	29	65	46	15	46	27
Other information*	32	12	13	1	2	1	16	1	11
Current students	118	384	167	177	50	131	669	358	1027
Prospective students	3	29	96	31	104	113	128	248	376
Both	115	104	92	13	39	23	311	75	386
Percent									
Current students	50	74	47	80	26	49	60	53	57
Prospective students	1	6	27	14	54	42	12	36	21
Both	49	20	26	6	20	9	28	11	22

*Other information includes management, recruitment, student story, and administration.

Figure 1

Number of Posts Per Brand Positioning of Universities and Colleges

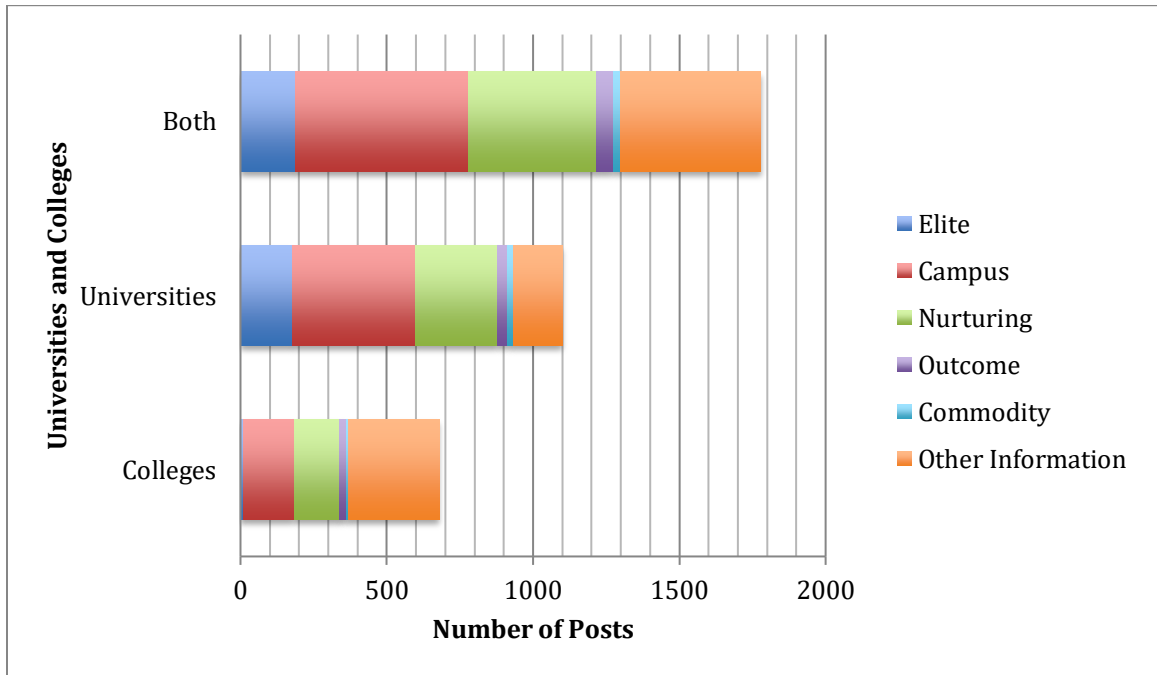
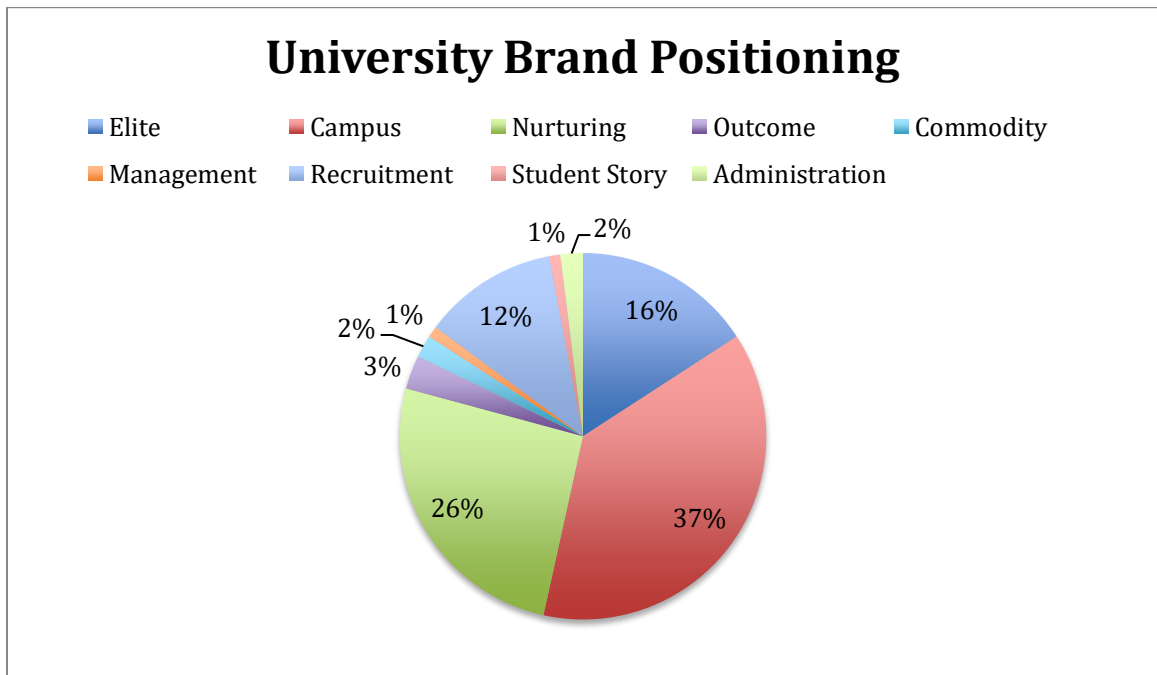


Figure 2

Distribution of Brand Positioning and Other Content Categories of Universities



Branding Strategy and Targeted Audience of Universities

As can be seen in Table 7 and Figure 2, UL focused on positioning itself as elite, campus, and nurturing school, with 32%, 27%, and 34%, respectively. UL had the highest percentage of elite position posts compared to other universities and colleges. UL had shown that it was a prestigious school with high ranking in the world and a reputable employer. Research was clearly a focus of UL's activities, especially innovation and technology research projects, such as digital solutions for research, 3D printer, and artificial intelligence. The research focused on diversified areas, from linguistics, medicine, law, psychology, kinesiology, to engineering and computer science. The researchers were various, from alumni and faculty members to students.

Through its campus position content, UL showed various activities other than academics, such as social responsibility projects, entrepreneurship, and campus events. It also posted images of its building, facility, and local areas. Only one post was about activities for international students. Especially, UL focused on community engagement and sustainability projects, with 18 out of 63 posts mentioning this area. Nurturing content accounted for the highest number of posts, which were mainly about student support and students' mental and physical health. The university also demonstrated a welcoming and friendly atmosphere as well as an empathy with students and community. In addition, UL celebrated holiday on Facebook pages and showed gratitude or gave motivation. Safety was one of the nurturing topics on its page, with one post mentioning it.

Meanwhile, UL did not create much content about career preparation (1%) and scholarship or bursary opportunities (1%), which indicates that it might not position itself as either an outcome or commodity school. Partnership with big organizations and those

who hold high management positions had also been featured in several posts, accounting for 2% of the posts. Three percent of the posts focused on recruitment, which mentioned the programs offered by the school, current students' story, and operation. We could say that UL did not post much recruitment related content on its Facebook page; no information was found about the two biggest events for prospective students (open house in Fall and Spring). Noticeably, UL very rarely posted any administrative content on Facebook page (only 2 out of 236 posts), such as operation hours or reminding tuition fee or registration timeline.

Similarly, UM also paid more attention to elite, campus, and nurturing position, representing 12%, 49%, and 26% of all posts. Campus was the main position of this university, with many different types of student events and workshops being featured. A high number of posts relates to fine art and performing art, such as music show, concert, or drama. Film festival was also organized in the university. Student associations and school spirit were mentioned to show rich campus culture. A wide range of lively contests was organized for the students, from campus photo contest, cooking contest, door decoration contest, to law competition. The university also encouraged the development of entrepreneurship by featuring a center for entrepreneurs on campus. Additionally, sport was mentioned in 26 posts among 250 campus related posts. E-sport was uniquely promoted as a campus activity in UM, which the audience could not find on Facebook pages of the other two universities, with events and invited speakers on this topic. Law and politics were other popular content angles of campus activities. There were six posts about international projections, mentioning students and educators from other countries. UM also posted information about its building renovation and facilities on Facebook

page. Similar to UL, UM paid attention to its community support activities, with 18 posts out of 250 campus related posts. Regarding elite position, UM posted information about its research in several fields, such as music, writing, textile, technology and innovation, immigration. Many different faculty awards had been showed, which were mainly about art, film, and law.

Diversity and inclusion was one of the main topic in nurturing related content, which mentioned women and other marginalized groups such as First Nation people, LGBTQ+, people of colour, the disabled, religion, and so on. Another common nurturing content was about cyber security and smoke-free campus. A friendly environment had been featured, with human connection, holiday wishes, and weather reminder. However, students' wellness and consultation were mentioned in just a few posts. UM rarely posted any content about career preparation or scholarship opportunities. UM tended to mention more about recruitment information and administration (9% totally). Open house, admission, and program information were highlighted every month during the whole academic year. Operation hours and other administrative announcement appeared in a few posts.

The smallest university in the sample, US, tended to post more campus-related content (30%) and recruitment information (27%). US demonstrated a lively campus by featuring various students' activities such as workshops, cooking contests, pumpkin carving contest, competition in business and law, festival, and art (music, exhibition). A unique feature of US was outdoor activities such as ice climbing and skiing, and other outdoor events, showcasing in 27 out of 355 total posts of US. The geography and natural landscape of the local area appeared to be a competitive advantage of US. Regarding the

international projection, US also offered exchange programs to send students abroad, which were mentioned in two posts. Noticeably, 10 posts were devoted to alumni events. Laboratory, residence, and fitness facilities were featured as a part of a campus position. Another content that makes US distinctive from other two universities was recruitment information. The recruitment events such as open house were captured in details with more posts. The recruitment effort had also been shown through various programs being featured on US's Facebook page, such as geography, psychology, engineering, and nursing. The message US sent to prospective students was an "extraordinary" life at this university, and claimed that students' life should not be typical.

Thirdly, US devoted the same proportion of its posts to elite position with UM (at 12%), proudly mentioning its awards, research, and ranking. Rather than a comprehensive, general ranking, US shifted audience's attention to its strength of undergraduate programs' high ranking. Less nurturing content was posted on US's page compared to UL and UM, representing 19% of all posts. US also showed the diversity and inclusion content angle, welcoming and friendly atmosphere, and students' wellness (such as a therapy-dog stress release program). However, what made US more unique was the frequently posted inspiration message, which usually captured beautiful weather on campus. Lastly, US posted a higher percentage of outcome position content (6%) compared to UL (1%) and UM (2%), with a focus on career fair, employment rate, career preparation office, experiential learning and co-op opportunity, employer connection, and writing resumé.

Regarding the target audience of universities as per RQ 3, this research based on the content categorization to define which type of audience was most relevant to content

on specific posts (as described in previous chapter). The results showed that UL did not focus on content that solely targeted prospective students, representing only 1% of all posts. Rather, UL posted content for current students and content that could be relevant to both types of audience, at 50% and 49%, respectively. UM tended to focus more on current students, with 74% content for them, and devoted only 6% content for future students. UM was the only university that focused more on prospective students, with 27% content, along with 47% content for current students, and 26% content for both.

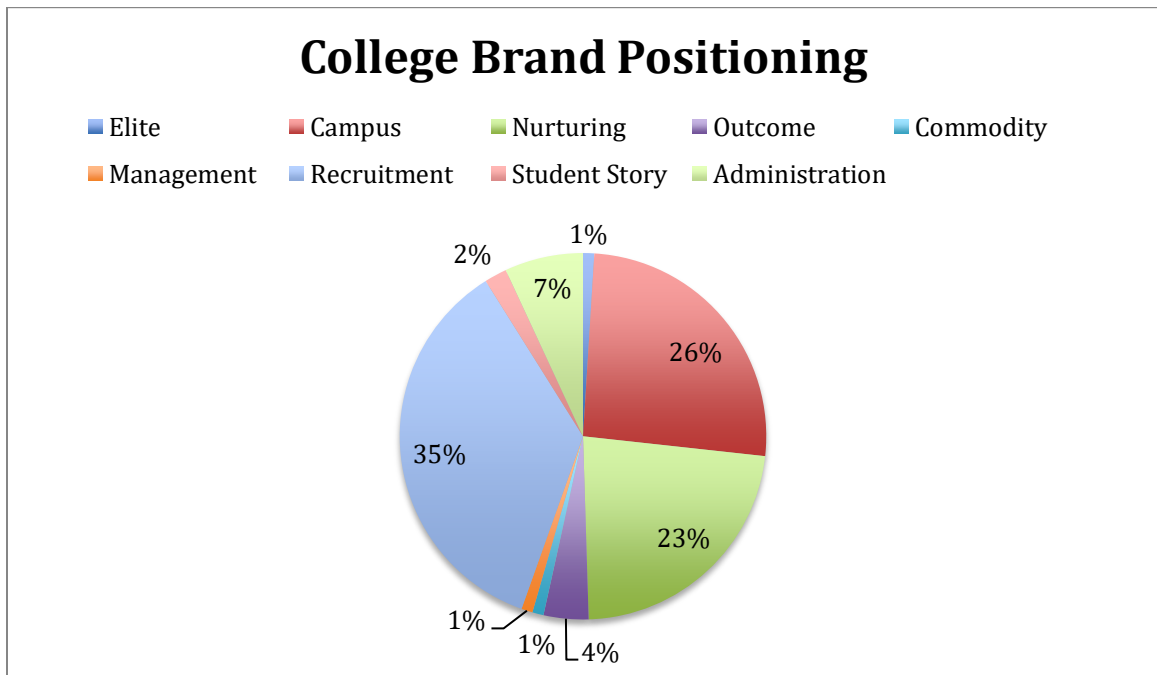
Branding Strategy and Targeted Audience of Colleges

As can be seen in Table 7 and Figure 3, three colleges in the sample were less likely to post elite position content compared to universities, accounting for 2% and 16%, respectively. Instead, colleges preferred to post more recruitment information on their Facebook pages, representing 37% of their posts, compared to only 12% on the universities' pages. Nurturing and campus were also important branding positions of colleges.

The largest college in the sample, CL, used its Facebook pages mainly for nurturing (35%) and campus (31%), recruitment (14%) and administration (14%) content. CL celebrated not only public holidays such as Thanksgiving or Halloween, but also special days such as World Mental Health Day or Coming Out Day of LGBTQ+ community. CL also took care of students in stressful time of exams by providing advising service and provided mental health tips for students. Indigenous and First Nation people were mentioned in a few posts. CL had also organized various on-campus activities such as events and contest. Some examples were dance, fashion, art, robotics competition, hiking, and sports. CL promoted a sustainable lifestyle that is good for the environment, such as using reusable cups and riding bikes to school.

Figure 3

Distribution of Brand Positioning and Other Content Categories of Colleges



Research, teaching, and ranking, as parts of elite position, were not mentioned; instead, CL featured awards on its page, with only 1% of all posts. CL tended to use Facebook as a tool to communicate administrative information to current students and recruit new students. Program, admission, and recruitment events such as Open House were featured in 31 posts (out of 221 total posts) on CL's page. CL reminded future students of admission deadline or congratulated them on getting accepted into this college.

As can be seen from the data, CM used Facebook pages mainly for recruitment purposes with over half of all posts relating to this content angle, which was the biggest percentage compared to other institutions. There were 46 out of 104 recruitment posts promoting various programs offered by CM. Some examples were photography, police studies, gas technician, water operator, early childhood education, biotechnology, tourism, creative art business, and so on. The discussion had been spread out to many programs instead of focusing on promoting a few ones. Also, recruitment posts were scheduled every month during the period of this study. The other 58 posts were about recruitment events and admission requirement, which had shown the attention of CM into recruitment effort.

Students' success story had also been emphasized in 6% of the posts. Most stories were about the image of successful alumni in their career after gaining certificates or degrees from CM. Some of them were international students who obtained citizenship in Canada and a satisfying job as per their plan. The alumni also mentioned co-op and placement opportunities, which helped them gain more working experiences. Another claim was that CM helped them match the career path with personality traits, which was a tailor made experience for them.

The second and third popular content is nurturing (14%) and campus (12%). CM encouraged students involve in “non-academic” experience, with some activities such as on-campus volunteer, food donation, giving Tuesday in some social responsibility initiatives. Also, some sustainable initiatives were mentioned such as green building technique and climate change workshops. Alumni association was another highlights of campus activities. Sport was seldom mentioned, in only one post. The same situation was true with international projection, with only two posts mentioning about this. Regarding nurturing aspect, CM also demonstrated caring for students’ wellness by providing counseling service, and welcoming new students. Diversity and inclusion was mentioned in one post, which was not be a focus of CM. Empathy was shown in content about Orange Shirt Day and tragic event of airplane crash.

CS as the smallest college in the group shared similar content direction with CM. CS devoted 43% of its posts to recruitment content, whereas the second and third most popular content was campus (30%) and nurturing (19%). One thing that separated CS from the other two colleges was that it promoted individual advisors from its enrolment team in several posts, including their academic and professional profile to show what they can help prospective students in applying to the college. CS also showed various programs it was offering in 18 posts on Facebook, such as pre-service firefighting, liberal studies, trade and technology programs, police foundations, technicians, nursing, and recreation therapy.

Compared to other colleges, CS did not offer as many campus activities. There were competitions for pre-service firefighting students, some motivational campaigns with specific hash tags, which were consistently shown in every post. One competition called “Enactus” was also highlighted as one student team from CS made it to the international

round. CS mentioned more sports and e-sport compared to CM, but these content were still minimal. Social responsibility activities were highlighted in seven posts, especially in pandemic outbreak time, March and April, which were mainly about healthcare and food providing service. Outcome was also not a focus of CS and mentioned in only 3% of its posts, which were about co-op opportunities and employer satisfaction rate for CS's graduates. There was only one elite position post, which was CS's ranking as top research college. Similarly, only one commodity factor was mentioned in a lucky draw to win a scholarship.

Generally, colleges showed various patterns of content breakdown targeting current students and prospective students (as per RQ 3). As can be seen from Table 6, larger colleges such as CL used only 14% of their posts exclusively for future students, but devoted 80% of the posts for engaging current students. Meanwhile, CM and CS focused on recruitment purposes with over half (54%) and nearly half (42%) of their posts targeting future students. Although colleges tend to have more content for future students than universities, standing at 36% and 12%, respectively, they also paid greater attention to current students, with 53% of their posts overall.

Engagement Rate

To measure the engagement level of branding positions (RQ 2.1) and content by target audience, data of proportional engagement rate revealed several insights (RQ 3.1). As can be seen from Figure 4 and Table 8, audiences of the majority of institutions (4 out of 6) engaged more on nurturing content, which was on Facebook pages of UM (0.131), US (0.186), CL (0.060), and CM (0.130). Other information, including administration, recruitment, management, and student story had the lowest engagement rate on the pages of UM (0.027), US (0.047), CM (0.029), and CS (0.121). Commodity was the least

engaging content overall, which had the lowest total engagement from six HEIs.

Noticeably, CS and US attracted the highest proportion of their fans in all five branding positions, making the total proportional engagement rates highest compared to other institutions in the sample.

UL's audience tended to engage more on outcome content (0.104) although only one post was about it, whereas they were least likely to interact with campus post (0.050). UM, US, and CM's Facebook audience shared the same preference of content engagement on nurturing, and they were generally least engaged on other information content. Noticeably, while elite was the least engaging posts on CL's Facebook pages (0.026), it was the most attractive brand position to CS's audience (0.485).

Regarding the engagement rates of posts based on audience targeting, three universities in the sample shared the same pattern of engagement level. Particularly, UL had the highest engagement rate on posts that were only relevant to current students, at 0.071, and smallest engagement rate on posts that targeted only future students, at 0.025. Similar results were revealed in UM's data, at 0.080 current students targeted posts, and 0.049 future students targeted posts. US also had a highest engagement on current students targeted posts, at 0.152, and only 0.065 on the other. Colleges experienced similar result of having high engagement for content targeting current students (0.147) and low engagement for content targeting future students (0.068), although they had created far more content targeting future students compared to universities. Specifically, although CM and CS spent approximately half of their posts for future students, those content had attracted the least attention with the lowest average engagement rate.

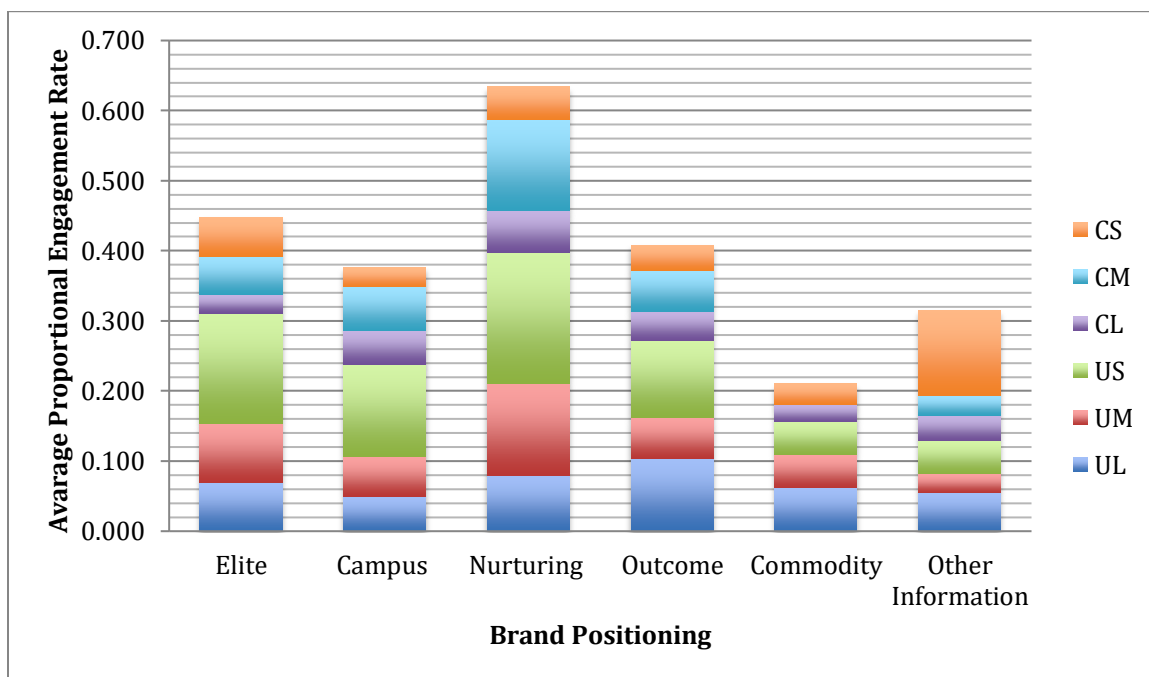
Table 8*Engagement Rates as Per Brand Positioning and Other Content Categories*

Items	UL	UM	US	CL	CM	CS	University	College	Overall
Elite	0.070	0.084	0.157	0.026	0.055	0.485	0.096	0.141	0.098
Campus	0.050	0.056	0.132	0.048	0.063	0.341	0.075	0.187	0.107
Nurturing	0.080	0.131	0.186	0.060	0.130	0.263	0.130	0.139	0.133
Outcome	0.104	0.058	0.110	0.042	0.058	0.419	0.094	0.180	0.132
Commodity	0.062	0.047	0.047	0.025	0.000	0.457	0.048	0.133	0.062
Management	0.027	0.058	0.000	0.013	0.032	0.505	0.045	0.312	0.134
Recruitment	0.025	0.021	0.043	0.038	0.023	0.108	0.037	0.063	0.055
Student Story	0.097	0.000	0.149	0.063	0.056	0.186	0.112	0.066	0.081
Administration	0.051	0.027	0.153	0.033	0.071	0.169	0.040	0.058	0.052
Other information*	0.055	0.027	0.047	0.036	0.029	0.121	0.038	0.086	0.054
Current students	0.071	0.080	0.152	0.050	0.092	0.298	0.096	0.147	0.114
Prospective students	0.025	0.049	0.065	0.038	0.023	0.119	0.061	0.068	0.066
Both	0.065	0.075	0.127	0.032	0.069	0.451	0.087	0.180	0.105

*Other information includes management, recruitment, student story, and administration.

Figure 4

Average Proportional Engagement Rate by Brand Positioning of the HEIs



Relationships Between Brand Positioning, Targeted Audience, and Engagement Levels

The above data show some differences in branding content preference of universities' and colleges' audience. To test the relationship between the brand positioning and engagement, this section answers RQ 2.2.

The independent sample t-test was used to answer the research question. From the universities' data in Table 9, the results showed no significant difference when using elite, commodity, outcome, and other information content. However, the universities' audience showed a lower engagement on campus related content: Campus ($M=0.074$, $SD=0.094$) versus no campus content ($M=0.099$, $SD=0.178$), $t(1106)=-2.678$, $p<0.05$. They tended to engagement more significantly on nurturing content: Nurturing ($M=0.129$, $SD=0.015$) versus no nurturing ($M=0.076$, $SD=0.090$), $t(1106)=5.191$, $p<0.05$.

However, when it came to colleges' data, there was no difference in engagement level when using elite, nurturing, commodity, and outcome. Meanwhile, the engagement rate was significantly difference when using other information and campus content. Colleges' audience engaged more in campus content: Campus ($M=0.187$, $SD=0.353$) versus other content ($M=0.100$, $SD=0.158$), $t(679)=4.404$, $p<0.05$; but less in other information: Other information ($M=0.072$, $SD=0.115$) versus the five brand positioning, ($M=0.164$, $SD=0.283$), $t(679)=-5.373$, $p<0.05$.

Regarding the content targeting current and future students, this section tests which type of content is more effective in engaging the audience, answering RQ 3.2. From Table 10, content targeting current student and content targeting both types of students showed no significant difference in engagement level. Prospective students targeted post were proved to attract less engagement: Prospective students ($M=0.061$, $SD=0.044$) versus other content ($M=0.093$, $SD=0.005$), $t(1106)=-2.304$, $p<0.05$.

Table 9*Inferential Statistics of Brand Positioning*

No.	Items	M	SD	t	df	p	Results
University							
1	Elite	0.095	0.116	0.505	1106	0.614 > 0.05	No significant difference
	Other content	0.089	0.158				
2	Campus	0.074	0.094	2.678	1106	0.008 < 0.05	Significantly different
	Other content	0.099	0.178				
3	Nurturing	0.129	0.253	5.191	1106	0.000 < 0.05	Significantly different
	Other content	0.076	0.090				
4	Outcome	0.089	0.056	-0.006	1106	0.995 > 0.05	No significant difference
	Other content	0.909	0.155				
5	Commodity	0.048	0.034	-1.260	1106	0.208 > 0.05	No significant difference
	Other content	0.090	0.123				
6	Other information	0.061	0.047	-2.679	1106	0.008 < 0.05	Significantly different
	Other content	0.975	0.163				
College							
1	Elite	0.138	0.270	0.210	679	0.834 < 0.05	No significant difference
	Other content	0.122	0.227				
2	Campus	0.187	0.352	4.404	679	0.000 < 0.05	Significantly different
	Other content	0.100	0.158				
3	Nurturing	0.139	0.186	1.080	679	0.281 > 0.05	No significant difference
	Other content	0.117	0.238				
4	Outcome	0.178	0.262	1.283	679	0.200 > 0.05	No significant difference
	Other content	0.120	0.226				
5	Commodity	0.132	0.217	0.086	679	0.931 > 0.05	No significant difference
	Other content	0.122	0.227				
6	Other information	0.072	0.115	-5.373	679	0.000 < 0.05	Significantly different
	Other content	0.164	0.283				

Table 10*Inferential Statistics of Target Audience*

No.	Items	M	SD	t	df	p	Results
Universities							
1	Current student	0.096	0.007	1.870	1106	0.062>0.05	No significant difference
	Other content	0.079	0.087				
2	Prospective student	0.061	0.044	-2.304	1106	0.021<0.05	Significantly different
	Other content	0.093	0.160				
3	Both	0.087	0.099	-0.398	1106	0.691>0.05	No significant difference
	Other content	0.091	0.168				
Colleges							
1	Current student	0.147	0.266	3.065	679	0.002<0.05	Significantly different
	Other content	0.094	0.170				
2	Prospective student	0.068	0.103	-4.375	679	0.000<0.05	Significantly different
	Other content	0.153	0.269				
3	Both	0.179	0.284	2.315	679	0.021<0.05	Significantly different
	Other content	0.115	0.218				

From the colleges' data, content that targeted current students and both types of students showed a higher engagement rate, while content that targeted only future students had lower engagement: Current students ($M=0.147$, $SD=0.266$) versus other content ($M=0.094$, $SD=0.170$), $t(679)=3.065$, $p<0.05$; Both ($M=0.179$, $SD=0.284$) versus other content ($M=0.115$, $SD=0.218$), $t(679)=2.315$, $p<0.05$; Future students ($M=0.068$, $SD=0.103$) versus other content ($M=0.153$, $SD=0.269$), $t(679)=-4.735$, $p<0.05$.

Chapter Conclusion

This chapter presented a comprehensive picture of social media strategy of the HEIs in the sample, including posting practices, brand positioning and audience targeting strategies through both quantitative and qualitative data. Detailed descriptions of this picture were mentioned in each HEI, university group, college group, and all HEIs in the sample as a whole. This chapter not only revealed the HEIs' strategy but also sought to measure the impact of different practices on the engagement level. The final chapter discusses the findings from the research results in Chapter 4, connecting it with previously reviewed literature, and also discusses implications for future practice and research.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

This research explored the social media landscape in the field of higher education, in the context of Ontario, Canada in 2019–2020, with three universities and three colleges as representative HEIs in the sample. This chapter discussed findings from the results of data exploration in Chapter 4, which served as primary research data to provide recommendations for future practices of social media in higher education. Future research ideas are suggested to further investigate social media marketing and communication in higher education through different directions. A final conclusion is also included to summarize the main ideas and discussions of this research study.

Discussion of Findings and Relevant Literature

The answers for the research questions were clearly addressed in Chapter 4. Patterns of social media practices and branding of six HEIs were revealed through the 8-month data. In general, the research results support the literature of branding in higher education, but several findings are not in line with previous research on social media practices of HEIs, which are to be discussed in details in the following sections.

Social Media Practices of HEIs on Facebook (RQ 1)

The results show that the length of posts is approximately from 200 to 300 characters and posts frequency is from one to two posts per day, which are pretty consistent with the results of a research by Peruta and Shields (2017) in the context of higher education in America. In addition, compared to the results in Peruta and Shields (2017), the preference of post types was also similar: HEIs are more likely to use photos in their posts. However, although posts with photos are more engaging to audiences (Peruta & Shields, 2017), this study finds no significant difference in engagement level of photo posts on universities' Facebook page; only colleges' pages show similar results.

Regarding the schedule of the posts, the findings of this research are not fully supportive of previous results in Peruta and Shields (2017, 2018). Specifically, Peruta and Shields's (2017) findings indicate a significantly higher proportional engagement on weekend posts, while this research finds no significant difference in engagement level on universities' and colleges' pages. Moreover, as per Peruta and Shields's (2018) findings, posts in the period of time from 8:00 p.m. to 11:59 p.m. are proven to yield different engagement impact. Although there is no preference over post timing for universities' audience according to this study's results, colleges' audience clearly preferred evening posts (from 6:00 p.m. to 11:59 p.m.) than daytime posts, which somehow supports Peruta and Shields's (2018) findings.

Noticeably, there were significantly more reactions (24,305 times) than shares (3,760 times) and comments (1,894 times) overall, which can be explained by the fact that Facebook users need to spend the most effort on comments, and more effort on shares than reactions (Peruta & Shields, 2018).

Branding Strategy (RQ 2)

In the period before the pandemic outbreak in Canada (from September, 2019 to the middle of March 2020), the HEIs' branding strategy in this research is a good reflection of strategic ambiguity theory (Leitch & Motion, 2007). Unlike strategic balance theory, the HEIs generally did not give up any positions to follow a unique characteristic (Deepphouse, 1999). Rather, they placed a high emphasis on several areas, although with some differences of the chosen focus. In particular, the six HEIs in the sample expressed all five branding positions, which showed their diversified activities and communication messages on social media. In each branding, the audiences can easily find similar events being organized in different HEIs, such as community volunteer, workshops, sport, or outdoor event in the campus branding category. The specific topic

may be different, but almost all the HEIs invested their highest effort on being a campus school to engage students in not only academic subjects but also in various extracurricular activities. Nurturing is the second highest branding focus of the majority of HEIs, an emotional value of the brand that can potentially tighten the students' bond to the HEIs (Chapleo et al., 2011).

However, they employed these content with some degree of variance, which raises the opportunities of differentiation in several discourse contexts (Leitch & Motion, 2007). In particular, US, CM, and CS, as the three smallest-sized institutions focused on the quiddity value (Bennett & Ali-Choudhury, 2009) and functionality of the brand (Chapleo et al., 2011), such as recruitment content and program introduction, instead of emotional value such as nurturing content. The mid-sized college in the sample CM used more than half of its content on Facebook talking about a variety of its programs and other recruitment information. CS also featured a lot of its programs on social media but showed a clear focus on some programs such as firefighter training that it might have competitive advantage. CS drew audiences' attention to this program by organizing relevant contests in public safety area. With a much larger number of students, UM also talked about its programs on social media, but with a strategy of promoting just several key programs such as performing arts (drama, theater, music) and law. UM encouraged students' engagement in these areas on many campus activities such as competitions or workshops and live shows. The HEIs' perception of featuring distinctive programs was in line with the notion that the programs could be a key driver in customer decision (Chapleo, 2015). Smaller HEIs such as US and CS tended to have significantly higher proportional engagement rate on their posts, which is in line with findings in Peruta and

Shields (2018), which indicates a negative correlation between number of page likes and proportional engagement.

On the contrary, UL and UM as the two largest institutions in the sample focused less on their functional value but more on emotional value, such as nurturing and campus (Chapleo et al., 2011). UL and UM posted only 1% and 6% recruitment content on their Facebook pages, respectively. Noticeably, the emotional value is claimed to be more effective than functional value for branding differentiation in higher education (Harris & Chermatony, 2001) partly because HEIs' branding can induce more feelings than brands in other sectors (Bulotaite, 2003). Eventually, the service and products of one HEI, as a part of functional value of the brand, would be similar to that of other institutions, instead, the organizational identity is key to brand differentiation (Aaker, 2004).

It is important to note that, among two most popular brand positions on Facebook pages of HEIs, campus factors are preferred by colleges' audience, while it is not that engaging to universities' Facebook fans. Instead, university audience significantly engaged on another popular content: nurturing. That shows the differences in content preference of audiences in colleges and universities.

In general, universities, compared to colleges, are more research-oriented, which is well reflected through the percentage of elite content on universities' Facebook page in this research. Outcome factor, although being proven as the number one consideration from future college students' perspectives when it comes to choosing HEIs (Colleges Ontario, 2016), was rarely promoted on either universities' or colleges' social media pages in this research. Due to various audiences on social media, HEIs cannot just focus on the need of prospective students (Peruta & Shields, 2018). In addition, in line with

Steele's (2008) perspective that no HEIs want to define themselves as commodity institutions, HEIs in this research seldom talked about the scholarship or financial support to students on their Facebook pages. In addition, HEIs were also less likely to use Facebook pages for the administration announcement such as operation hours.

During the time of pandemic outbreak, in March and April 2020, the majority of HEIs followed pretty much the same content pattern: more nurturing factors and corporate responsibility projects. All six HEIs in the sample demonstrated a great deal of caring for their students' mental health when being locked down at home and announced moving courses online as well as changes in operation. Noticeably, thanks to the competitive advantage of strong research capability, UL showcased a lot of research projects, especially in the healthcare sector. UL also took part in various community projects such as helping frontline healthcare workers with household chores, producing masks, face shields, and ventilators, delivering medical supplies. Other HEIs, although not having strong research works in pandemic, showcased the participation of their students and faculty in community projects, such as producing hand sanitizer (UM and CS), helping with healthcare frontline workers and producing face shields (US), and delivering medical supplies (CM). According to the strategic ambiguity theory, it could be said that in the discourse context of pandemic (Leitch & Motion, 2007), the configured norm of HEIs' corporate image during this time is being responsive to students, employees, and the community, in terms of mental health and healthcare related projects.

Content Targeting Current and Future Students (RQ 3)

The HEIs in this research created diversified content on their pages to meet the needs of various audiences, targeting current students and future students, sometimes

alumni, community partners, and local people. However, they rarely posted internal staff-related content on Facebook pages, despite a high recommendation on internal branding in higher education field in relevant literature (Chapleo, 2011). Smaller institutions such as US and CS tended to post more content targeting prospective students compared to larger institutions such as UL and CL, which reflects the usage of Facebook pages for recruitment purposes (Peruta & Shields, 2018). Larger-sized HEIs rarely post admission content because they may enjoy a high-reputation advantage gained from current students and alumni population (Colleges Ontario, 2016). Overall, engaging current students was the main purpose of using Facebook of HEIs in this study.

Content targeting different types of audience has different engagement level. Content for current students and both types of students were proven to engage more audience on colleges' pages. On the contrary, content for only future students such as admissions and programs induction had a statistically lower proportional engagement rates on both universities' and colleges' Facebook pages.

Theoretical Implications

This research contributes to academia and theories in several ways. Firstly, the research provides an analysis of the most current data on social media of HEIs in Ontario, Canada, which serves as a basis for comparative analysis of previous researches on this topic, but in a new, distinctive context. Based on the theoretical framework of strategic balance (Deephouse, 1999) and strategic ambiguity (Leitch & Motion, 2007), the practices and brand positioning strategy on social media of the HEIs in this research can help us examine the tension of normalization and differentiation in various discourse contexts for multiple Facebook audiences. The normalization and differentiation of

selected HEIs in Ontario, Canada were clearly defined through the data analysis and interpretation. While HEIs were conducting quite similar activities to show their legitimacy, such as caring for students, organizing workshops, to name a few, they sometimes tried to be distinguishable by promoting particular programs that they have competitive advantages, such as firefighter training program, law, performing art, e-sport, or mentioning about their unique geographical features. In other words, HEIs have been showing effort in building institutions' identity as per their differentiation strategy.

Lastly, the research findings can re-inform the challenges of marketing and communication in higher education field, given the nature of multi-stakeholders involvement and the hard-to-define outcome of education (Chapleo, 2015; Ng & Forbes, 2009; Temple, 2006). Hence, through this research finding, we can see that diversified content is a key to serve multiple perspectives. As discussed earlier, unlike other service providers, it may be arguable to claim students' success thanks to HEIs effort, as the service of HEIs requires a high involvement and effort from the students (Ng & Forbes, 2009). Hence, the HEIs in this research rarely mentioned directly any results of the education service they provided on Facebook pages. Instead, they spend more time promoting their activities and caring for the students, which show their attention and dedication to provide a nourishing and supportive educational environment.

Practical Implications

The research provides an empirical result for practitioners to rethink what they have been doing, and modify appropriately to meet their institutions' branding and social media goals. According to the findings, there were differences in the engagement preferences of universities' and colleges' audiences. Specifically, colleges should focus

on photos and links, as well as schedule the posts in the evening, from 6:00 p.m. to 11:59 p.m. They should also focus on campus content and content for current students such as administration and nurturing to have higher engagement. Meanwhile, university audiences showed less preference for any particular social media practice. One type of content that was significantly more engaging among universities' audience was nurturing. Hence, universities should create more nurturing content on their Facebook pages. Albeit with different distributions due to differentiation strategy, the five branding elements (elite, nurturing, campus, commodity, and outcome) should be included in HEIs' branding strategies.

Smaller universities and colleges in this study tended to focus on recruitment content on their Facebook pages. However, the research results prove that communicating recruitment and programs information for future students on Facebook pages was not an efficient way to attract audiences' engagement because it yielded significantly lower average engagement rate compared to other content, for both universities and colleges. Hence, HEIs should diversify the channels to reach future students instead of posting much recruitment content on Facebook pages. HEIs, especially colleges, should use Facebook pages more for engagement purposes and less for recruitment purposes.

It is clear that the HEIs in this study were having similar must-have activities in the higher education field. However, social media practitioners should focus on promoting emotional value and nurturing aspects as it is proven more engaging to the audiences on Facebook pages of the HEIs. Emotional aspect can also help build a distinguished identity among other HEIs. Through content promoted on Facebook pages,

practitioners in one HEI can have ideas about the strengths and directions of other HEIs, which provides them insights for establishing a communication strategy on social media.

Communication strategies of the HEIs were subject to enormous change during unexpected time such as pandemic. Practitioners can refer the reactions of HEIs in Ontario during the COVID-19 pandemic outbreak from March 2020 on their social media as examples of future adoption strategies during hard time. HEIs showed effort in collaborating with community partners to ease the pain caused by the pandemic, which showed that they were resourceful in terms of scientific research, laboratory, and qualify human resources for essential industry.

Future Research

This research reaffirms the notion that using Facebook as a communication channel for HEIs is here to stay (Peruta & Shields, 2018). Further research with a larger sample size is needed to further investigate all HEIs in Ontario, Canada, from which we can have a complete picture of social media and branding strategies. Next, due to the differences of communication message during pandemic period, another research question has been raised about how do HEIs react in unexpected time through their social media communication channels such as Facebook.

Branding strategies in specific time may be modified to some extent (Kotler & Fox, 1995), and thus future research about branding elements in HEIs' communication message is always necessary to contribute to the evolving branding diary in higher education field. Also, future research can be a qualitative research that uses interview to investigate the perspectives of social media practitioners on the branding data analysis in this research. Furthermore, social media generally and Facebook specifically update their

algorithm quite frequently (Peruta & Shields, 2017), that raises the need of similar research with more updated data.

Conclusion

In general, the findings support previous literature about branding in higher education, as well as empirical researches on social media in the context of Canada and the United States. The research provides a clear pattern of social media and branding strategy of six HEIs, as well as their engagement measurement in the context of Ontario, Canada in 2019–2020, through 1,789 posts collected. Overall, the larger-sized HEIs tended to have higher number of page likes and lower engagement rates on posts. They used from 200 to 300 characters per posts, and from one to two posts per day with some degree of variation. Also, the HEIs preferred using posts with photos and links, rather than post with only text or posts with video. Approximately half of the posts have the hash tags. In addition, they were also more likely to posts on weekdays and daytime, rather than weekends and nighttime.

Regarding the brand positioning, all HEIs had content in all five branding—elite, campus, nurturing, outcome, and commodity—albeit with clear preference to campus and nurturing posts. They tended to post more content showing their competitive advantage. For example, UL showed a variety of elite content regarding its intensive research; UM and US focus on their key programs through not only recruitment activities, but also workshops and competitions as per campus content.

Clear preference of audience demonstrated by the engagement rates was revealed in some social media practices. Colleges' audience tended to engage more on posts with links and photos, as well as posts in the evening. They also preferred campus element on

the social media content. Also, they engaged more on content for current students than content for future students. Meanwhile, university audiences statistically engaged more on campus posts, but less on the nurturing posts, and posts targeting prospective students.

Under the scope of this major research paper with limited time and resources, the sample size may not represent the whole picture of HEIs in Ontario, Canada. Also, the coding process as well as the data organization process is time and effort consuming, which may result in minor mistakes. A media management tool was used to help minimize the mistakes when collecting the data. The data analysis was conducted in excel and SPSS, which produced reliable research results.

The research has added to the empirical data analysis results of social media practices and branding element in communication of the higher education field. The study also affirms the challenges in marketing and branding of higher education due to firstly the complex nature of HEIs, which involve various stakeholders, students, alumni, and community members, to name a few; and secondly, the rapid changing of the quasi-commercial market where HEIs are forced to join the fierce competition with less governmental funding. Regarding the practical implication, this research may serve as a reference for social media practitioners in higher education to review what they have been doing and propose appropriate modification for future work. Future study may need to see data from all HEIs in Ontario, instead of a small sample size of six HEIs, to have a deeper understanding of the social media as well as branding higher education landscape.

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