

ABSTRACT

Title of Dissertation: SUPPORTING STUDENT SUCCESS WITH ONLINE VIDEO:
A CONTENT ANALYSIS OF COMMUNITY COLLEGE YOUTUBE
CHANNELS

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For some community college students, the lack of knowledge about how to succeed in college, combined with institutional deficiencies in the provision of information and instructions to support student success, create barriers to completion. Video, an effective informational and instructional tool growing in use in higher education and popularity among college age students, has the potential to help address barriers to completion related to the information needs of students and the information provision of these institutions. However, little has been known about how community colleges are utilizing YouTube as a channel of communication and videos as a source of information to support student success. This qualitative content analysis research explores community college YouTube channels for the prevalence and breadth of video content supporting student success based upon the Loss/Momentum Framework, which identifies the information needs of students throughout their college experience. The study is primarily exploratory, but it includes some descriptive quantitative measures. The official YouTube channels of Maryland community colleges were systematically queried using search terms related to the information needs of community college students identified by the

Loss/Momentum Framework. A comprehensive sample of 784 videos and their descriptions were analyzed and classified into student success content categories in order to provide a benchmark of how public community colleges in Maryland use YouTube to provide information to support student success. Findings show that Maryland community colleges have an active presence on YouTube and that online video is a powerful communication and information provision tool that these institutions have utilized optimally to support student success. In addition, findings show that the majority of videos supporting student success on Maryland community college YouTube channels focus on the information needs of newly-enrolled students in the entry stage and current students in the progress stage of their community college experience. Furthermore, findings show that videos supporting student success on Maryland community college YouTube channels vary widely in quantity, popularity, and duration.

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by

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CHAPTER 1: INTRODUCTION

Background

Over the past decade, concern over low graduation rates among American community colleges has been the impetus for a national completion reform movement focused on improving student success. Completion rates are so low at community colleges that of the twelve million students who enroll, more than half fall off track and fail to graduate within six years of starting (Ginder, Kelly-Reid, & Mann, 2014; Juskiewicz, 2015; National Student Clearinghouse, 2014; American Association of Community Colleges, 2016). The community college completion issue garnered national attention, and the completion reform movement gained momentum during the Obama Administration with the growth and evolution of three notable national initiatives: Achieving the Dream, Completion By Design, and Guided Pathways (Boggs, 2010; American Association of Community Colleges, 2015). Although there are numerous barriers to completion and various aspects to this complex issue, developing and implementing strategies to improve student success outcomes is a common focus of these initiatives and their institutional partners (AACC, 2014).

Regardless of which strategies community colleges adopt, the 21st-Century Initiative of the AACC has recommended that implementation of plans to improve college completion must integrate technology creatively and be designed for scale (American Association of Community Colleges, 2014). Therefore, it was the intent of this study to explore how video, a creative technology which is designed for scale, is being utilized by community colleges to support student success by helping to remove institutional barriers to completion, particularly as they relate to deficiencies in the dissemination of information to navigate the institution.

Drastically low graduation rates at many American community colleges are a major problem for these institutions. Students are taking longer to complete a degree or credential, and the majority never graduate at all. More than twelve million students, nearly 38 percent of all undergraduates in the U.S., are enrolled in two-year institutions (Ginder, Kelly-Reid and Mann, 2017). However, according to the 2015-16 graduation rates reported by the U.S. Department of Education, only 17.8 percent of first-time undergraduates who enrolled full-time in two-year post-secondary institutions completed a degree or certificate within two years (Ginder, Kelly-Reid, and Mann, 2016; NCES, 2017). In addition, more than half failed to graduate or transfer to a four-year university within four years (Cohen et al., 2014; Juskiewicz, 2015). Furthermore, only 16 percent of students who started at community colleges in the fall of 2010 transferred and earned a degree at a four-year institution within six years (Shapiro et al., 2016). Although Juskiewicz (2015) questioned how the U.S. Department of Education measures graduation rates and the discrepancies between graduation and completion rates for community colleges, overall the majority of students are not earning a degree or a credential. Therefore, it is important to understand how community colleges are turning to innovative technology, like video, to improve student success outcomes.

Low Completion Rates for Special Populations

As a result of the completion movement, many community colleges have placed a major emphasis on supporting the success of the large number of minority, immigrant, low-income, and first-generation college students enrolled in their institutions (Cohen, et. al., 2014). Fifty-two percent of all Hispanic undergraduates and 43 percent of all Black undergraduates are enrolled in community colleges (American Association of Community Colleges, 2017). Additionally, 36 percent of community college students are the first in their family to attend

college; 35 percent receive Pell grants; more than half receive some type of financial aid (American Association of Community Colleges, 2017). However, several studies have found that graduation and transfer rates are especially low for minority and low-income students (Goldrick-Rab, 2010; Bailey, Jenkins, & Leinbach, 2005). For Hispanic students who started at a community college in the fall of 2010, the six-year completion rate was 33 percent, and for Black students it was 25.8 percent (Shapiro et al., 2017). Most importantly, for minority and first-generation college students, Sheppard (2012) found that the lack of knowledge about college was a significant institutional barrier. Furthermore, first-generation college students face several communication-related institutional barriers such as difficulty navigating aspects of community college requirements and difficulty understanding higher education terminology due to lack of information (Educational Advisory Board, 2016). Therefore, this study is based on the concept that community college students need specific information to succeed, and that it is important to understand how community colleges use video to communicate information to support the success of students.

Information Needs of Community College Students

No community college student should begin his or her educational journey without information on where to go and instructions on how to get there. Yet, many students entering community college lack knowledge and information about college life, how to succeed academically, how to use resources and supports, how to choose programs and majors, and how to prepare for degree completion or transfer (Rosenbaum, Deil-Amen, & Person, 2006; Zeidenberg, 2008). As a consequence, students often feel lost and confused, which leads to poor student outcomes because they feel they are given minimal information prior to enrollment, are unaware of services available to them while they are enrolled, and receive

limited information that seems complicated, inconsistent, and difficult to access (Jaggars, 2014; Jenkins, 2014; Dadgar, 2013; Karp, 2012; Karp, 2008; Zeidenberg, 2008; Gardenshire-Crooks, 2006). Moreover, Zeidenberg (2008) found that the lack of student knowledge about how to succeed in community college, how to utilize resources, and how to choose majors and careers are factors that contribute to poor student outcomes. These findings were supported by Dadgar (2013) who found that students do not receive enough information from their institutions.

According to the Building Guided Pathways Toolkit developed by Completion by Design (2014), students have specific information needs throughout the community college experience, and deficiencies in the communication of information to students create institutional barriers to completion. Furthermore, the Guided Pathway principles developed by the Completion by Design initiative emphasized the important role of communication. The principles were identified to help community colleges in the development of policies, practices, and programs to improve completion. Pathways Principle Number Three, which specifically relates to communication, information provision, and the information needs of students, states:

Ensure students know requirements to succeed, which includes: Ensure students understand the assessment and placement progress—including the importance of tests—and ways to prepare for it. Communicate clearly (and frequently) the requirements to earn a certificate or degree for each program and make sure this information is readily available to every faculty member, staff, and student. Communicate expectations to K–12 partners (Completion By Design, 2012).

Therefore, this study of community college use of video as a tool for communication to support student success has addressed the issue of deficiencies in information provision as an institutional barrier to completion. In addition, this study also addressed the information needs

of students as identified by one of the major completion movement initiatives, Completion By Design. Furthermore, this study explored and examined how community colleges are using video messages to inform and instruct students about the practices, programs, services, and college resources that support student success.

Video as a Tool for Information Provision

Providing students with the information they need to succeed is an important aspect of community college completion and is an important foundational concept of this study. Karp (2012) and Nodine (2011) have recommended that community colleges must go beyond websites to provide information in multiple formats by leveraging new technologies and popular media. Research by Jaggars (2014) on institutional barriers to community college completion related to intake, orientation, and information provision processes, proposed that how-to videos could help improve the success of students in a highly cost-effective way. In addition, the American Association of Community Colleges (2014) recommended the implementation of innovative, technology-enriched solutions “to connect students to information about their studies and the support services available to them” (p. 25). Videos of student success stories were recommended by Karp (2011; 2012) as a potential strategy to help students clarify their goals and increase their commitment to college.

Most importantly, the use of video was encouraged in Connection by Design, a major completion reform report on student perceptions of their community college experience (Nodine et al., 2012). Specifically, the findings revealed that students wanted connections to: 1) information and supports, 2) instructional services, and 3) careers and/or career exploration. In general, the report found that students were concerned about information being unavailable and not specific to their needs. In particular, with regards to the information community

colleges provide online, the report stated: “It might be useful for colleges to post videos created by students—for example, about questions they wished they had asked to help them succeed, and how they might find answers to those questions” (Nodine et al., 2012, p. 8). However, the report recognized that one of the most difficult challenges for these institutions will be “anticipating what students might need at each stage of their college experience and providing that information even when students are not asking for it” (Nodine et al., 2012, p. 6). Therefore, this study sought to understand how community colleges are addressing this barrier to completion issue by using videos to disseminate the information students need to succeed.

Video and Community College Students

The tremendous growth and impact of video use in our society, especially among college students, raise a wide array of possibilities about its promise and potential as a technological tool to support student success in higher education. With the proliferation of YouTube, an online media platform for hosting and sharing videos, post-secondary institutions are recognizing the benefits of online video for a wide variety of purposes. A considerable amount of literature has been published on the numerous ways colleges and universities are using videos, which include the following: supporting teaching and learning, communicating with internal and external stakeholders, marketing and recruitment, and enhancing the overall student experience (Leonard, 2015; Buzzetto-More, 2015; Fabris, 2015; Woolfitt, 2015; Tiernan, 2013; Roodt, 2013; McGovern and Baruca, 2013; Brecht, 2012; Bravo, Amante, Simo, Enache and Fernandez, 2015; Google, 2012; Kahn, 2011; Clark and Stewart, 2007). The growth in the use of video in higher education could be due in large part to the phenomenal growth of the online video for society as a whole.

Since its launch in 2005, the online video sharing platform, YouTube, has grown to become the second most trafficked website and the second most used search engine after Google. With billions of unique users and millions of hours of videos, YouTube (2018) reports it reaches more U.S. adults ages 18 to 34 than any cable television network, and that people between the ages of 18 to 34 are among the largest consumers of online video. The data were supported by the Pew Research Center (2018), which found that 73 percent of all adults in the U.S. use YouTube and 91 percent are between the ages of 18 and 29. Furthermore, considering that the average age of community college students is 29, these video usage statistics help make a case for leveraging video to reach, teach, and engage community college students of today (American Association of Community Colleges, 2017).

Therefore, this study argued that it is important to study how community colleges are utilizing videos on YouTube to support student success. Specifically, what types of information and instructional videos are community colleges presenting on YouTube to address the personal and institutional barriers that make it difficult for students to complete their degrees or certification programs? According to Bailey, Jaggars, and Jenkins (2015), some of these institutional barriers include open-access admission, developmental education, placement testing, unclear academic pathways, inadequate academic advising, adjunct faculty, and the lack of financial resources. Numerous studies have identified the impact of specific barriers to student success (Bailey, 2009; Spellman, 2009; McNairy, 1997; Sheppard, 2012; Kazi, 2006; and Hill, 2007). For example, navigating the path to completion is an important component of student success. However, it can also be a barrier to completion for many community college students because they often lack knowledge and information about how to succeed in college, how to use college resources, how to choose programs of study, and what they need to do to

earn a degree or transfer (Jaggars, 2014; Completion By Design, 2012; Karp, 2012; Nodine, 2011; Venezia, 2010; Gardenshire-Crooks, 2010; Zeidenberg, 2008). In addition, community college deficiencies in communicating important information to students, particularly about orientation, programs of study, and available services and resources, are considered institutional barriers to completion (Completion by Design, 2014). However, using videos and leveraging popular media and new technologies have been recommended as strategies to improve the provision of community college online information that supports student success and completion (Jaggars, 2014; Karp, 2012; Karp, 2011; Nodine, 2011).

Considering the rapid evolution of YouTube and the popularity of online videos among college-age adults, it is clear that community colleges need to understand how to use this platform to disseminate information students need to succeed. Therefore, this study of community college use of video to support student success builds upon the work of the completion reform movement initiatives by contributing to the understanding of how community colleges use video to improve information provision that supports student success and helps to eliminate communication-related institutional barriers to completion. Primarily, this study seeks to explore how community colleges use video messages and video tutorials on YouTube to 1) disseminate specific information students need to succeed, and 2) instruct students on how to navigate college successfully.

Conceptual Framework

This study integrated three relevant theories into a framework for understanding the information needs of students throughout their community college experience, their information-seeking behavior, and communication (Table 1). This approach to developing the conceptual framework was selected because the information needs of community college

students, and the provision of information to support student success, provide the justification for this research. Therefore, the Loss/Momentum Framework originally introduced in a concept paper by the Bill and Melinda Gates Foundation (2010) and further developed by the Completion by Design (2013) initiative, served as the principle construct for understanding the specific information needs of students, and for identifying community college video content that communicates information to support student success. This framework was combined with the Wilson (1999) model of information behavior and communication, and the Leckie, Pettigrew and Sylvain (1996) information-seeking behavior model.

The Loss/Momentum Framework

Integral here is the Loss/Momentum Framework for student success and completion developed by Completion By Design (2013). The Loss/Momentum Framework provides a conceptual model to help communication practitioners recognize the specific information needs of community college students because it divides the students' college experience into four critical stages and identifies risks and opportunities to improve momentum toward completion in each of these stages (Completion By Design, 2013). The framework encourages institutions to take into consideration the full range of student needs through four main stages of their interaction with the college from their first connection to completion. Each stage of the Loss/Momentum Framework—connection , entry, progress and completion—is applicable to this proposed study because many of the momentum strategies are related to communication and the need of the institution to provide information to students.

The connection stage focuses on promoting early assessment, early remediation and early college opportunities, and the entry stage suggests facilitating student enrollment, choice of program, early connections to programs of study and strong orientations (Completion By

Design, 2013). The use of video for the purposes outlined in the Loss/Momentum Framework has been supported by Karp (2011) and Jaggars (2014), who both recommend that community colleges should leverage video and communicate via popular media to help students connect to college, clarify their goals, and improve orientation. Therefore, the Loss Momentum Framework provided the basis for the research variables of this study, utilized in examining the types of video content community colleges provide to support student success.

Information Behavior and Communication Model

Wilson's (1999) model of information behavior connects information users and information-seeking behavior to the role of communication and the information provider. Both information-seeking and communication are key elements of information behavior theories. Here students are considered the information users, and the community colleges are the information providers. According to Wilson's (1981; 1996; 1999) models of information behavior, certain information needs lead people to specific information-seeking activities. He asserted that information needs are affected by a person's environment and role. Thus, community college students have specific information needs which are also affected by the college environment and their roles as students. Wilson's model indicates that personal, interpersonal, and environmental factors create barriers or intervening variables which may inhibit or support information-seeking. Thus, personal barriers such as a lack of knowledge about college, and institutional barriers such as deficiencies in information provision, could be analogized to Wilson's barriers or intervening variables of information-seeking.

Information-Seeking Behavior Model

Also significant is the information-seeking behavior model developed by Leckie et al. (1996). Their model was based on research into the different information needs of

professionals, but it also has application to the information needs of students in this study. The model identified roles and tasks that professionals have in their daily work which lead to their need to seek various kinds of information. It proposed that a professional's information needs vary depending upon the profession, field, or stage in a career.

Similarly, the information needs of community college students vary depending upon their programs of study and their stage within the path to completion. Leckie et al. (1996) asserted that information needs are also influenced by the level of complexity, sense of urgency, predictability, accessibility and source. Likewise, the information needs of community college students have significant influences, such as the complexity of registering for classes, the urgency of choosing a major, and the predictability of transferring. According to Leckie et al. (1996), the individual's awareness of the information source, accessibility, convenience, familiarity, reliability, and the format in which it is provided are also important characteristics of information-seeking. Awareness of YouTube and the accessibility, convenience, familiarity, reliability, and format of online videos could be an important aspect of a student's information seeking. Therefore, the components of this model are extremely applicable to the information needs of community college students and the information provision of these institutions based upon their needs at different stages of the student experience.

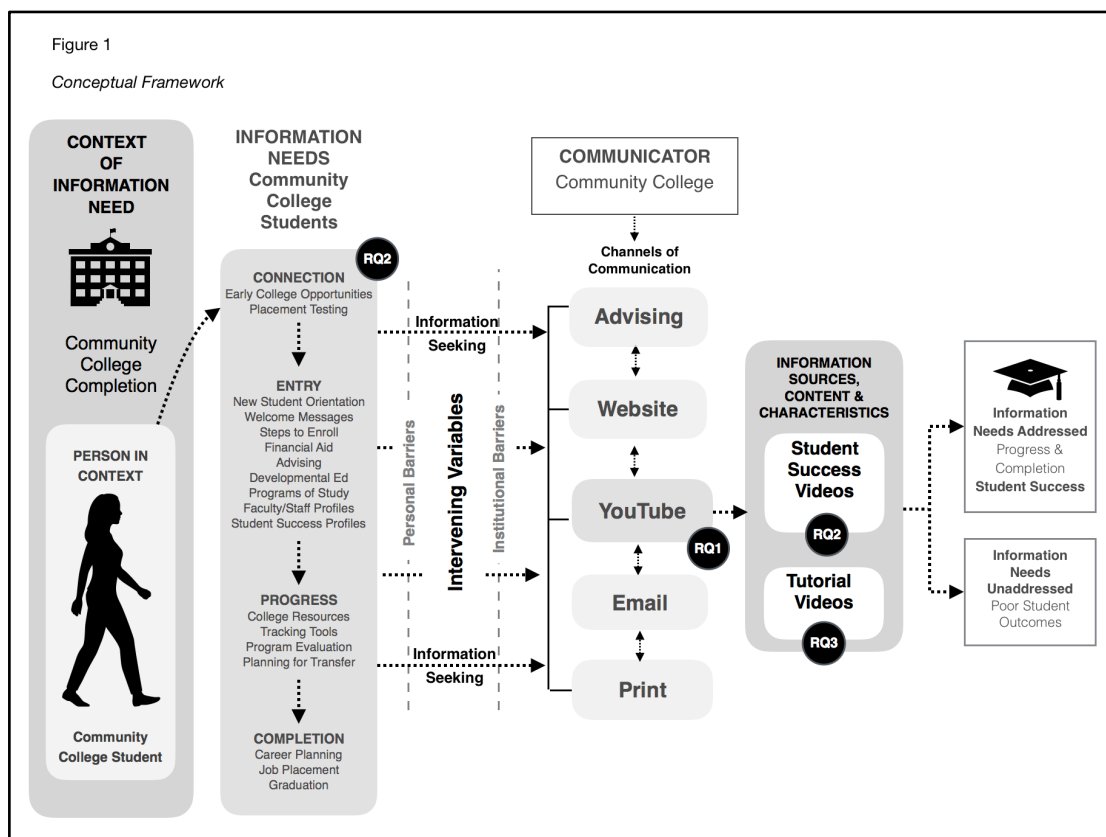


Figure 1

Problem Statement

This qualitative content analysis study, which involved descriptive quantitative measures, sought to explore how community colleges are using video messages and video tutorials on YouTube to provide information and instructions to support student success. Influenced by my professional experience as a video producer in a community college, I have rested this study upon the premise that student success is dependent, in part, on the availability of information and instructions on navigating the institution, choosing programs of study, and using college services and resources. This viewpoint is supported by numerous studies that have found that many community college students lack the information they need to succeed (Rosenbaum, Deil-Amen, & Person, 2006; Zeidenberg, 2008). In addition, studies have also

found that many community colleges are deficient in providing information to support student success (Jaggars, 2014; Jenkins, 2014; Dadgar, 2013; Karp and Bork, 2014; Karp, 2011; Zeidenberg, 2008; Gardenshire-Crooks, 2006).

However, there has been insufficient research on the extent of community college use of online videos or the content and characteristics of these videos as a source of communication to provide information to support student success. Because research suggests that video, particularly YouTube, is an effective communication and instructional tool which is growing in popularity among college students, it was important to understand to what extent community colleges use videos to provide information and to instruct students on specific behaviors and practices related to student success. Finally, this study addressed the completion problem by examining community college use of videos on YouTube to support student success, which could potentially help institutions improve communication and information provision relative to the continual information needs of the students they serve.

Research Questions

Through a qualitative content analysis research design, with some quantitative descriptive measures, this study sought to address a gap in the literature regarding community college use of videos on YouTube to provide information and tutorials to support student success. This research primarily focused on exploring the YouTube channels of community colleges in Maryland and examining the available videos and tutorials that inform and instruct students about topics and practices which contribute to student success. Based upon the Loss/Momentum Framework, these topics and practices include navigating the institution, choosing programs of study, and using college services and resources, among many others. Hence, this study posed the following three research questions:

Research Question 1

RQ1: How are public community colleges in Maryland using YouTube as a channel of communication and source of information for students?

The first research question aimed to describe and quantify the extent of YouTube use among community colleges in Maryland to communicate information to students. By collecting data on the number of videos, views, subscribers, and the date each community college in Maryland established their YouTube channel, RQ1 provided a baseline benchmark of YouTube use, presence, level of activity, and popularity. In addition, a content analysis of video titles presented on the home page, and video playlists titles, of each community YouTube channel, provided an understanding of the how these institutions are using YouTube as a source of information for students.

Research Question 2

RQ2: What videos are presented on the YouTube channels of public community colleges in Maryland to support student success based upon the Loss/Momentum Framework, and what is the popularity of these videos?

The second research question sought to identify, describe, and examine the breadth of video content supporting student success available on the YouTube channels of community colleges in Maryland. A codebook of student success topic variables derived from the Loss/Momentum Framework and from the review of the literature related to the information community college students need to succeed was developed for this research question. The codebook is attached in Appendix A. The digital coding spreadsheet used to collect data for RQ2 is attached in Appendix B. The findings from these data quantified the frequencies and

popularity of videos for each topic and helped provide an understanding of which student success video topics were most commonly and least commonly presented on these channels. Popularity was based on the number of views for each video. Collecting data on the number of video views helped identify the most and least popular student success topics and videos.

Research Question 3

RQ3: What tutorial videos are presented on the YouTube channels of public community colleges in Maryland to support the orientation of new students, and what is the popularity of these videos?

The third research question aimed to identify and examine tutorial videos used for the orientation of new students. Tutorial videos, also known as “how-to” videos, present procedural knowledge, provide discrete step-by-step instructions, and are more likely to be re-watched multiple times by students (Guo et al., 2014). Community college tutorial videos could include information and step-by-step instructions about the procedures, processes, and policies new students must know and follow when entering the institution. For example, based upon the student success variables of the Loss/Momentum Framework, community college tutorial videos could be used to teach students the steps to enrollment, or how to register for classes, apply for financial aid, develop an academic plan, or use college resources, among other topics. Therefore, RQ3 helped provide an understanding of how these institutions are using tutorial videos to enhance information and instructions provided during orientation to support the success of new students.

Significance of the Study

This study of community college use of videos on YouTube to support student success contributes to the emerging body of literature on institutional strategies and practices used by

community colleges to address the issue of barriers to completion, and to broaden current perspectives on information provision and communication. Informed by the literature on community college completion initiatives and strategies to support student success, particularly the Loss/Momentum Framework, this study focused on a specific communication tool for supporting student success and completion that often has been overlooked by researchers. By conducting a content analysis of the types of student success videos currently available on institutional YouTube channels, this study provided insight into and a baseline for community college use of this medium for disseminating information students need to succeed.

From a theoretical perspective, this study will help institutions better understand student information needs, information-seeking, and how video can be used for communication and information provision. Moreover, this study has particular significance to community college communications professionals, educational video producers, as well as academic and student services administrators because it will help them improve their communication practices by enabling them to evaluate the breadth of their video content and characteristics of the information they provide on YouTube. Lastly, scholars who research solutions to institutional barriers impeding community college completion and innovative technological solutions to support student success will also be especially interested in this study.

Supporting student success on YouTube

The suitability of using videos on YouTube to support student success is a significant area for study because of the increasing popularity of this platform among college-age students and its increasing adoption among community colleges. A better understanding of how community colleges are using YouTube and the types of student success videos on their institutional channels could be beneficial in several ways. First, it would quantify community

college YouTube adoption, the extent of student success videos on these channels and their level of activity and engagement of the videos, providing a baseline for institutional comparison. Secondly, this study provides insight into the breadth of topics and types of student success video content being produced by community colleges and published on YouTube. Furthermore, this study is significant because it expands, using empirical data, the emerging body of literature on the increasing use of YouTube as an informational, educational, and promotional tool in the health sector by focusing on similar uses in higher education. Most importantly, the findings of this study shine a light on how community colleges are using video to improve student success and information provision which could help reduce institutional barriers to completion.

Improving community college information provision

With a focus on improving community college information provision, this study is significant because it explores and examines how community colleges use videos on YouTube to disseminate information to support student success. Community college administrators have a compelling interest in ensuring their institutions communicate and provide the information students need to succeed and complete their programs of study. Moreover, this study offers insight into the extent of community college use of YouTube for information provision and the commitment they have to supporting student success with video. Researchers have suggested that community colleges should take into account how students consume media, including social media, and subsequently employs innovative methods to reach and engage them (Nodine et al., 2012). Therefore, a content analysis of community college YouTube content supporting student success, paired with activity metrics, may provide evidence for institutions seeking to implement or enhance their video practices and resources to improve information provision.

Limitations

This qualitative content analysis of community college use of videos on YouTube to support student success had a few limitations related to YouTube metrics and content analysis. YouTube analytics make it possible to track video metrics by publicly providing the number of videos on a channel, the number of views of each video, the number of “likes” for each video, the number of comments on each video, the most watched video, as well as the number of subscribers of each channel. Although there are numerous metrics to measure videos on YouTube, according to Larsen and Salber (2016), it is difficult to identify the right key performance indicators to evaluate the effectiveness of a video. For example, the number of video views is a limitation of this study because view counts do not measure how many of the viewers are students or the effectiveness of the video. However, view counts could be considered a good indication of the popularity of a video.

Another limitation is related to identifying video content supporting student success. Some videos may not accurately reflect the information needs of a specific student population, such as non-English speaking students. For this study, only videos that were in English were included in the sample, which is another limitation. The geographical region and limited number of community college YouTube channels and videos analyzed were also limitations of this study. The use of YouTube by Maryland community colleges may not be representative of other public two-year post-secondary institutions in other areas of the United States. Lastly, the sample size of videos analyzed may not reflect the entire volume of content supporting student success available on the YouTube channel of each community college.

Delimitations

Although the target entity for this study was all community college YouTube channels, this study is bounded by the accessible population of official YouTube channels of public community colleges in Maryland. Additionally, this study was bounded by the videos presented on official community college YouTube channels. It did not examine videos produced by community colleges that were presented on websites or other internal or public video-sharing platforms. Furthermore, this study was also bounded by community college student success videos. It excluded community college videos related to athletic events, and administrative activities unrelated to academics, such as trustee board meetings. Lastly, this study did not analyze all student success videos, only those videos that focused specifically on the information needs of students derived from the conceptual framework of this study.

Conclusion

In conclusion, the primary purpose of this qualitative content analysis study, which used some quantitative descriptive measures, was to explore how public community colleges in Maryland use online videos as sources of information, and YouTube as a channel of communication to support student success. To summarize, this study addressed the problem of barriers to community college completion related to institutional deficiencies in providing and communicating information that supports student success, and the lack of student knowledge about how to succeed in college. The conceptual framework for this study integrated the Loss/Momentum Framework for student success with models of information seeking. The next chapter provides a review of the literature related to this study.

CHAPTER 2: LITERATURE REVIEW

This chapter offers a review of the literature which provides the context for this study of community college use of videos on YouTube, and for communicating information to support student success and completion. According to Creswell (1994), a literature review provides findings of studies closely related to the research topic, connects the study to the broader scope of ongoing research on the topic by revealing gaps in research, and provides a foundation for supporting the significance of the study. Therefore, this literature review is divided into four main sections: Community college completion and information provision, Community college completion movement and reform initiatives, Use of video and YouTube, and the Conceptual framework.

The first section of the literature review prepares the context for this study by describing the community college completion issue, with a special focus on barriers to completion related to communication and information provision. The second section of the literature review connects this study to research on the community college completion movement and the evolution of major reform initiatives, particularly Completion By Design. The literature review explains the Loss/Momentum Framework developed by Completion By Design (2012), which provided the variables for this study. The third section of this chapter reviews the literature on the uses of video and YouTube, particularly in higher education. It also provides a review of YouTube content analytic studies of health videos and explains how they influenced the research design for this study. Lastly, the fourth section of the literature review explains the theories and models included in the conceptual framework for this study.

Community College Completion and Information Provision

Improving student success at America's community colleges became a national priority in the past decade for many reasons. Most notably, more than half of the students enrolled in community colleges fail to graduate or transfer to a four-year university (Cohen et al., 2014). Furthermore, according to the U.S. Department of Education the official graduation rate for community colleges is 21 percent, although there is wide concern over how rates are measured and the differences between completion and graduation rates (Juszkiewicz, 2015). In addition, college completion rates for all post-secondary institutions have declined, as research by Lauff and Ingels (2014) found that fewer than half of the students who graduated high school in 2004 attained a college degree within eight years. Similarly, a study by Radford, Berkner, Wheelless, and Shepherd (2010) found that less than 36 percent of first-time college students completed a post-secondary credential in six years after enrolling in community college. Moreover, several studies have found that graduation and transfer rates are especially low for poor and minority students (Bailey, Jenkins, & Leinbach, 2005; Goldrick-Rab, 2010). Subsequently, President Obama brought national attention to the issue in 2010, when the White House convened the first-ever summit on community colleges (The White House, 2011). While there are a multitude of reasons why community college students fail to graduate, there are also major efforts to reform these institutions, all part of a nationwide completion agenda.

Information Barriers to Community College Completion

The limited knowledge some community college students have about higher education in general can impact their success in many ways. Studies have found that many students entering community college lack knowledge and information about college life, how to succeed academically, how to use resources and supports, how to choose programs and majors, and

how to prepare for degree completion or transfer (Rosenbaum, Deil-Amen, & Person, 2006; Zeidenberg, 2008). Additionally, Sheppard (2012) identified the lack of general information about college, college processes, and higher education terminology as barriers to student success in community college, which made it difficult for students to navigate admission, register for classes and choose majors. Similarly, Zeidenberg (2008) found that the lack of student knowledge about how to succeed in college, how to utilize resources, and how to choose majors and careers are factors that contribute to poor student outcomes for community college students. This lack of knowledge is not only a problem for new, entering students, it can be a problem for students throughout the college experience. In addition to students lacking a general knowledge about college, deficiencies in community college information provision may also create institutional barriers to community college completion.

Deficiencies in the Provision of Information at Community Colleges

Many community colleges may be failing to provide students with the information they need to succeed and may be inadequately communicating the limited information they do provide. The deficiencies of community college information provision combined with the information needs of today's community college students are two research areas which have been documented in recent literature (Jaggars, 2014; Jenkins, 2014; Dadgar, 2013; Karp and Bork, 2014; Karp, 2011; Zeidenberg, 2008; Gardenshire-Crooks, 2006). According to Nodine et al. (2012) deficiencies in community college information provision could create institutional barriers to completion by not providing students with the information they need to receive on a continual basis, from the time they enroll until they graduate. Studies have also found that students feel they are provided minimal information prior to enrollment, and they are unaware of services available to them while they are enrolled. Furthermore, the limited information they

do receive seems complicated, inconsistent, and difficult to access (Jaggars, 2014; Jenkins, 2014; Dadgar, 2013; Karp, 2012; Karp, 2008; Zeidenberg, 2008; Gardenshire-Crooks, 2006).

Deficiencies in community college information provision are not limited to new entering students, but it may also be a problem for returning and minority students. Lack of information about articulation requirements was considered an institutional barrier to completion which resulted in students taking courses which are not transferable (Kazi, 2006). For minority students, deficiencies in information provision may be particularly problematic. For example, Hill's (2007) research on institutional and personal barriers to persistence and discontinuation of Latino students in community colleges found that 90 percent of the participants in the study had a limited knowledge of the programs offered by the college. Noted community college scholar Thomas Bailey (2010) urged institutions to do more to ensure that students fully understand what the institutions do and what programs they offer.

Community college websites and new student orientations are designed to provide information students need, but they may be insufficient communication methods to support student success adequately. Research by Jaggars (2014) found that both students and advisors are dissatisfied with the often limited, inconsistent, and difficult-to-find information on community college websites and with the inordinate amount of information often provided in person at new student orientations. Moreover, studies on the effectiveness of community college orientation and information provision have recommended that institutions redesign and improve their orientation delivery (Jaggars, 2014; Shugart & Romano, 2008), as well as make their online content more engaging by the utilization of popular media, such as how-to videos and video vignettes of students (Karp, 2011). Therefore, the literature supports the premise of

this study that community colleges could improve the information provided on their websites and at orientation through the use of videos.

Video technology has been recommended as a potential strategy for supporting student success and improving community college completion. Several studies on improving community college student success have recommended leveraging new technologies such as video to provide information that is dynamic, engaging, easy to access, and available on popular online platforms and social media sites commonly used by students today (Karp, 2011; Karp, 2012; Nodine et al., 2011; Nodine et al., 2012; Dadgar, 2013). Therefore, as the information needs of community college students increase and become more critical to their completion, community colleges may have to move beyond relying solely on advisors, websites, and orientation for information delivery and consider using social media and video sharing sites to support student success (Karp, 2011; Karp, 2012; Nodine et al., 2011; Nodine et al., 2012; Dadgar, 2013). While a substantial number of website and orientation studies are evidence of the lack of effectiveness of community colleges in communicating information to students, scarce research has been conducted on how these institutions are addressing the problem with regards to the utilization of videos on YouTube.

New Solutions to Improve Information Provision

Studies suggest new approaches to addressing the information needs of community college students (Rosenbaum, Deil-Amen, & Person, 2006). Students need information that is easy to access online, instead of having to make an appointment to ask an advisor. However, websites may not be the best information source for students. The significance of the problem was recognized by Completion by Design (2012), a national community college completion initiative, which identified “ensuring students know requirements for success” as the number

one Pathway Design principle that community colleges must strategically implement to improve completion rates (p. 11).

Information Needs of Community College Students

From the general to the specific, both newly enrolled and returning students need a multitude of information to succeed in community college. According to the momentum strategies of the Loss/Momentum Framework, community college students need information that connects them to the institution, as well as information about college readiness, assessment and placement policies, developmental education, early college opportunities, programs of study, graduation, articulation, and transfer (Completion By Design, 2014). For example, Nodine et al. (2012) conducted focus group studies about student perceptions of the community college experience. Their research revealed that the primary information needs of community college students include the following: 1) generic information about higher education, 2) routine information about institutional processes, procedures, services and resources, and 3) specific information about choosing courses and programs of study.

Interestingly, additional focus group research conducted by Public Agenda (2012) of students enrolled in the cadre of Completion By Design colleges revealed another aspect about the information-seeking of students. The data found that students are aware of the variety of services offered beyond advising, but the lack of institutional communication and deficiency of information provision make it difficult to find the specific information they need. Although community college websites and in-person orientations are considered important sources of information for students, Jaggars (2014) argued that they have fallen short of their potential.

Disseminating information about programs of study is also an integral part of supporting student success. In terms of choosing a major, Nodine et al. (2012) found that community

college students know they need to choose a major, but they may not know how to find information about different programs and careers. Most significantly, students want community colleges to anticipate their questions because they may not be aware of what information they need until it is too late (Nodine et al., 2012).

Community College Completion Movement and Reform Initiatives

Several national, state, and institutional reform efforts have been implemented to improve community college completion rates. At the institutional level, Karp (2015) argued that dual enrollment is an evidence-based educational reform that is improving student outcomes and completion goals. At the state level, Stout (2016) asserted that there are a variety of statewide comprehensive completion reforms related to developmental education, dual enrollment, completion and transfer, and performance-based funding. At the national level, there have been several major community college reform efforts aimed at improving completion.

In response to policymakers and educators questioning the low completion rates of community college, many national initiatives developed to address the issue and improve student outcomes. Achieving the Dream (ATD), Completion By Design (CBD), and Pathways are three different national initiatives focused on improving community college student success (Brock, Mayer, & Rutschow, 2016). Conceived in 2004, Achieving the Dream: Community College Count was the first major initiative focused on improving student completion, equity, and comprehensive institutional performance (Davis, 2009).

Achieving the Dream. Achieving the Dream is the largest and oldest community college completion reform initiative. The organization claims to lead the “most comprehensive non-governmental reform movement for student success in higher education history” (Achieving the

Dream, 2017). Originally funded by the Lumina Foundation, ATD was founded upon five guiding principles: 1) Secure leadership commitment; 2) Use data to prioritize actions; 3) Engage stakeholders; 4) Implement, evaluate, and improve intervention strategies; and 5) Establish a culture of continuous improvement (AACC, 2015). However, Rutschow (2011) found that while some focused ATD programs were successful, they did not result in large scale improvements of student outcomes at institutions. In addition, Quint et al. (2013) found that the approach of ATD to reform community college development education through its participation in the Developmental Education Initiative was ineffective. As a result, according to the AACC Pathways Project (2015), emerging studies on community colleges being too complex and confusing for students (Scott-Clayton, 2011), early and accelerated entry into community college programs of study (Attewell, Heil, & Reisel, 2011; Jenkins & Cho, 2012) and the ineffectiveness of developmental assessments and coursework (Bailey, 2009; Edgecombe, 2011; Jenkins et al., 2010; Scott-Clayton, 2012) influenced the development of the Completion By Design Initiative.

Completion By Design. According to the American Association of Community Colleges (2015), the early work of Achieving the Dream, the experiences of the Developmental Education Initiative and emerging studies from the Community College Research Center influenced the conceptual development of Completion By Design (CBD). Launched in 2011 by the Bill and Melinda Gates Foundation, CBD was a five-year \$34.8 million comprehensive reform initiative to help substantially improve graduation rates for lower-income community college students (Bill and Melinda Gates Foundation, 2010). Founded on the premise that comprehensive reform would increase student success, CBD asked a cadre of community college grantees to take several steps to improve completion, including analyzing their systems and processes, and developing a pathway for student experience, among other actions. In regards to this proposed

study of video to support student success, it is important to note that CBD also encouraged colleges to incorporate proven and promising practices across every dimension of the student experience. Therefore, because a review of the literature supports video as one proven and promising practice used in higher education, it is important to understand how it is being used by community colleges to support student success.

According to Brock et al. (2016) Completion by Design was considered the second generation of community college reform because of the influences which contributed to the development of the Loss/Momentum Framework. Working with groups of community colleges within several different states, Completion By Design developed the Loss/Momentum Framework model to help community colleges understand the students' journey through college from start to completion. In addition, the Loss/Momentum Framework was used to help facilitate the design of solutions to support student success across the student's entire educational experience (Bill & Melinda Gates Foundation, 2010). This proposed study will examine the use of video as a solution to support student success within the context of the LMF.

The Loss/Momentum Framework. There are multiple components to understanding the community college student experience within the Loss/Momentum Framework. The Loss/Momentum Framework divides the student's community college experience into four key stages and identifies high-risks and high-opportunities to improve momentum toward completion (Brock et al., 2016; Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The framework takes into consideration the full range of student needs through four main stages of their interaction with the college, from their first connection to completion. The Loss/Momentum Framework helps colleges identify points at which students might fall off-track or become susceptible to dropping out. Therefore, it provides opportunities for institutions to

improve retention and momentum toward completion. This section of the literature review lists and describes the four stages of the Loss/Momentum Framework and why they were applicable to this study (Table 1):

- Connection
- Entry
- Progress
- Completion

Connection is the first stage of the Loss/Momentum Framework, which begins at the moment of interest in the institution through application. It focuses on how community colleges can support students through the application intake, financial aid, and placement testing processes (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). Key policies supporting the Loss/Momentum Framework connection stage encourage the promotion of early college opportunities, remediation, and assessment. Therefore, this study examines how community colleges use video to provide general information about the college; early college programs; how to apply and enroll; apply for financial aid; prepare for and take placement tests; and how to develop an academic and career plan.

Entry is the second stage of the Loss/Momentum Framework, which starts at enrollment to completion of a student's first college-level course. The entry stage focuses on helping students choose and successfully enter a program of study as soon as possible (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The goal of this stage is to help students decide on a major and pass their required introductory courses in their major (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The entry stage also includes policies that support coherent assessment and placement, developmental education redesign and

strong college orientation and advising (Completion By Design, 2013). Hence, this study examines how community colleges use video to provide information about assessment and placement, programs of study offered by the institution, orientation, and developmental education.

Progress is the third stage of the Loss/Momentum Framework, which begins at the student's entry into a course of study and goes to 75 percent of completed requirements (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The progress stage focuses on helping students complete their program requirements sooner. The goal of this stage is to monitor the progress of students in their programs to help prevent them from falling off track (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The progress stage also includes policies that support "access to structured programs and pathways, early declaration of academic majors and strong retention-focused advising and interventions" (Completion By Design, 2014, p. 1). Therefore, this study examines how community colleges use video to provide information about the college resources and services that help retention and supports student success, such as advising, tutoring, mentoring, computer labs, and library facilities.

Completion is the final stage of the Loss/Momentum Framework, which includes the last 25 percent of a student's course of study, to completion of earning a credential with labor market value (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). The completion stage of the Loss/Momentum Framework includes monitoring student rates of completion, transfer and job placement by program. It focuses on helping students graduate sooner and preparing students to transfer to a four-year institution, enter a career, or advance in the workforce (Bill & Melinda Gates Foundation, 2010; Completion By Design, 2013). Key policies of this stage support developing plans for graduation and job placement, and improving

articulation and transfer. Therefore, this study examines videos that provide students with information about graduation, transfer, and career placement opportunities.

Student success video topic variables for this study of community college use of videos were found within each stage of the Loss/Momentum Framework because many of the momentum policies and strategies are related to communication and information provision. For example, the momentum strategies within the Connection stage focus on increasing “student interest in, understanding options for, and connections to college,” which includes promoting early assessment, early remediation, and early college opportunities (Completion By Design, 2013). Additionally, momentum strategies within the Entry stage include facilitating student enrollment, choice of program, early connections to programs of study, and strong orientations. The use of video for these purposes was suggested in research by Karp (2011) and Jaggars (2014), who recommended that community colleges should leverage video and communicate via popular media to help students connect to college, clarify their goals and improve orientation. Because the Loss/Momentum Framework identifies the information needs of students at each stage of their college experience, it provided the basis for identifying the research study variables for the types of video content community colleges provide to support student success.

Table 1

Table 1 <i>CBD Loss/Momentum Framework Key Strategies and Policies</i>			
CONNECTION	ENTRY	PROGRESS	COMPLETION
Interest to application	Enrollment to completion of gatekeeper courses	Entry into course of study to 75 percent of Requirements completed	Complete course of study to credential with labor market value
Promotion of Early College Opportunities	Enrollment Information	Information About College Resources and Services	Encourage transfer goals
Summer bridge programs	New Student Orientation	Entry into Course of Study	Career and Job placement
Promotion of Early Assessment & Remediation	Academic & Career Advising	Information about the college's tools for helping students stay on track	Graduation Requirements
	Assessment and Placement	Complete a degree audit	
	First Year Experience & Student Success Courses	Transfer planning and Requirements	
	Explore and enter programs of study and careers		
	Develop educational goals, career goals, and a degree plan.		
	Developmental Education		

Guided Pathways. The most recent evolution of the community college completion movement is Pathways, which was influenced by Completion By Design and launched in 2015. Based upon the concept of guiding students on a pathway to completion, the Pathways Model is defined as follows:

an integrated, institution-wide approach to student success based on intentionally designed, clear, coherent and structured educational experiences, informed by available evidence, that guide each student effectively and efficiently from her/his point of entry

through to attainment of high-quality postsecondary credentials and careers with value in the labor market (AACC Pathways Project, 2016).

The Guided Pathways model is based upon research that suggested community colleges are operating under an outdated “cafeteria” model with too many program offerings that are often unclear to students and do not meet their career or educational goals (Bailey et al., 2015). According to the AACC Pathways Project (2016), community colleges need to redesign programs and support services at scale to improve student learning and progression.

The pathways model has four dimensions, which include the following:

1. Clarify paths to student end goals
2. Help students choose and enter a pathway
3. Help students stay on path
4. Ensure that students are learning (Pathways, 2015).

The concept of Guided Pathways has gained popularity among both two and four-year institutions and has been recognized by community college scholars Bailey, Jaggars, and Jenkins (2015) as a promising approach to improving completion. Many of the components of the pathways model were based upon the Completion by Design Pathway Principles which were identified to help inform community colleges in the development of policies, practices, and programs to improve completion (Completion By Design, 2012). Completion By Design was based on the following principles:

1. Accelerate entry into coherent programs of study
2. Minimize the time required to get college-ready
3. Ensure that students know the requirements to succeed
4. Customize and contextualize instruction

5. Integrate student supports with instruction
6. Continually monitor student progress and proactively provide feedback
7. Reward behaviors that contribute to completion
8. Leverage technology to improve learning and program delivery

According to the AACC Pathways Project (2016), these principles were considered a new and unconventional approach to improving completion. Consequently, research by Jenkins and Ran (2011) found that some institutions decided not to apply all of the principles to their organizational practices, which resulted in varied implementation of the Completion By Design model.

The research problem of this study applies to the third pathway principle because it is related to communication, and it implies deficiencies in the information community colleges provide to support student success. However, it is important to note that the CBD model led to the development of the Loss/Momentum Framework, and many of the components of CBD principles were also integrated into Guided Pathways (AACC Pathways Project, 2016). Furthermore, Guided Pathways is not considered another reform, but it is “a framework or general model that helps unify a variety of reform elements around the central goal of helping students choose, enter, and complete a program of study aligned with students' goals for employment and further education” (AACC Pathways Project, 2016, p 4). Although it is too new to assess the overall impact of the Guided Pathways model, a growing number of community colleges are using it to redesign programs and the entire student experience to improve student success outcomes (AACC Pathways Project, 2016). Therefore, this study argues that video is a useful communication tool that could help community college students choose a program of study, which is supported in research by Jaggars et al. (2014).

The Use of Video and YouTube

This section of the literature review primarily focuses on video uses, particularly studies related to the use of video and YouTube in higher education. Studies were analyzed under several subsections and help support the suitability of community college use of videos on YouTube to communicate information to support student success. Studies on the growth and impact of YouTube, as well as the use and user behavior of YouTube among college students, provided the context for this study. The next subsections focus on the use of YouTube in higher education inside and outside of the classroom, which supports the purpose of community college use of YouTube to enhance student success. In addition, this section includes a review of the literature on content analytic studies of YouTube use by corporations, governmental agencies, nonprofits, and health organizations for its applicability to this study.

YouTube growth and impact. Video viewership and video content in the United States have grown exponentially since the launch of YouTube in 2004. Advancements in television, computers, digital video, the Internet and smartphone technology have given rise to an explosion in video content and consumption (Nielsen, 2017). In terms of reach, YouTube (2017) reports that it reaches more than one billion users who watch over one billion hours of video each day. In terms of YouTube usage, studies also show that online video consumption has more than doubled over the past decade (Pew Research Center, 2015), due in large part to the availability and on-demand nature of online video (Nielsen, 2017). According to research by Nielsen (2012), during May 2012, “there were 163 million unique U.S. video viewers who streamed over 26 billion videos and spent about 5.8 hours on average watching online video.” Since its beginnings, many studies have asserted that YouTube is a promising platform for

promoting behavior change, particularly among young people (Ahn, Kwak, & Jeong, 2007; Cheng & Liu, 2007).

YouTube users and behavior. With over one billion users, YouTube has had a major impact on all groups and aspects of our society, but it may have the most appeal to young people. In terms of who watches, according to the Pew Research Center (2014) survey of internet users, YouTube is most popular among young adults, Blacks, and Hispanics. According to a global YouTube audience study, 76 percent of young adults visit YouTube weekly, and 36 percent visit the site daily (IPSOS Media, 2013). However, there are racial differences in YouTube use, with African Americans and Hispanics more likely to use the video-sharing site than whites (Pew Research Center, 2014). Therefore, considering that minorities comprise the majority of students enrolled in community college (American Association of Community Colleges, 2017), and how-to videos are among the most watched on YouTube (Google/Ipsos Connect, U.S., 2016), this researcher would argue that community colleges should optimize use of videos on YouTube to support student success.

YouTube content and higher education information seeking. Many students are turning to videos on YouTube to find information on education-related subjects (Snelson, 2011). In terms of video content, according to research by Google/Ipsos Media Connect, U.S. (2016), “how-to videos” are among the top video content categories watched on YouTube. The other categories include comedy, music, and entertainment/pop culture. In addition, research also shows that viewers have more purposeful and targeted engagement with online video, such as searching for how-to videos on a topic (Nielsen, 2017).

Clearly, YouTube is becoming a useful research tool for students researching post-secondary institutions. According to research commissioned by Google (2011) on reasons for

using YouTube for higher education research, two out of three learners turn to video to get to know a school. For students researching information about a prospective school, 62 percent use YouTube to watch videos about the school, compared to 57 percent who use the institution website (Compete, Inc. USA, 2011). Furthermore, the study found that videos shape students' perceptions about school and video helps them get to know a school, especially in terms of specific features, campus culture and environment, and program offerings.

YouTube user behavior and use among college-age students. Video consumption, creation, and curation play a major role in popular culture and in the daily lives of today's college students. As the world's largest and most ubiquitous video-sharing platform, YouTube appeals to college-age students (Jung & Lee, 2013). Research shows that people between the ages of 18 to 34 are among the largest consumers of online video (Pew Research Center, 2014; Jones & Fox, 2009). This age group also spends the most time watching video on the Internet—almost an hour-and-a-half each week (Nielsen, 2014). This investment of time may be due in large part to their use of YouTube and other social media venues for entertainment, social engagement, relaxation, and information exchange (Hordemann & Chao, 2012; Jones & Fox, 2009). However, there are differences in YouTube viewing in terms of gender as Haridakis and Hanson (2009) found that college men were more likely to watch YouTube than women, particularly for information-seeking.

In the early days of YouTube, Lin, Michko, and Bonk (2009) conducted studies on the characteristics of YouTube users and the implications for education. However, while some educators questioned its use for learning, early supporters like Prensky (2010) suggested that everyone should be using video in education, and Khan (2011) strongly argued for the use of video to reinvent education. After nearly a decade, numerous studies have found that young

adults and college students use YouTube for social media and academic purposes (Sesterhem, 2012), including to learn new skills and explore their identity (Chau, 2010). In addition, YouTube communities provide a platform for viewer participation through its comments feature and offers an active participatory culture for young adults (Savage, 2014; Chau, 2011). Therefore, this study argues that the ability to post comments on YouTube also supports student success because it offers a unique opportunity for students to respond to and interact with the institution. It allows the community college to interact with a community of students online by answering their questions and responding to comments about the video.

It is important to note that YouTube is not the only source for online videos. Nielsen (2014) research shows that college students watch videos from a variety of sources. Leonard (2015) found that 79 percent of college students watch videos outside of class to enhance their learning; and 59.3 percent of the students studied watch educational videos on their own time to help them understand course material. However, in terms of access to videos assigned for class, research from Li, Lau, Shih and Li (2008) revealed that these students mostly used YouTube and learning management systems such as Blackboard. The exponential growth and impact of video use in our society, especially among college students, raise a wide array of possibilities about its promise and potential as a technological and communication tool to support student success in higher education.

Content analysis studies of YouTube. As the largest online video platform, YouTube has been studied by a growing number of communications scholars (Burgess & Green, 2009; Frohlich & Zmyslinski, 2010; Freeman & Chapman, 2007). The majority of studies of YouTube utilize qualitative research design methods such as content analysis or case studies (Snelson, 2011). Moreover, many of these studies have focused on analyzing specific content and

characteristics of videos on YouTube (Snelson, 2011; Alias et al., 2013). However, several studies used quantitative research methods including experimental and correlational. Many of the quantitative studies examined the impact of video content on viewers, the viewer engagement of YouTube videos, and associations between specific YouTube variables.

YouTube use in the government and nonprofit sectors. Individual, corporate, and organizational use of YouTube extends across the public and private sector. Studies of the 500 largest corporations in the U.S. found that 75 percent use YouTube as a social media platform (Barnes & Pavao, 2017) and to communicate and engage with stakeholders (DiStaso, 2013; Bonsón, Bednarova & Escobar-Rodríguez, 2014). Likewise, studies of the top 400 charities and nonprofits in the U.S. found that 97 percent use videos to help inspire their stakeholders (Barnes, 2014), and that YouTube videos were primarily used to inform and educate viewers about their organization's missions, programs, and services (Waters & Jones, 2011). Similarly, Young (2012) found that nonprofit human service organizations employ YouTube to connect with stakeholders and report on the progress of projects.

YouTube is also employed by the non-profit sector as a marketing, promotional, and engagement tool. Colburn and Haines (2012) examined the use of YouTube by libraries as a promotional tool and Dearolph (2014) examined the use of YouTube as a tool by museums for audience engagement. Government use of YouTube was studied by Velasco (2016), who examined online video as a tool for education and engagement by city planning departments, and by Thackeray, Neiger, Smith, and Van Wagenen (2012), who studied the extent of YouTube use by public health agencies.

In contrast to the professional marketing and promotional videos presented on YouTube by for-profit and nonprofit organizations, Welbourne and Grant's (2015) study of science videos

on YouTube found that user-generated amateur videos and channels are significantly more popular than large professional media channels. The researchers argue that user-generated videos that feature a YouTube host are more likely to have a higher number of views, subscribers, and comments. As a result, viewers develop a connection and sense of trust with the YouTube host, and are more likely to post comments and subscribe to the channel. This study, which examines video characteristics, would argue that community college videos that feature a host would receive higher views and engagement. Although YouTube is used throughout the public and private sector, and videos are produced by both professionals and amateurs, its use in the health communication is especially applicable to this proposed study.

YouTube use for health communication and education. Videos used in health communication and education have similar purposes to videos used in higher education. According to Valencia, Kingston, Nakamura, Rosenfield, and Schwartz (2004), the primary goal of health educators is the successful dissemination of important information that promotes the acquisition of knowledge and changes in behavior in targeted populations. Information-seeking on health is one of the most commonly searched topics on the Internet, as well as on YouTube (Fox, 2011). This information-seeking is supported by a review of the literature which suggests that YouTube is an ideal web channel for health communication (Fox, 2011), information seeking (Chou et al., 2009), information provision (Paek, Hove, & Jeong, 2011; Metzger & Flanagin, 2011), and for social marketing (Cugelman, Thelwall & Dawes, 2011), particularly for young adults ages 18-24 (Centers for Disease Control and Prevention, 2011). These studies support the argument that YouTube is an ideal platform for community colleges to communicate information and instruct students on the practices and behaviors that contribute to student success.

There is extensive literature on the use of videos on YouTube to inform and teach young adults about important health topics. YouTube was found to be a viable health informing channel for young adults to facilitate knowledge acquisition about safe sexual behavior when studied by Prybutok (2013). The persuasive impact of YouTube anti-smoking videos was studied by Paek, Kim and Hove (2010), who found that the interactive video platform was beneficial for both viewers and health educators, especially for evaluating comments on video content. The increase in the number of informational health videos on YouTube is well documented in the literature (Fordis, Street, Volk, & Smith, 2011; Metzger & Flanagan, 2011; Keenan, Pavri-Garcia, & Tomlinson et al., 2007; Linkletter, Gordon, & Dooley, 2010). This increase could be the reason the Centers for Disease Control and Prevention (2011) published a collection of best practices for health educators using online videos and other social media to educate and promote behavior change.

This study was strongly influenced by and modeled after the growing body of content analysis and theoretical research on YouTube health videos. Numerous researchers have conducted content analysis of YouTube videos communicating health information and education, particularly on cancer topics. Studies have included content analysis of the characteristics of mammography videos (Basch, Hillyer, MacDonald, Reeves, & Basch, 2015), skin cancer prevention videos (Basch et al., 2015), colonoscopy preparation videos (Basch, 2014), and cancer risk reduction messages (Lauchner, 2014). Content analytic studies have also examined public responses to medical videos (Desai, Shariff, Dhingra, Minhas, Eure & Kats, 2013), the strategic communication of organ donation messages (Vanderknyff, Friedman, & Tanner, 2015; Tian, 2010), and video messages used to motivate behavior change to combat childhood obesity (Georgiadis, 2013). Furthermore, this study is similar to research by West,

Lister, Perry, Church, and Vance (2014) who examined prescription drug videos on YouTube for the presence of behavior change theory, and Foster (2013) who explored and analyzed mental health videos on YouTube for their potential to change knowledge, attitudes, and behaviors about mental health.

Research on the use and adoption of social media platforms among public health departments is also applicable to this study. Thackeray, Neiger, Smith, and Van Wagenen (2012) found that state health departments are in the early adoption stage of using social media channels, including YouTube, to disseminate information. Thackery et al. (2012) argued that public health departments must incorporate best practices in order to expand their reach and promote activity and engagement on YouTube. According to Thackeray et al. (2015), the findings of the study serve as a benchmark for assessing how public health agencies provide access to health information through technology, which is one of the goals of the national initiative of the federal government, “Healthy People 2020” (U.S. Health Department, 2013). Therefore, clearly the findings of this study provide a similar benchmark for examining how community colleges use YouTube to disseminate information to support student success and help improve completion.

Video Uses in Higher Education

The phenomenal growth and impact of video use in our society, especially among college students, raises a wide array of possibilities about its promise and potential as a technological tool to support student success in higher education. Throughout the U.S., educational video use by major colleges and universities is gaining momentum across all disciplines and departments (Johnson et al., 2016; Hansch et al., 2015; Intelligent TV & New York University, 2009). According to industry experts Greenberg and Zanetis (2015), higher education

is undergoing a major technological shift, and video is a key factor. However, despite the pervasiveness of video in the K-12 classroom, its use in college classrooms is only beginning to emerge as a research topic. This lack of research has resulted in a relatively small body of literature on its utilization for teaching and learning in postsecondary education. In addition, there is scant research specifically related to the utilization of video among community colleges. Therefore, studies in this section are primarily related to video use in four-year post-secondary institutions.

Video and YouTube for teaching and learning in higher education. Although YouTube use in higher education is a relatively new field of study (Snelson, 2011; Roodt & Peier 2011), research shows that video use is growing in popularity in college classrooms to supplement the lecture (Giannakos, 2013), or as an assignment for study outside the classroom (Viera, Lopes & Soares, 2014). Researchers have studied the use of video across many academic disciplines, including nursing and allied health courses (Snelson, 2011; Mendoza, Caranto, & David, 2015; Topps, Helmer & Ellaway, 2013; Agazio & Buckley, 2009; Akagi, 2008; Burke & Snyder, 2008). Video was also used as a strategy for engaging students in active learning in psychology courses (Sacco & Bernstein, 2009), and in political science and sociology courses (Rackaway, 2012; Florez-Morris & Tafur, 2010; Tan & Pearce, 2011). The use of video has also been studied in math and history courses (Niess & Walk, 2009), music courses (Lai, 2013), technology courses (Bravo, Amante, Simo, Enache, & Fernandez, 2011) and biology courses (Cherif, Siuda, & Movahedzadeh, 2014).

Researchers have found that videos have been used effectively in the college curricula to enhance teaching and learning (Tinti-Kane, 2013) by providing real-life scenarios or historical context (Liles, 2007), for visualizing complex concepts (Sacco & Bernstein, 2010), and for

demonstrating techniques and procedures (Bauer, Geront, & Huynh, 2001; Rackaway, 2012). Videos and feature film clips were found to be effective instructional tools for teaching in college-level sociology (Liles, 2007), psychology concepts (Sacco and Bernstein, 2010), elementary teacher education programs (Alwehaibi, 2015; Seidel, Bloomberg, & Renkl, 2013), and for Shakespearean studies (O'Neill, 2014). Furthermore, a study of career training demonstration videos by Bauer, Geront, and Huynh (2001) found that nursing students benefited from the use of instructional classroom videos. The students were also better able to apply and demonstrate what they learned from the video than were those who only read the textbook.

Instructional methods for video use. Video is a technological tool that is increasingly being used to enhance instructional methods to meet the needs of 21st century learners. According to Halls (2015), video is ideal for classroom learning, e-learning as part of online modules, social media learning when used as a delivery method for sharing knowledge and information, and just-in-time learning on a mobile device. There are numerous techniques for using video to facilitate learning, which Koumi (2014) identified in his research; he found thirty-three pedagogical roles for video across four domains. Specifically, Koumi argued that video effectively enhances instruction in ways that other media are unable to achieve by: 1) facilitating cognition, 2) providing realistic experiences, 3) nurturing affective characteristics, and 4) demonstrating skills.

Numerous researchers have studied the benefits of video in higher education inside the traditional college classroom model (Vieira, Lopes, & Soares, 2014; Fleck, Beckman, Sterns & Hussey, 2014; Roodt, & Peier, 2013; Watson & Pecchioni 2011; Sherer & Shea, 2011; Berk, 2009; Duffy, 2008; Mullen & Wedwick, 2008; Snelson, 2008; Van Mechelen & De Pryck, 2009) as well

as in “flipped” classroom models (Long, Logan, & Waugh, 2016; Hanover, 2015; Thomson, Bridgstock, and Willems, 2014). For example, Warner and Thoron (2009) studied basic guidelines for selecting YouTube videos for instruction and creating educational videos. Roodt and Peier (2011) found YouTube useful for illustrating concepts. Berk (2009) encouraged faculty to incorporate video into their presentations to focus student attention. Watson and Pecchioni (2011) studied video use in assignment design and student learning, and Snelson (2011) suggested educators use YouTube for creating playlists of videos into their lesson plans.

Several studies have revealed that college faculty use video for a variety of instructional purposes. Video is used in higher education to record classroom lectures (Chandra, 2007), and faculty commonly use online video platforms like YouTube to distribute the lectures to students. However, this research does not take into account that not all students will watch the videos. Videos connected to required course assignments are correlated with higher view counts (Hibbert, 2014). Additionally, Alhquist (2013) suggested that educators can learn much from YouTube videos and YouTube content creators. Moreover, Bonk (2008) suggested that when appropriately used inside and outside of the classroom, YouTube could improve the effectiveness of teaching and learning. Furthermore, the acceptance of YouTube among educators and students has been studied by Jung and Lee (2013), including student perceptions of its use in community college classrooms (Buzzetto-More, 2014) and in other post-secondary institutions (Fleck, Beckman, Sterns, & Hussey, 2014; Jackman & Roberts, 2014; Eick & King, 2012).

However, while numerous studies have found the benefits of teaching and learning with video, there are opposing views. Other studies have found that some instructors are unconvinced of the benefits of video, are reticent about using it, and feel they do not possess

the knowledge, skills and training to incorporate it into their practice (Stover & Veres, 2013; Reece, 2013). Video use in higher education is not limited to instructional purposes; however, it has also been studied outside of the college classroom.

Video and YouTube use in higher education outside the classroom. The use of YouTube outside the classroom among college age students is of particular interest to higher education marketers and video technology companies targeting this sector. Industry reports on the state of video in higher education found that the percentage of colleges and universities using video for marketing, communications, and admissions was growing (Kaltura, 2015; 2016; 2017). For example, research found that when prospective students seek information about a college, two out of three use YouTube to understand specific features of an institution (Compete, 2011). Furthermore, students reported using YouTube to watch student testimonials and faculty lectures, learn about degree and program offerings, and to get insight about the college culture and environment. In addition, research on YouTube use for university promotion (Glogoff, 2008) and marketing trends in higher education (Hanover, 2015) has found increasing use of video for outreach efforts to appeal to prospective students and for purposes such as video campus tours, admission videos, move-in day highlight videos, and alumni and donor communications. Therefore, it is evident that practices in video use in higher education marketing could be extended to support student success.

Video Use to Support Student Success. Video also has promising potential to help improve college readiness, student motivation, and the success of first-generation college students. Oreopoulos and Dunn (2013) studied the use of video to provide high school students with information about the benefits of college and to improve college access, while Thomas and Stewart (2007) studied online video use to promote academic programs. YouTube has also been

used in higher education as a strategic motivational tool to support student success (Finamore, Hochanadel, Hochanadel, Millam, & Reinhardt, 2012) and to increase the motivation of engineering students (Bravo, Amante, Simo, Enache & Fernandez, 2011). California community colleges used educational math videos to help increase success rates for students enrolled in developmental math courses (Long, 2010). Moreover, research by the Educational Advisory Board (2016) suggested that videos distributed through social media featuring student, alumni and staff success stories may help normalize the college experience for first-generation students.

Conceptual Framework

An understanding of the processes of information-seeking and information provision, and the influence of communication on motivating behavior change, undergird the theory of this study. Therefore, this section of the literature review focuses on the conceptual framework laid out here, which includes information-seeking and communication theories, health communication and behavior change theories, and models of health education. Although information-seeking and health communication and behavior change are not directly analyzed in this study, it is important to understand the theoretical process of information-seeking for community college students. It is also equally important to understand the theoretical process of information provision and how it applies to community colleges. Mostly importantly, an understanding of theories and models of health communication and behavior change is essential to this study because it provides the premise for the use of videos to support student success. Lastly, models of health education and communication were useful in developing a conceptual framework for the study of community college use of videos to communicate information and provide instruction to support student success.

Information-seeking and communication theories. Community college use of videos on YouTube to support student success could address barriers to completion related to student information needs and institutional information provision. Therefore, this section of the literature review focuses on two theories of information-seeking behavior and communication which guided the development of this conceptual framework for this study. Developed by Leckie, Pettigrew and Sylvain (1996), the information-seeking behavior model is similar to Wilson's (1981; 1996; 1999) information-seeking communication model. Together, both models help to provide a better understanding of the relationship among the context of information-seeking, the sources of communication, and the barriers of information-seeking. Both Leckie's and Wilson's theories provide a framework for understanding the information needs of community college students, and the provision of information by their institutions.

Information-seeking behavior theories. Both the information-seeking behavior theory developed by Leckie et al. (1996) and the information-seeking and communication theory developed by Wilson (1981; 1996; 1999) offer conceptual models that are applicable to the research problem of this study. These two theories are specifically related to the information needs of community college students and to the YouTube video communication practices of community colleges. According to Wilson's (1981; 1996; 1999) models of information behavior, certain information-needs lead people to specific information-seeking activities. He asserted that information-needs are affected by a person's environment and role. His model also indicated that personal, interpersonal, and environmental factors create barriers or intervening variables which may inhibit or support information-seeking. Likewise, community college students have specific information needs which are also affected by the college environment

and by their role as students. Furthermore, institutional barriers could be compared to Wilson's barriers or intervening variables.

It is important to note, that Leckie et al.'s (1996) model of information-seeking behavior was based on research of the different information needs of professionals. However, by extension, the model could also be applied to the information-needs of community college students. The model identified roles and tasks that professionals have in their daily work, which lead to information-seeking. It proposed that a professional's information needs vary, depending upon the profession, field or career stage. Although Leckie's model was based on her research of engineers, this model can also be applied to other groups.

Similar to professionals, students have different roles and tasks that they must accomplish throughout their educational journey, which lead to information-seeking. Based upon the Loss/Momentum Framework, this study argues that the information needs of community college students vary, depending upon the stage of their post-secondary education. In addition, according to Leckie et al. (1996), information needs are influenced by the level of complexity, sense of urgency, predictability, accessibility, and source. Moreover, the individual's awareness of the information source, accessibility, convenience, familiarity, reliability, and the format in which it is provided are important characteristics of information-seeking. The level of complexity of enrolling in college, the urgency of registering for classes, or the awareness of programs of study, and the format in which the information is provided may easily be applied to Leckie's model. Therefore, the components of this model are extremely applicable to the information needs of community college students and the information provision of these institutions based upon their needs at different stages of the student experience. Hence, the

conceptual framework here is based upon Wilson's (1981; 1996; 1999) and Leckie et al. (1996) models of information-seeking.

Conclusion

In conclusion, this literature review provided the foundation that supports the main arguments of this study on community college use of video to disseminate information to support the success of students. After describing the magnitude of the community college completion issue, the literature review provided research that reinforced the argument concerning deficiencies in information provision and the lack of student knowledge of how to succeed in college, thus creating barriers to completion. Next, the literature review presented extensive research about the information needs of students throughout their college experience, which provides the foundation for the conceptual framework and supports the main argument of the study. Community college student success is dependent, in part, on the availability of information, particularly navigating the institution and programs of study. Furthermore, the literature review offered considerable evidence on the growth and use of online video for informational and instructional purposes in higher education and in public health communication. This evidence supports the argument that community colleges should use YouTube to present videos that inform and instruct students about the practices, programs, resources, and services that contribute to student success.

CHAPTER 3: METHODOLOGY

This chapter describes the methods used in this qualitative study of community college use of videos on YouTube to support student success. This chapter explains why content analysis is an appropriate method for this study. In addition, it provides a detailed description of the content analysis design, which includes the coding procedures, codebook, research variables, study population, and videos sampled for this study. It also explains each research question addressed in this study and describes the data collection and analysis.

The primary goal of this qualitative study, which uses some quantitative descriptive analysis, was to explore how community colleges use videos on YouTube to support student success. To accomplish this objective, this study examined community college YouTube channels to identify the topics, types and characteristics of videos supporting student success. In addition, this study used descriptive quantitative data to provide a baseline benchmark of the size and scope of community college YouTube use and activity. Therefore, in order to accomplish all of these objectives, content analysis was selected as the research design for this study.

Research Design

This qualitative study involved a content analysis of videos on the sixteen Maryland public community college YouTube channels. The methods used in this study also include some quantitative descriptive statistical analysis. The content analysis involved examining community college YouTube channels, and coding the topics, types and temporal characteristics of videos supporting student success. The videos and their descriptions were analyzed for content supporting student success and coded into categories derived from the Loss/Momentum Framework.

The quantitative descriptive analysis examined the level of activity and popularity of each community college YouTube channel and each student success video based on view counts and comments. A sample set of student success videos from each institutional channel was identified for analysis. The title, description, date published, number of views, and URL were recorded for each video. For each community college YouTube channel, the total number of videos, views, subscribers, the date established, and URL were recorded.

Rationale for Content Analysis

The study design involved a content analysis of videos supporting student success available on Maryland community college YouTube channels. Content analysis was chosen as the method of examination because the purpose of this study is to explore how community colleges use videos on YouTube to support student success. According to Stroud and Higgins (2011), “content analysis is a method of quantitatively analyzing communication messages” (p. 123). Also, content analysis enables researchers to measure communication content, including audio, video, and other aspects of communication in a systematic and replicable process (Stroud & Higgins, 2011; Krippendorff, 2004). Developed primarily by media researchers Lippmann, Lassell, Gerbner and Krippendorff (2004), this method has typically been used to describe printed communications. However, with the advent of electronic media, it has also been used to analyze audio, video and multimedia content (Dimitrova et al., 2002; Yoo & Kim, 2012, Keenan et al., 2007; Tian, 2010; and Kim, Paek & Lynn; Herring, 2004).

Content analysis is an appropriate research approach in order to understand how community colleges use videos on YouTube to support student success. It is an effective and proven research method for describing communication messages and characteristics, assessing

media topics, and making inferences about the content creators, audiences, and media effects, particularly when combined with other data (Stroud & Higgins, 2009; Riffe, Lacy & Fico, 2005).

Content analysis can be replicated and is a valid method of research for examining videos on YouTube because it focuses on descriptive characteristics of messages and how they are delivered. Content analysis is appropriate for community college YouTube channels because it can be used to examine single or multiple communication sources and for large quantities of information (Stroud & Higgins, 2011). This study analyzed the content of multiple videos on multiple community college YouTube channels and quantified specific topics and video characteristics.

There are several benefits to using content analysis to explore community college use of videos on YouTube. According to Stroud and Higgins (2011), it is not necessary in content analysis to engage with human subjects, and it enables the researcher to examine communication messages over a specific period of time and to determine, through intensive observation and analysis, the major themes in media content. In addition, both qualitative and quantitative procedures can be used in content analysis because they are not mutually exclusive (Paisey, 2012). However, there are also some criticisms of content analysis. Content analysis is descriptive and not explanatory, and it is restricted to the available material being analyzed, which could lead to researcher bias. Furthermore, strictly quantitative analysis may not reveal insights behind the frequencies, but qualitative content analysis can result in deeper insights or inferences (Paisey, 2012). This qualitative content analysis study used some quantitative descriptive measures.

By conducting a content analysis of community college YouTube channels, this study was able to explore how these institutions use video to disseminate information to support

student success. In addition, the specific focus of this study on student success, with predefined variables from the Loss/Momentum Framework, made this a content analytic study which could be replicated. However, it is important to note that although this study analyzed videos supporting student success on community college YouTube channels, this method did not examine institutional motivations for disseminating the videos or the effect of these messages on students.

Content analysis of health videos on YouTube. As indicated in the review of the literature, content analysis has been used widely to examine the types of health communication messages available on YouTube and viewers' responses (Foster, 2013). Researchers have conducted content analysis on health videos on YouTube related to cancer prevention messages (Lauckner, 2014; Basch, Basch, Hillyer, & Reeves, 2014) organ donation (Tian, 2010), anti-smoking (Kim, Paek & Jordan, 2010), and childhood obesity (Georgiadis, 2013). Content analysis studies of YouTube have also been conducted on political campaign videos and videos used by international political activists (Verjani and Zuev, 2011), cyberbullying detection (Marathe, & Shirsat, 2015), and user-generated content on the gender divide (Molyneaux, O'Donnell, Gibson, & Singer, 2008). Combined with YouTube metrics on the student success videos of each channel, the content analysis will also provide insight into the institution's overall channel activity and popularity. To examine community college use of YouTube to support student success, the methods for this study were adapted from similar content analytic studies of video and YouTube adoption and use by universities, public agencies, non-profit organization and corporations. The coding procedures and coding forms for this study were influenced by Velasco (2016), who evaluated the use of YouTube by city planning departments, and Thackeray (2012), who evaluated the use of social media by public state health departments. The design of this

study also incorporated methods influenced by Waters and Jones (2011), who evaluated YouTube use by non-profits, and Bonson (2015), who evaluated YouTube use by corporations. Furthermore, the methodology of this study incorporated aspects of Clayton, Cavanaugh and Hettche's (2012) content analysis of university public service announcements.

To answer the research questions, this study employed a qualitative approach with some quantitative descriptive analysis to explore and examine the extent of community college use of videos and tutorials on YouTube to support student success. This section will present three research questions.

Research Question 1

The first research question sought to describe the extent of YouTube use among community colleges in Maryland to communicate information to students. By collecting data on the number of videos, views, subscribers, and the date each community college in Maryland established its YouTube channel, RQ 1 provided a baseline benchmark of YouTube use, presence, level of activity, and popularity. In addition, a content analysis of video titles presented on the home page, video playlists titles, and the titles of the most popular videos of each community YouTube channel, provides an understanding of the how these institutions are using YouTube as a source of information for students.

RQ 1: How are public community colleges in Maryland using YouTube as a channel of communication and source of information for students?

Research Question 2

The second research question sought to identify, describe, and examine the breadth of video content supporting student success available on the YouTube channels of community colleges in Maryland. A digital codebook of student success topic variables derived from the

Loss/Momentum Framework and from the review of the literature related to the information community college students need to succeed was developed for this research question. The codebook and a coding form were used to collect data for RQ 2. The findings from this data quantified the frequencies of videos and views for each topic and helped to provide an understanding of which student success video topics are most and least commonly presented on these channels.

RQ2: What videos are presented on the YouTube channels of public community colleges in Maryland to support student success, based upon the Loss/Momentum Framework, and what is the popularity of these videos?

Research Question 3

The third research question sought to identify tutorial videos used for the orientation of new students. Tutorial videos, also known as “how-to” videos, present procedural knowledge, provide discrete step-by-step instructions, and are more likely to be watched multiple times by students (Guo et al., 2014). Community college tutorial videos could include information and step-by-step instructions about the procedures, processes, and policies new students must know and follow when entering the institution. For example, based upon the student success variables of the Loss/Momentum Framework, community college tutorial videos could be used to teach students the steps to enrollment, or how to register for classes, apply for financial aid, develop an academic plan, or use college resources, among other topics. Therefore, RQ 3 helps to provide an understanding of how these institutions are using tutorial videos to enhance information and instructions provided during orientation to support the success of new students.

RQ 3: What tutorial videos are presented on the YouTube channels of public community colleges in Maryland to support the orientation of new students, and what is the popularity of these videos?

In conclusion, the data collected and analyzed from these research questions generated findings that provide a benchmark of YouTube use among community colleges in Maryland. The findings also describe the content of community college videos presented on YouTube to support student success, and it quantified the frequencies and popularity of these videos. Table 2 provides a summary of the relationship among the conceptual framework, research variables, and measures of this study.

Table 2

Table 2			
<i>Summary of Conceptual Framework, Research Variables and Measures</i>			
	Conceptual Framework	Variables	Measures
RQ 1	Information Seeking and Communication Theories and Models (Wilson, 1996; 1999; Leckie et al., 1996) <ul style="list-style-type: none"> Channels of Communication Information Sources Awareness of Information 	Use Presence Activity Popularity	Date Channel Established Number of Videos Number of Video Views Number of Subscribers
RQ 2	Loss/Momentum Framework (Completion by Design, 2012) <ul style="list-style-type: none"> Student Information Needs Information Seeking and Communication Theories and Models (Wilson, 1996; 1999; Leckie et al., 1996) <ul style="list-style-type: none"> Roles and tasks which precipitate information seeking Information needs Information Sources 	Student Success Video Topics Popularity	Video Title Video Description Number of Videos Number of Video Views
RQ 3	Loss/Momentum Framework (Completion by Design, 2012) <ul style="list-style-type: none"> Student Information Needs Information Seeking and Communication Theories and Models (Wilson, 1996; 1999; Leckie) <ul style="list-style-type: none"> Information needs and sources Awareness of Information 	Student Success Topics Videos Popularity	Video Title Video Description Number of Videos Number of Video Views

Research Variables

The research variables coded for this study were a combination of YouTube metrics and student success topics. YouTube provided standard descriptive variables about each community college YouTube channel including the following: name of institution, the date the channel was established, total number of videos, total number of views, and total number of subscribers. YouTube also provided descriptive variables about each student success video which include the following: video title, duration, description, and date published. The number of views was the only variable related to the popularity of each video.

The variables used to code video topics supporting student success were derived from the Loss/Momentum Framework developed by Completion By Design (2012), and the review of the literature on the information needs of community college students (Nodine et al., 2012; Karp, 2012; Nodine, 2011; Rosenbaum, Deil-Amen & Person, 2006; and Zeidenberg, 2008). These variables provide the basis for answering each of the research questions of this study.

Student Success Content Variables

The student success video content variables for this proposed study were primarily identified from the four stages of the Loss/Momentum Framework, which recommends specific policies and strategies for supporting student success (Completion By Design, 2012). The four stages span the entire community college student experience, from first connection and entry into the institution, to progress through programs of study, and completion of a degree or certificate. Additional variables related to the information needs of community college students were identified from studies (Jaggars, 2014; Nodine et al., 2012; Karp, 2012; and Nodine, 2011) which suggested that communication, information-seeking and information provision may contribute to student success and reduce institutional barriers to completion.

Research by Nodine et al. (2012) in the report *Connection By Design* (2012) provided additional student success topic variables for this study. Their focus group study of new student entry and enrollment found that students want more information than what is provided at orientation. Additionally, the study of focus group research of community college students, revealed in the report *Connection By Design* (2012), found that communication was one of several issues impacting completion. The report identified several topics about which students wanted more information, including the following: majors, programs of study, college resources and services, and transfer opportunities (Nodine et al., 2012).

For the purposes of this study, the digital codebook for identifying student success videos included seventeen variables adapted from the key strategies and policies of the Loss/Momentum Framework, and from the review of the literature. These variables, as indicated in Table 3 below, include the following: *Early College Opportunities, Assessment and Placement, New Student Orientation, Enrollment and Registration, Financial Aid, Welcome Messages, Advising, Programs of Study, Resources for Students, Developmental, Education, Tracking Tools, Degree Audit, Articulation and Transfer, Graduation, Career and Job Placement, Student Success, and Faculty and Staff*. The identification of videos that support student success was determined by analyzing the title and description of each video. For videos without a title, the transcript was analyzed when available. The presence of these specific topics and key terms in the video title and/or description was a good indicator to identify videos supporting student success without having to watch and analyze each video in its entirety. The codebook below (Table 3) of student success video content variables was prepared for this dissertation by the author.

Table 3

Table 3	
<i>Variables of Student Success Video Topics based on the Loss/Momentum Framework</i>	
Code	Description
Early College Opportunities	Summer bridge programs, early assessment, early remediation and early college programs.
Assessment and Placement	Placement exams, testing procedures, test preparation and test results.
New Student Orientation	Information regarding the process and procedures for new student orientation.
Enrollment and Registration	How to enroll in the college and register for classes.
Financial Aid	How to apply for financial aid and scholarships.
Welcome Messages	Welcomes students to the institution and provides general information about the college
Advising	Academic and career advising including developing educational plans and goals.
Programs of Study	Programs of study, including both academic (credit) and workforce development and continuing education (non-credit).
Resources for Students	College resources, programs, services, and facilities, such as tutoring centers, mentoring programs, disability services, computer labs and the library.
Developmental Education	Remedial programs or courses available for students.
Tracking Tools	Technological tools for helping students monitor their academic progress.
Degree Audit	Comparing courses taken to the requirements for certificates and degrees at the institution.
Articulation and Transfer	Information about planning for transfer and articulation agreements with four-year institutions.
Graduation	Information about graduation requirements and commencement.
Career and job placement	Careers, regional labor outlook, salaries and potential for job placement.
Student Success	Profiles of student, or alumni success stories and/or testimonials.
Faculty and Staff	Profiles of faculty and staff at the institution.

Population

The target population for this proposed research study was the sixteen public community colleges of Maryland. The Maryland Association of Community Colleges (2018) provides detailed information on the public two-year colleges in the state. Located in urban, suburban, and rural areas, more than a half-million students are enrolled in Maryland community colleges (Maryland Association of Community Colleges, 2017). In addition, more than half of all Maryland residents attending college are enrolled in public community colleges in the state. These institutions include the following: Allegany College of Maryland, Anne Arundel Community College, Baltimore City Community College, Carroll Community College, Cecil College, Chesapeake College, College of Southern Maryland, The Community College of Baltimore County, Frederick Community College, Garrett College, Hagerstown Community College, Harford Community College, Howard Community College, Montgomery College, Prince George's Community College, and Wor-Wic Community College. However, this study used pseudonyms to protect the anonymity of these institutions.

Two methods were used to discover which institutions have YouTube channels. The first method involved visiting the website of each institution to search for a link to its official YouTube channel on its homepage. If no YouTube link was available on the college home web page, the next method was to conduct a YouTube channel search. The name of each institution was entered into the YouTube search feature to make certain that the official channel of each institution had been identified. The channel was determined "official" if the "About" page indicated it as the channel of the institution.

Once a complete list of Maryland community college YouTube channels was established, a screenshot and descriptive information were recorded for each channel. First, using the

computer screen capture feature, a screenshot was recorded of each “Home” page and “About” page of each college YouTube channel. Next, the following information and YouTube metrics were recorded for each channel: (a) channel name (b) channel URL, (c) date channel was established, (d) total number of videos, (e) total number of views, and (f) total number of subscribers.

Sample Selection

Due to the exploratory nature of this study, a content analysis was undertaken on a sample of community college YouTube channels, a sample of student success videos, and a sample of student success tutorial videos available on these respective channels. Although the target population for this study was Maryland community colleges, a smaller representative sample of community colleges in the state was selected for study. This section explains the methods for selecting the sample of community colleges, YouTube channels, and videos that were analyzed in this study.

Community college YouTube channels sample. In order to provide baseline quantitative descriptive measures of the extent of YouTube use and activity among Maryland community colleges, all of the sixteen institutions in the target population were included in the initial study sample. The following information and YouTube metrics were recorded for each channel: (a) channel name (b) channel URL, (c) date channel was established, (d) total number of videos, (e) total number of views, and (f) total number of subscribers. In addition, using the computer screen capture feature, a screenshot image was recorded of the “Home” page and “About” page for each college YouTube channel.

In order to maintain a manageable number of community college YouTube videos for content analysis, a smaller secondary sample of the largest and most active Maryland

community college YouTube channels was selected from the target population. This smaller sample was obtained by comparing data on the total number of videos, views, and subscribers of each Maryland community college YouTube channel. This generated a sample of seven Maryland community college YouTube channels, with the most videos, the most views, and the most subscribers. Pseudonyms were used to protect the anonymity of these institutions. Once the final sample of community college YouTube channels to study was formulated, the next step involved selecting a sample of student success videos for content analysis.

Student success video sample. A successful content analysis requires a comprehensive examination of a population of videos. To identify a sample of student success videos, this study used a keyword search strategy and a purposive sampling method based upon the Loss/Momentum Framework research variables of information students need to know to succeed. Purposive sampling is used extensively in qualitative research to select and identify information-rich cases for study (Patton, 2002). This type of sampling relies on researcher judgement to select cases purposefully, based upon specific criteria, so as to answer the research questions (Lund Research, 2012). Therefore, the criteria for selecting the video sample for this study were based upon the student success research variables identified in the Loss Momentum Framework. In addition, purposive sampling strategies can emphasize similarity, maximum variation, or provide a combination of both (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). Therefore, purposive sampling enabled the selection and identification of a wide variety of student success videos that include typical cases and a variation sample.

First, a keyword search based upon the research variables was used to identify a sample of specific student success videos topics available on the official YouTube channels affiliated with the community colleges in this study. YouTube search feature enables users to conduct

keyword queries of videos available on a particular channel. The search to select videos for this study was conducted using the following search terms: “Early College,” “Placement Test,” “Orientation,” “Registration,” “Enrollment,” “Financial Aid,” “Welcome,” “Advising,” “Programs of Study,” “Student Success,” “Support Services,” “College Resources,” “Developmental,” “Transfer,” and “Career and Job Placement.” A purposive sample of videos from among the top 50 results of each search was selected for this study.

Second, a purposive sample of student success videos included in the playlists of community college YouTube channels was selected after the initial keyword search. YouTube enables the creation of playlists to categorize similar types of video content under common themes. Therefore, community colleges have the option to create specific playlists for a variety of student success videos that would be located on the playlist page of each YouTube channel. Hence, the title and description of each playlist was purposively examined for student success video content related to the Loss Momentum/Framework research variables. This method of sampling helped identify student success videos which might not have been included in the initial keyword search results. It was expected that the results of the key word search queries and the purposive examination of playlists would provide some overlap. However, the combination of these two sample selection methods resulted in a more comprehensive student success video sample. Lastly, this proposed study also analyzed a sample of student success tutorial videos. A keyword search using the term “tutorial” was used to identify student success tutorial videos on the YouTube channel of each community college.

The majority of the data gathered for this study—the sample of YouTube channels, student success and tutorial videos, including recording metrics, and capturing screenshots—

were collected during the month of March, 2018. Further analysis and coding of selected student success and tutorial videos continued throughout 2018.

Data Collection

Several different analyses of community college YouTube channels and videos supporting student success were undertaken in this study. Due to different units of analysis for each research question, different data collection and coding procedures were necessary. Therefore, this section describes the different procedures used for collecting the data and coding the videos, which included the following: 1) collecting descriptive quantitative measures of community college YouTube channels, and 2) coding student success video topics. In addition, data collection for this study was exempt from extensive Institutional Review Board approval because it collected and analyzed data from publicly available videos on community college YouTube channels, and did not involve individuals.

YouTube channel data collection procedures. The first unit of measure for this study was the community college YouTube channels. The data collected from each community college channel primarily included quantitative measures, which provided a descriptive analysis and a baseline benchmark of YouTube use and popularity. This quantitative data were also analyzed in order to describe differences in the frequencies of YouTube channel use, activity, and popularity. Therefore, data about each channel were recorded on a spreadsheet

Before coding the videos, descriptive information and quantitative data were collected on each community college YouTube channel. First, the name and URL of each community college YouTube channel were recorded. Then, a screenshot of the “About” page of each community college YouTube channel was captured in order to collect data on the total number

of videos, views, subscribers, comments, and the date established. After data were collected on each community college YouTube channel, coding of videos began.

Table 4

Table 4		
<i>Variables for Community College YouTube Channels and Videos</i>		
Metric	Definition	Metric
Presence	The existence and age of an official community college YouTube channel(s) with videos available for public viewing.	<ul style="list-style-type: none"> • Date official community college YouTube channel was established • Number of videos • Link on college webpage
Activity	The number of videos uploaded per month and the number of video views per month on the community college YouTube channel.	<ul style="list-style-type: none"> • Date channel was established • Number of videos • Number of video views
Popularity	The number of video views and the number of subscribers to the community college YouTube channel.	<ul style="list-style-type: none"> • Number of video views • Number of channel subscribers
Reach	The number of subscribers to the community college YouTube channel.	<ul style="list-style-type: none"> • Number of subscribers • PT/FT Enrollment

Video data collection and coding procedures. The second unit of analysis for this study is videos. Therefore, once the quantitative measures were collected on each channel, the student success videos were coded. The procedures for coding videos included analyzing each video for codebook variables present in the title and description. Examining the title and description of each video eliminated the need to watch each video in its entirety. For each student success video identified, the following information was recorded: (a) video title (b) video description (c) date the video was posted, (d) duration of the video, and (e) the number of views. Information about each student success video was entered into a digital spreadsheet (Appendix C). These quantitative measures help to describe differences in the frequencies of student success videos by topic, duration, and popularity. Therefore, in order to identify videos

and tutorials supporting student success, a digital codebook of topics of student success videos (Table 3) was used.

Data Analysis

This qualitative content analysis study of community college use of video on YouTube to support student success was primarily exploratory; however, it also utilized some quantitative descriptive analysis. The quantitative data analysis relies on frequencies and some basic statistical tests for comparison of means which was conducted using spreadsheets.

Data analysis for RQ 1 benchmarked community college use of videos on YouTube and provided a baseline of institutional YouTube channel characteristics. The frequencies of the total number of videos, video views, and subscribers of community college YouTube channels were determined. In addition, the mean age, activity, and popularity of each channel were also determined and categorized.

Data analysis for RQ 2 quantified the total number of videos and tutorials supporting student success on community college YouTube channels. The frequencies of the different student success topics, particularly the most common, the least represented, and the most popular videos were also determined. The data were analyzed in tables and charts of the number and cumulative percentage of student success video topics presented on community college YouTube channels. Analysis of data from RQ 2 helps identify student success videos that have higher popularity (measured by number of views). Data analysis for RQ 3 quantifies the number and popularity of tutorial videos supporting student success on community college YouTube channels in Maryland.

Conclusion

To summarize, this section described the methodology of this qualitative content analysis study, which explores and examines the use of videos to support student success on community college YouTube channels. This section also provided a rationale and review of studies to support the use of content analysis as a research design and purposive sampling as a method selecting the video sample for this study. In addition, this section addressed the data collection and analysis for each of the research questions and their related variables. Lastly, the coding procedures for each unit of analysis in this study were described in detail. In conclusion, the methodology for this study produced information-rich data, which provided key findings for the use of videos to support student success.

CHAPTER 4: FINDINGS

The primary purpose of this qualitative content analysis study was to explore community college use of YouTube as a channel of communication and online videos as sources of information to support student success. Therefore, this chapter analyzed data collected from videos presented on the YouTube channels of public Maryland community colleges to explore and describe how these institutions have addressed a major problem for American community colleges: students often lack the information they need to succeed (Rosenbaum, Deil-Amen, & Person, 2006; Zeidenberg, 2008), and community colleges are deficient in providing information students need to succeed (Jaggars, 2014; Jenkins, 2014; Dadgar, 2013; Karp & Bork, 2014; Karp, 2011).

In addition, issues undergirding the problem statement of this study include barriers to completion related to information provision and communication (Jaggars, 2014), recommended use of popular media to improve student success (Jaggars, 2014; Karp, 2012; and Nodine, 2011), and insufficient research on community college use of videos on YouTube to support student success. Student success is dependent in part on the provision of information and instructions on navigating the institution, and research suggests that video is an effective communication tool, hence the main findings of this study reveal how powerfully Maryland community colleges do, in fact, use videos to support student success.

Research Questions

The aim of the research questions for this study was to explore Maryland community college YouTube use, student success videos presented on these channels, and the tutorial videos designed to support the orientation of new students. The conceptual framework for this study arose from the Loss/Momentum Framework (Completed By Design, 2013), and Models of

Information Seeking Behavior and Communication (Leckie, Sylvain & Pettigrew, 1996; Wilson, 1999), from which the following three research questions were developed.

RQ1: How are public community colleges in Maryland using YouTube as a channel of communication and source of information for students?

RQ2: What videos are presented on the YouTube channels of public community colleges in Maryland to support student success based upon the Loss/Momentum Framework, and what is the popularity of these videos?

RQ3: What tutorial videos are presented on the YouTube channels of public community colleges in Maryland to support the orientation of new students, and what is the popularity of these videos?

Research Methods

The methodology of this qualitative study included content and theoretical analysis with some descriptive quantitative measures. The rationale of this research design was threefold. First, the research design was modeled after Stroud and Higgins (2011) and Krippendorff (2004) to measure communication content in a systematic and replicable process. Second, the research design also examined communication messages over a specific period of time to determine through intensive review and analysis, the major themes in media content (Stroud & Higgins, 2011). Third, the research design was influenced by the methodology of Stroud and Higgins (2009) and Riffe, Lacy and Fico (2005) which described communication messages and characteristics, assessed media topics and made inferences about the content creators, audiences and media effects. In addition, as noted by Neuendorf (2012), the researcher's knowledge and skills were an integral part of the measurement process, specifically as it related to expertise in producing videos for higher education and professional video production skills.

TABLE 5

Baseline Descriptive Analysis of YouTube Presence, Activity, Popularity and Reach of Community Colleges in Maryland

COMMUNITY COLLEGES	TOTAL FT/PT ENROLLMENT*	PRESENCE		ACTIVITY		POPULARITY			REACH	
		YT CHANNEL		VIDEOS		VIEWS			SUBSCRIBERS	
		Date Est.	Age In Months	Total No.	Avg. Per month	Total No.	Avg. Per month	Avg. Views per Video	Total No.	% of Student Pop
Linus CC	3,091	10/19/11	77	166	2.16	47,786	621	288	84	2.72%
Eldan CC	14,689	11/20/09	100	267	2.67	194,018	1,940	727	465	3.17%
Maret CC	4,060	7/22/11	80	32	0.40	30,868	386	965	88	2.17%
Nell CC	3,542	10/17/06	137	74	0.54	227,423	1,660	3,073	35	0.99%
Barbet CC	2,591	8/21/09	103	149	1.45	26,110	253	175	48	1.85%
Perch CC	2,264	10/8/12	65	240	3.69	662,829	10,197	2,762	1,348	59.54%
Marson CC	8,166	4/30/09	107	607	5.67	3,073,674	28,726	5,064	8,842	108.28%
Nevar CC	22,179	4/13/10	95	166	1.75	467,366	4,920	2,815	521	2.35%
Barney CC	6,197	10/20/09	101	276	2.73	93,335	924	338	0	0.00%
Meter CC	712	5/10/10	94	30	0.32	11,678	124	389	15	2.11%
Cosmo CC	4,276	10/30/09	101	242	2.40	151,852	1,503	627	140	3.27%
Rolson CC	6,520	5/10/11	82	35	0.43	6,375	78	182	39	0.60%
Wren CC	9,632	9/18/08	121	398	3.29	237,092	1,959	596	480	4.98%
Astra CC	25,320	4/2/07	131	2,918	22.27	2,643,178	20,177	906	6,400	25.28%
Crawson CC	13,040	3/11/13	60	211	3.52	105,146	1,752	498	383	2.94%
Newford CC	3,128	10/2/12	65	23	0.35	2,047	31	89	14	0.45%
TOTALS			94.94	5,834	3.35	7,980,777	4,703	1,218	18,902	

Maryland Higher Education Commission 2017 Data Book Total full-time and part-time undergraduate enrollment

Descriptive Analysis Findings

To answer the first research question, the official YouTube channels of the sixteen Maryland public community colleges were reviewed and quantitative data were collected to provide a baseline benchmark of YouTube use among the target population of this study. Historical data were gathered to compare the age of the channels. Quantitative data on the total number and frequencies of videos, views, and subscribers were collected to compare the activity, popularity, and reach of the channels. Additional data on the number of full-time and part-time students enrolled at each institution were obtained from the Maryland Higher Education Commission to further compare the size of the student enrollment to the number of subscribers to the YouTube channel of the institution. This descriptive baseline analysis of the target population was used to identify the sample for this study, seven Maryland public community college YouTube channels with the most videos, views and subscribers.

Research Question 1

RQ1: How are public community colleges in Maryland using YouTube as a channel of communication and source of information for students?

Research Question 1 sought to provide a baseline descriptive analysis of the presence, activity, popularity and reach of Maryland community college YouTube channels. This research question aimed to quantify how public community colleges in Maryland are using YouTube as a channel of communication and source of information for students. Presence was defined as the existence of an official institutional YouTube channel with videos for public viewing. The variables for this research question included YouTube presence, activity, popularity, and reach. The metrics for measuring presence were the date the channel was established and the number of videos on the channel. Therefore, an analysis of Table 5 was conducted to compare the ages

of the channels and the quantity of videos presented on the channels among all of the public community colleges in Maryland.

Presence of Maryland community colleges on YouTube. The major findings of the descriptive quantitative analysis revealed that Maryland community colleges have a strong presence on YouTube, regardless of the size of their student enrollment or the age of the channel. Moreover, among the 16 public community colleges in Maryland, 100 percent actually operate an official YouTube channel. Combined, these institutions have presented thousands of videos, that were viewed millions of times over more than a decade. However, the findings also showed huge differences in the activity, popularity, and reach among the YouTube channels of these institutions. An analysis of Table 5 indicated the number of videos on these channels varied from a minimum range of 23 videos to a maximum of 2,918 videos. Similarly, the number of views for all the videos on the official YouTube of the institution channel ranged from a minimum of 2,047 views to a maximum of 3,073,674 views. Likewise, the total number of people who subscribed to a YouTube channel of the institution ranged from zero to 8,842 subscribers. It was apparent from the baseline descriptive analysis that Maryland public community colleges are using YouTube as a channel of communication, and it is reasonable to assume these institutions may also be using it as a source of information for students.

This study also found that many of these channels have been in existence for longer than a decade, with an average channel age of 7.8 years. Nell Community College was the oldest YouTube channel, established in 2006, and Crawson Community College was the youngest YouTube channel, established in 2013. However, the age of the channel was not an indication of the size of the channel. After just five years on YouTube, Crawson Community

College had more videos on its channel than eight other Maryland community college YouTube channels which had been in existence longer.

Presence was also measured by the size of the YouTube channel as measured by the quantity of videos presented. This study found that community colleges in Maryland presented a combined total of 5,834 videos on their YouTube channels, with an average of 365 videos per college. The Maryland community college with the largest presence on YouTube was Astra Community College with 2,918 videos in total. In contrast, the college with the smallest YouTube presence was Newford Community College with only 23 videos in total. More than two-thirds of Maryland community colleges, 68.7 percent, had more than 100 videos on their official YouTube channel. Astra Community College, Marson Community College, Wren Community College, Barney Community College and Linus Community College accounted for 76.8 percent of all videos uploaded to Maryland community college YouTube channels. The purpose of this study was supported by these findings which indicate that Maryland community colleges have established a substantial presence on YouTube and use the platform as a channel of communication.

Activity of Maryland community college YouTube channels. The activity of Maryland community college YouTube channels was measured by the frequency of videos presented on the channel per month. Maryland community colleges uploaded an average of 3.3 videos per month. More than two-thirds of the community colleges in Maryland, 68.7 percent, uploaded at least one or more videos per month, while 25 percent uploaded at least two or more videos per month. Notably, the most active YouTube channel was Astra Community College with an average of 22 videos added to its channel per month. Marson Community College added an average of six videos per month, while Perch Community College and Crawson Community

College added an average of four videos per month. These findings suggest that Maryland community colleges are actively uploading video content to their YouTube channels on a monthly basis.

Table 6

Table 6					
<i>Baseline comparison of Maryland Community College Student Enrollment with YouTube Channel Reach and Popularity.</i>					
COMMUNITY COLLEGES	TOTAL FT/PT UNDERGRADUATE ENROLLMENT*	REACH		POPULARITY	
		Channel Subscribers		Channel Views	
		Total No. of Subscribers	Avg. No. of Subscribers per 1K students	Total No. of Views	Avg. No. of Views per 1K students
Linus CC	3,091	84	27	47,786	15,530
Eldan CC	14,689	465	32	194,018	13,213
Maret CC	4,060	88	22	30,868	7,603
Nell CC	3,542	35	10	227,423	64,202
Barbet CC	2,591	48	19	26,110	10,078
Perch CC	2,264	1,348	595	662,829	292,772
Marson CC	8,166	8,842	1,083	3,073,674	376,525
Near CC	22,179	521	23	467,366	21,078
Barney CC	6,197	0	0	93,335	15,064
Meter CC	712	15	21	11,678	16,402
Cosmo CC	4,276	140	33	151,852	35,518
Rolson CC	6,520	39	6	6,375	978
Wren CC	9,632	480	50	237,092	24,610
Astra CC	25,320	6,400	253	2,643,178	104,406
Crawson CC	13,040	383	29	105,146	8,065
Newford CC	3,128	14	4	2,047	654
TOTALS	129,407	18,902	138	7,980,777	62,919

Popularity of Maryland community college YouTube channels. Research question one also sought to determine the popularity of community college YouTube channels as measured by the number of video views. In terms of popularity, Table 6 indicated that Maryland community college videos were viewed 7,980,777 times on their YouTube channels. In-depth analysis revealed that the average number of video views per community college was 498,799, with an average of 4,073 video views per month. In addition, Maryland community colleges averaged 1,367 views per video. The minimum range of video views was 2,047 for Newford Community College, and the maximum range of video views was 3,073,674 for Marson Community College. Five of the 16 Maryland community colleges, Marson Community College, Astra Community College, Perch Community College, Nevar Community College, and Wren Community College, accounted for 88.7 percent of all video views. Video views are an indication of how many times a video has been viewed, which is one measure of the popularity of a channel. However, it is not a valid measure of how many unique viewers watched a particular video on the YouTube channel of the institution. Therefore, an analysis of these findings indicated that there were wide differences in the popularity of Maryland community college YouTube channels, as measured by views. However, the large number of combined average views per month and average views per video point to the potential of the use of YouTube channel of communication and source of information to support student success.

Reach of Maryland community College YouTube Channels. To determine how Maryland community colleges use YouTube as a channel of communication, this study also measured its reach, based upon the number of subscribers to the channels. As a subscriber to the YouTube channel of the institution, a student or any individual would receive notifications of

new videos whenever they are added to the college channel. In terms of reach, the study found there was a total of 18,902 subscribers of community college YouTube channels in Maryland, as shown in Table 6. Furthermore, there was an average of 1,181 subscribers per community college, and all but one of the institutions offered the option to subscribe to the channel.

Surprisingly, the number of subscribers ranged from zero for Barney Community College to 8,842 for the YouTube channel of the Marson Community College, which was 8 percent above its total student population. It was also interesting to note that Astra Community College had 6,400 subscribers, and Perch College had 1,348 subscribers, which represent 25 percent and 60 percent of their total student population, respectively. In addition, Astra Community College, Marson Community College, Perch Community College, Nevar Community College, and Eldan Community College had the greatest numbers of subscribers, which accounted for 88.6 percent of all Maryland Community College YouTube channel subscribers.

It is important to note that this analysis did not assume all subscribers are students of the institution, nor did this study measure the number of Maryland community college students who subscribe to the official YouTube channel of their institution. However, the number of subscribers to Maryland community college YouTube channels pales in comparison to the numbers of students enrolled at these institutions. Therefore, it would be reasonable to believe that there might be potential benefits for students to subscribe to the YouTube channel of their institution as a source of information to support student success.

Differences Among Student Enrollment, Reach, and Popularity. For comparison purposes, the baseline descriptive analysis of this study compared the number of students enrolled in Maryland community colleges with the number of subscribers (reach) and video views (popularity) of these channels. According to the Maryland Higher Education Commission

Data Book (2017), there was a total of 129,407 full-time and part-time undergraduate students enrolled in Maryland public community colleges during this study. Based upon the number of subscribers relative to the total student enrollment, an analysis of Table 6 showed that combined Maryland community college YouTube videos reached an average of 138 subscribers per 1,000 students. When the total number of video views were compared to the total student enrollment, Maryland community colleges combined had an average number of 62,919 video views per one thousand students. The Newford Community College YouTube channel had the minimum number of 654 average views per 1000 students, and Marson Community College had the maximum number of 376,525 average views per 1000 students.

Although this study did not assume that all views were by students, these findings show that the total number of times videos have been viewed on Maryland community college YouTube channels far outnumbers the total enrollment of these institutions. Therefore, these findings support the use of YouTube as a popular channel of communication with the potential to reach a large number of students and the ability to provide information needed to support student success.

Sample Selection of Maryland Community College YouTube Channels. The target population for this qualitative content analysis study was the 16 Maryland public community colleges. A smaller sample of the target population was selected for this study based upon those institutions with the greatest presence, activity, popularity, and reach of their official YouTube channels. The aim was to select a representative sample of Maryland community college YouTube channels that would provide the best understanding of the use of online videos to support student success. Of the 16 public Maryland community college YouTube channels,

seven were chosen from among the top channels with the most videos, views, and subscribers.

Pseudonyms were used to protect the anonymity of these institutions.

Table 7

Table 7				
<i>Number of Videos Selected From the Study Sample of Maryland Community College YouTube Channels</i>				
Community College YouTube Channel	YouTube Channel Videos		Student Success Videos	
	Total Videos on YouTube Channel	Percent of Total Sample	Student Success Videos Selected for Sample	Percent of Total Student Success Videos Selected for Sample
Eldan CC	267	5.48	85	11
Perch CC	240	4.93	102	13
Marson CC	607	12.46	119	15
Nevar CC	166	3.41	81	10
Barney CC	276	5.67	74	10
Wren CC	398	8.17	143	19
Astra CC	2,918	59.89	180	23
TOTALS	4,872	100	784	100

Another major finding of this study was that the sample of seven institutions provided a very large quantity of videos on their YouTube channels, which generated a rich source of video content to support student success. An analysis of Table 7 shows these community colleges presented a combined total of 4,872 videos on their official YouTube channels. For the purpose of this study, a total of 784 of these YouTube channel videos were identified as student success videos, which represented 15.8 percent of all the videos presented by these institutions. The total number of channel videos for each college ranged widely from 166, or 3.41 percent for Nevar Community College to 2,918, or 59.8 percent for Astra Community College. However, there was a smaller range in the number of student success videos selected for study. The

minimum range was 74 student success videos for Barney Community College, and a maximum range of 179 student success videos for Astra Community College, which represented 10 percent and 23 percent of this study's sample respectively.

Comparison of 2017 Student Success Videos and Views. In 2017, the majority of the community colleges in the sample of this study presented a remarkable number of videos. An analysis of Table 8 reveals these institutions added a combined total of 697 videos to their official YouTube channels in 2017, which represented 14.3 percent of all the videos on their channels. Student success videos accounted for 41 percent, or 286 of the videos published on Maryland community college YouTube channels in 2017, and these videos were viewed 214,031 times. In 2017, these channels presented an average of 3.4 student success videos per month, which were viewed an average of 2,561 times per month. The greatest number of student success videos presented in 2017 was Astra Community College with 115, followed by Wren Community College with 51, and Eldan Community College with 42 videos.

Interestingly, Nevar Community College presented the least number of student success videos in 2017, but these seven videos were viewed 56,996 times. In stark contrast, Astra Community College presented a total of 115 student success videos in 2017 that were viewed 66,735 times. Therefore, these findings appear to suggest that community colleges should give consideration to not only the quantity of videos used to support student success, but the number of views a video receives.

Table 8

Table 8						
<i>Comparison of 2017 Student Success Videos and Views</i>						
YouTube Channel	ALL VIDEOS IN 2017		2017 STUDENT SUCCESS VIDEOS		2017 STUDENT SUCCESS VIEWS	
	Total Videos Uploaded in 2017	Average No. of Videos per month in 2017	Total Student Success Videos published in 2017	Average No. Student Success Videos published per month	Total Student Success Video Views in 2017	2017 Average Views Per Student Success Video
Eldan CC	44	3.67	42	3.50	39571	942
Perch CC	35	2.92	25	2.08	1461	58
Marson CC	84	7.00	29	2.41	3147	109
Nevar CC	7	0.58	4	0.33	56996	14,249
Barney CC	20	1.67	20	1.67	35682	1,784
Wren CC	118	9.83	51	4.25	10439	205
Astra CC	389	32.42	115	9.58	66735	580
TOTALS	697	8.30	286	3.40	214,031	2,561

Research Question 2

RQ2: What videos are presented on the YouTube channels of public community colleges in Maryland to support student success based upon the Loss/Momentum Framework and what is the popularity of these videos?

Research Question 2 aimed to explore a sample of Maryland community college YouTube channels for video content that provided information to support student success. Based upon the conceptual framework of this study, community college students have specific information needs throughout four stages of the student experience which includes connection, entry, progress and completion. Student success topics, based upon the information needs of students, were identified from the Loss/Momentum Framework (Completion By Design, 2013) and provided variables for this study. Videos were identified, watched, analyzed, and coded

into 17 sample sets of videos based upon the information needs of community college students. This study used a priori codes based upon the variables of student success video topics in the conceptual framework of this study. Data were collected on the video title, description, duration, number of views, and the date published. The length of each video varied from 15 seconds to over one hour in duration. Analysis of Table 9 showed the differences in keyword search results by topic and the number of videos selected for analysis through purposive sampling.

The initial search term strategy used to collect data for Research Question 2 produced results which were overly broad. However, a subsequent purposive sampling of the first 50 keyword search results and the video playlists available on the YouTube channels in this study yielded more narrowly focused results. By comparison, when using the keyword search term strategy, a total of 6,421 videos populated when searching for student success videos. However, purposive sampling of the search term results and video playlists resulted in the identification and selection of 784 videos which specifically met the description of the variables of student success video topics. According to Patton (2002), purposive sampling is used extensively in qualitative research to select and identify information-rich cases for study. Influenced by the research of Palinkas et al. (2015), purposive sampling in this study was used to emphasize similarities and to maximize variations of videos supporting student success.

The major findings of the combined keyword search term and purposive sampling strategy revealed that Maryland community colleges presented a substantial number of videos to support student success across all stages of the student experience. Further analysis of Table 9 showed the top three student success topics with the highest frequencies of videos included “Programs of Study” with 175 videos, “College Resources or Support Services” with 145 videos,

and “Student Success Profiles” with 105 videos. By contrast, the student success topics with the least frequencies of videos included “degree audit or program evaluation” with five videos, “tracking tools” with five videos, and “developmental or remedial” with six videos. Nearly two-thirds, 63 percent, or 494, of the videos selected for sample on the YouTube channels of Maryland community colleges represented “Entry” stage information needs. More than one-fifth, 22.5 percent or 177, of the videos represented the information needs of students in the “Progress” stage. Videos which represented the information needs of students in the “Completion” stage accounted for 7.9 percent, or 62 videos, while “Connection” stage videos accounted for 5.6 percent or 44 of the videos sampled. The analysis of Table 9 also revealed another interesting finding, i.e., videos supporting student success on the YouTube channels of Maryland community colleges are potential sources of information for newly-enrolled and current students. However, these findings appear to suggest that videos supporting the information needs of near-completers and prospective students may be lacking on community college YouTube channels.

Table 9

Table 9 <i>Differences in Student Success Keyword Search Terms and Purposive Sampling Results</i>			
CONNECTION STAGE INFORMATION NEEDS FOR STUDENT SUCCESS			
SEARCH TERMS	Keyword Search Results	Purposive Sampling Results	DESCRIPTION
Early College OR dual enrollment	241	35	Summer bridge programs, early assessment, early remediation and early college programs.
Assessment OR Placement Test	255	9	Placement exams, testing procedures, preparation and results.
CONNECTION SUBTOTAL	496	44	
ENTRY STAGE INFORMATION NEEDS FOR STUDENT SUCCESS			
New Student Orientation	172	44	Information for new students about the orientation process.
Welcome Messages	531	22	Welcomes students and provides general college information.
Enroll OR Registration	324	30	How to enroll in the college and register for classes.
Financial Aid OR Scholarship	257	44	Applying for financial aid, including institutional scholarships.
Advising	180	22	Academic and career advising; educational plans and goals.
Developmental OR Remedial	176	6	Remedial programs or courses available for students.
Programs of study OR Major	888	175	Programs of study, including workforce development
Faculty OR staff	456	46	Profiles of faculty and staff at the institution.
Student Success Profiles	441	105	Profiles of student, or alumni success stories
ENTRY SUBTOTAL	3425	494	
PROGRESS STAGE INFORMATION NEEDS FOR STUDENT SUCCESS			
College Resources OR Support Services	711	145	College resources, programs, and services, such as tutoring, mentoring and disability services.
Tracking Tools	123	5	Technological tools for monitoring academic progress.
Degree Audit OR Program Evaluation	43	5	Comparing courses taken to the requirements for certificates and degrees at the institution.
Articulation OR Transfer	369	25	Transfer and articulation agreements with 4-year institutions.
PROGRESS SUBTOTAL	1246	180	
COMPLETION STAGE INFORMATION NEEDS FOR STUDENT SUCCESS			
Graduation OR Commencement	762	39	Graduation requirements and commencement information.
Career OR Job Placement	492	27	Careers, regional labor outlook, salaries and job placement.
COMPLETION SUBTOTAL	1254	66	
STUDENT SUCCESS VIDEO TOTAL	6421	784	

Differences in the Number of Student Success Videos and Views

There are considerable differences in the number of student success videos presented on each official YouTube channel of each institution. The following tables compare the frequencies and percentage of student success videos presented on the YouTube channels of Maryland public community colleges.

Early College Opportunity Videos. Information about early college opportunities was found on all of the seven Maryland community college YouTube channels. In order to identify these videos, the keyword search terms had to be broadened beyond “early college” to also include “concurrent,” “dual enrollment,” high school,” and “summer bridge” programs. Analysis of Table 10 reveals that nearly three-quarters, 71 percent of the institutions, had multiple early college opportunity videos. Overall, the 35 videos identified promoted dual enrollment and summer programs for high school students, explained the advantages of earning college credit while in high school and highlighted the benefits of high school students enrolling in courses at the institution. The majority of the early college opportunity videos were short, with 71 percent ranging in duration from 30 seconds to five minutes. By contrast, 14 percent or five of the videos were nearly 30 minutes in duration, which included a “Dual Enrollment Orientation” on the Perch Community College YouTube channel, and a television program entitled “Campus Conversations: Preparing for College” presented on the Astra Community College YouTube channel.

Table 10

Table 10 <i>Differences in Total Number of Student Success Videos by College and Topic</i>									
Student Success Variables	No. Student Success Videos By College							Total No. Student Success Videos	%
	Eldan CC	Perch CC	Marson CC	Near CC	Barney CC	Wren CC	Astra CC		
Early College Opportunities	3	4	1	1	10	8	8	35	4.5
Assessment and Placement	0	1	2	1	1	2	2	9	1.2
New Student Orientation	5	15	3	7	5	1	8	44	5.6
Welcome Messages	8	3	3	0	1	0	7	22	2.8
Enrollment and Registration	4	5	5	6	0	2	8	30	3.8
Financial Aid	1	15	9	5	1	6	7	44	5.6
Advising	1	3	11	2	0	1	4	22	2.8
Developmental Education	0	2	0	0	0	0	4	6	0.8
Programs of study	9	21	36	30	26	29	24	175	22.3
Faculty and staff	1	5	4	2	1	13	20	46	5.9
Student Success	17	1	13	12	10	24	28	105	13.4
Resources for Students	23	16	9	6	14	46	31	145	18.5
Tracking Tools	1	2	1	0	0	0	1	5	0.6
Degree Audit	2	2	1	0	0	0	1	5	0.6
Articulation and Transfer	1	2	8	1	1	2	10	25	3.2
Graduation	8	4	8	5	4	1	9	39	5.0
Career Planning and Job Placement	2	1	5	3	0	8	8	27	3.4
TOTALS	86	102	119	81	74	143	180	784	100

The greatest number of videos with information about early college opportunities was present on the YouTube channel of Barney Community College with ten, followed by Astra Community College and Wren Community College with eight videos each. Notably, the approach of Barney Community College to providing this information included a series of short

videos primarily ranging from 30 seconds to 1 minute and 40 seconds, each focusing on specific topics of dual enrollment. These videos featured educators from the public school system and the community college providing information on dual enrollment requirements, benefits, quality of instructors, cost, student perspectives, advantages, and partnerships. Figure 2 shows how one particular video in the series, “Dual Enrollment Advantages,” provided graphics comparing the tuition costs of paying for college courses in high school and utilized college logos to emphasize the message that college credits earned in high school transfer to all state colleges in Maryland.

Overall, there was considerable information about early college opportunities on Maryland community college YouTube channels. However, as shown in Table 11, these videos were among the least viewed of all student success video topics with 12,752 views, which represented only 1.2 percent of the total view count of all the student success videos in this study. The three most popular videos were the “Early College Access Programs” video presented on the Nevar Community College YouTube channel which received 1496 views, the “Dual Enrollment Requirements” video by Barney Community College which received 1300 views, and the Wren Community College “StarTalk” summer program for high school students video which received 1200 views. Each of these videos was under three minutes in duration. Providing this information in a variety of formats popular with students is supported in the literature review of this study (Nodine, 2011). A representative sample of early college opportunities videos presented on Maryland community college YouTube channels is listed in Appendix D.

Table 11

Table 11									
<i>Differences in Number of Views of Student Success Videos by College and Topic</i>									
Student Success Variables	Views of Student Success Videos by College							Total No. of Views	%
	Eldan CC	Perch CC	Marson CC	Nevar CC	Barney CC	Wren CC	Astra CC		
Early College Opportunities	580	672	44	1496	2761	4070	3129	12752	1.2
Assessment and Placement	0	216	534	3266	74	789	10429	15308	1.4
New Student Orientation	1574	7182	2253	5359	3516	116	123286	143286	13.2
Welcome Messages	4461	800	29448	0	1200	14	7434	43357	4.0
Enrollment and Registration	1551	18187	29401	27212	0	49099	124229	249679	23.0
Financial Aid	215	2367	4537	12126	32	2643	5345	27265	2.5
Advising	149	769	3859	6200	0	151	2186	13314	1.2
Developmental Education	0	280	0	0	0	0	3762	4042	0.4
Programs of study	12814	26660	8009	43592	18896	42757	87626	240354	22.2
Faculty and staff	156	703	1650	523	46	2701	5913	11692	1.1
Student Success Profiles	107642	162	21995	6620	2527	6007	12980	157933	14.6
Resources for Students	6300	2698	6901	9379	4789	20663	17275	68005	6.3
Program Evaluation & Tracking Tools	60	349	51	0	0	0	227	687	0.1
Degree Audit	0	0	0	0	0	0	0	0	0.0
Articulation and Transfer	119	693	3331	308	6	2253	6845	13555	1.3
Graduation	2348	1629	1961	5157	1886	1800	3327	18108	1.5
Career Planning and Job Placement	180	350	767	2036	0	3152	59686	66171	6.1
TOTALS	138149	63717	114741	123274	35733	136215	473679	1085508	100

Figure 2

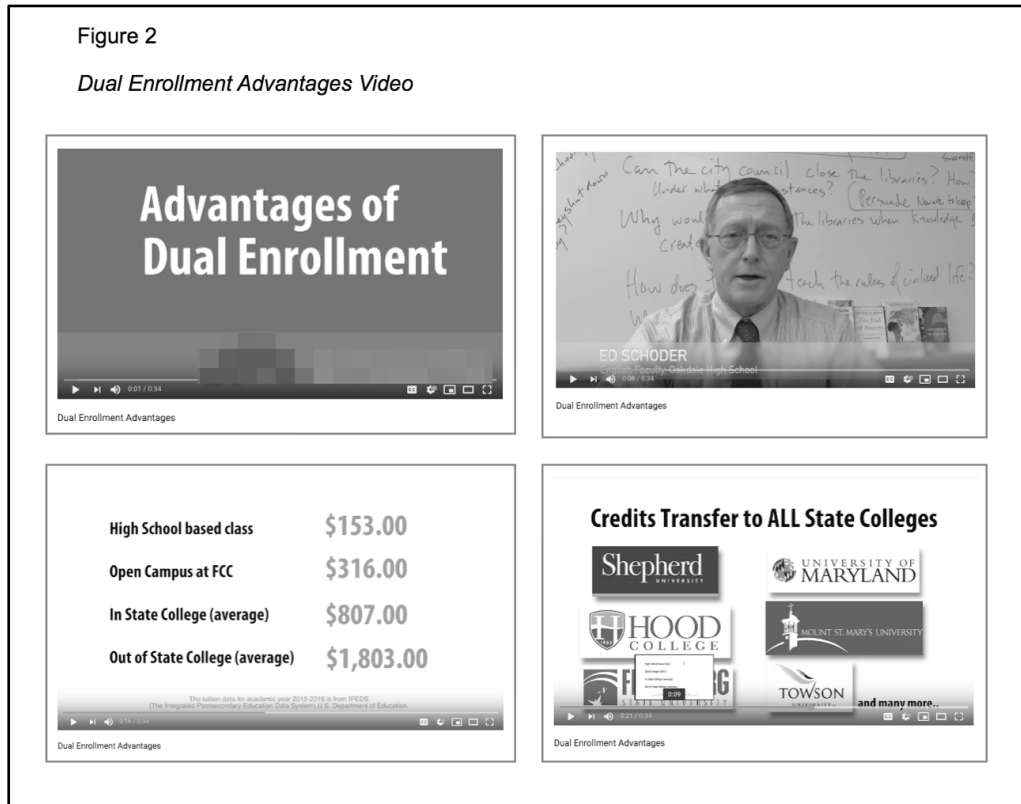
Dual Enrollment Advantages Video

Figure 2 YouTube Screenshots

Assessment and placement videos. Information regarding assessment and placement testing was minimal and somewhat difficult to find on Maryland community college YouTube channels. The term "Accuplacer" was added to the keyword search to generate more results because the Accuplacer is a placement test commonly used among Maryland community colleges. Although only nine videos about assessment and placement testing were identified in this study, these videos were replete with information students need to be successful. All but one of the institutions presented at least one video about placement testing on their YouTube channel. The majority of these videos, 78 percent, were less than three minutes 30 seconds in duration, but 22 percent were longer than ten minutes. These videos included general information about entrance and placement testing, specific information about the location of

the testing centers at the institutions, and tutorials for students to prepare successfully for testing.

From computer screen recordings to theatrical dramatizations, the approaches to providing information about placement testing varied widely in the videos identified in this study. For example, in the “How-To Placement Test Prep” video, Marson Community College used a 42 second screen capture recording to demonstrate step-by-step how students can find information online about the test, sample questions, and study guides to help them prepare for placement testing at the institution. By contrast, Barney Community College took a lighthearted humorous approach to providing this information to students in its nearly 17 minute “Assessment Zone” video, which was inspired by the “Twilight Zone” television series. Longer videos seem to provide more in-depth information for students about placement testing. One notable example was a video guide that explained the Test of Essential Academic Skills (TEAS), which is required for admission into Health Sciences programs at Astra Community College. As illustrated in Figure 3, the video provided detailed information on the structure and scope of the exam, policies and procedures for taking the exam, practice questions, study resources, and advice from students.

Overall, the number of videos with information about placement testing was minimal, but several of these videos had high view counts. Analysis of Table 11 shows that the nine placement testing videos in this study were viewed 15,308 times, which represents only 1.4 percent of the total view count of all the student success videos in this study. However, the top three placement testing videos with the greatest number of views accounted for 89 percent, or 13,695 of the total views in this category. These videos included the “Introduction to Accuplacer Testing” video with 7,073 views, and the “Test of Essential Academic Skills Tutorial” video with

3,356 views, both by Astra Community College, followed by the “Smart Moves: Testing and Placement” video with 3,266 views by Nevar Community College. Videos that provide general information and detailed instructions about entrance testing and placement points to research in the review of the literature about community college students’ specific needs for both generic and complex information to support their success (Completion By Design, 2012). A representative sample of assessment and placement videos presented on Maryland Community College YouTube channels is listed in Appendix D.

Figure 3

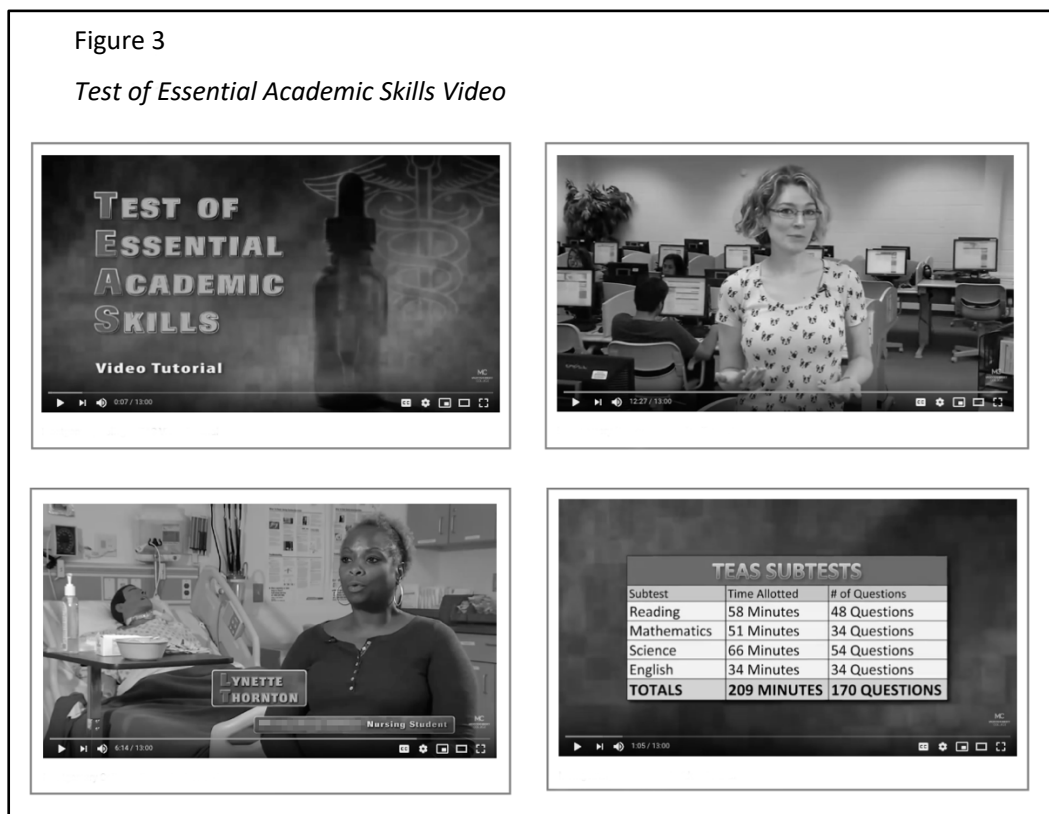
Test of Essential Academic Skills Video

Figure 3 YouTube Screenshots

New Student Orientation Videos. The frequency of videos that provide orientation information for newly enrolled students varies widely on Maryland community college YouTube channels. As shown in Table 10, forty-four new student orientation videos were selected for this study sample set, which accounted for 5.6 percent of all student success videos in this study. The majority of the videos, 68 percent, were produced by three institutions: Perch Community College with 15 orientation videos, Astra Community College with eight videos, and Nevar Community College with seven videos. New student orientation videos comprised only 5.6 percent of all the student success videos selected for study, but they received 143,286 views or 13 percent of all student success video views. The three most popular new student orientation videos, based upon views, included “How to Search for Classes” with 53,000 views, “Credit Registration” with 28,352 views, and “Finding Drop Deadlines for Classes” with 25,000 views. As a result, views of new student orientation videos on the YouTube channel of Astra Community College accounted for 86 percent of the sample set of new student orientation videos.

Providing information for new student orientation ranged from a 30 second strategies for success video to a two-hour long student convocation video. However, the vast majority, 50 percent of new student orientation videos, were short, with a duration of less than three minutes. Another 43 percent of the videos ranged from three to ten minutes in duration, with only six percent of the videos longer than ten minutes. Common themes among new student orientation videos on Maryland community college YouTube channels included campus tours, academic advising, registering for classes, and paying for college. In addition, some institutions had specialized orientation videos for student loans, student employment, developmental math, and the student portal.

This study found that several of the community colleges categorized their new student orientation videos into YouTube playlists. For example, Figure 4 shows how Perch Community College featured a “New Student Orientation” playlist. Similarly, Nevar Community College featured a “Smart Moves for Student Success” playlist, and Astra Community College featured a “Astra Community College Info” playlist on its YouTube channels. The findings of this study have suggested that playlists might help overcome information-related barriers to completion by making it easier for newly-enrolled students to find the information they need on the YouTube channel of their institution. A representative sample of new student orientation videos presented on Maryland community College YouTube channels is listed in Appendix D.

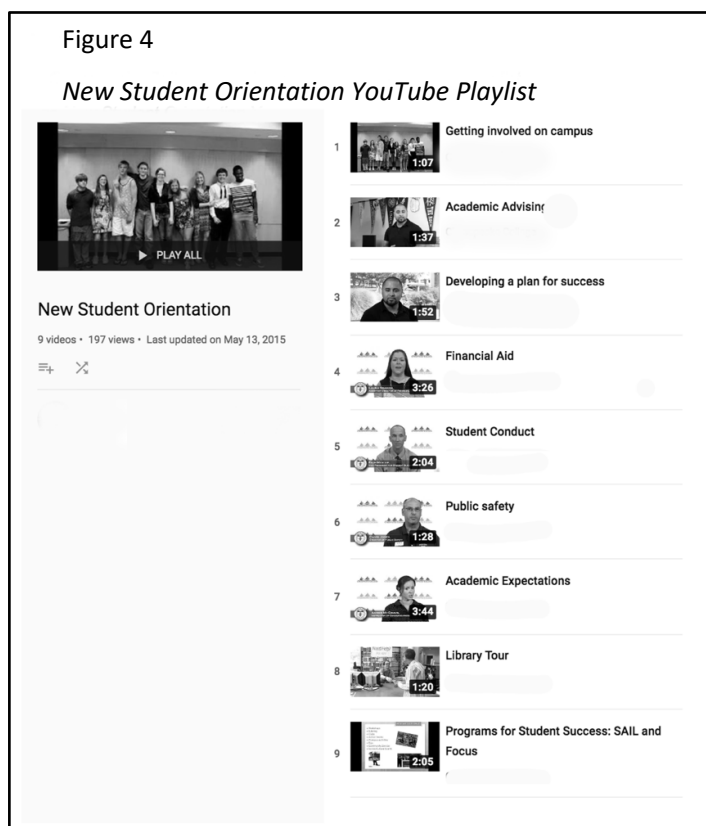


Figure 4 YouTube Screenshot

Welcome message videos. Videos welcoming new students were found on the majority of Maryland community college YouTube channels. A total of 22 videos providing welcome messages for new students were selected for this sample set, which represents 2.8 percent of all the student success videos in this study. Five out of seven institutions had at least one or more welcome messages, but two of the institutions had none. Welcome message videos received 43,357 views, which represents four percent of all views of student success videos in this study.

This study found that there were basically three types of welcome message videos on Maryland community college YouTube channels: formal, informal, and specialized. Formal welcome message videos featured college presidents officially welcoming students to the institution, such as the “Welcome to the Fall Semester President’s Message” video by the president of Eldan Community College, the “Welcome to Perch” video by the president of Perch Community College, and the “Welcome to Astra” video by the president of Astra Community College, as seen in Figure 5.

By contrast, informal welcome message videos featured student leaders personally welcoming students to the college and providing a virtual tour of the campus. Two examples of these types of student welcome messages include “Getting to Know Campus from other Students,” and the “SGA Welcome” video on the Eldan Community College and Perch Community College YouTube channel, respectively. Generally, welcome message videos were short in duration. More than half of these videos, 59 percent, ran less than two minutes in duration, 40 percent were between two and five minutes duration, and only one video ran longer than five minutes in duration.

Figure 5

Welcome Message Videos

Figure 5 YouTube Screenshots

Specialized welcome videos were also found on Maryland Community College YouTube channels. For example, Perch Community College had a welcome video specifically for students enrolled in developmental math courses. A faculty member at Marson Community College had an introductory welcome video for students enrolled in the Principles of Accounting course. Interestingly, this professor's video was the most popular welcome video based upon views, receiving 44 percent, or 19,259, of all welcome video views in this study. The high view count for this video could be attributed to the fact that it had been on the college YouTube channel for many years. However, from my professional experience in higher education video production, it seems to suggest that professors should consider the long-term benefits of using welcome videos for their courses to introduce themselves to students, particularly online learners, and to

provide information students need to succeed in the course. In addition, Astra Community College had a video welcoming students to its “Reading, Writing and Language Center,” as well as a video providing information about its “Welcome Centers” for students and visitors. Lastly, several institutions had specialized videos promoting their welcome week activities to new students. A representative sample of welcome message videos on the YouTube channels of Maryland community colleges is listed in Appendix D.

Enrollment and registration videos. Videos providing information about enrollment and registration were the number one most viewed videos in this study. The 30 videos included in the enrollment and registration sample set were viewed 249,679 times. Interestingly, the number of videos only represented 3.8 percent of the total number of student success videos in this study, but the view count represented 23 percent of all student success video views. Nearly half of these videos, 46 percent, were present on the YouTube channels of Astra Community College and the Nevar Community College. The most popular video, based upon views in this sample set, was a generic 30 second advertisement promoting the benefits of enrolling at Wren Community College with 53,000 views. However, in terms of providing information students need to enroll successfully, the most popular videos in this sample set, based upon the number of views, included “How to Search for Classes” with 53,000 views, a “Credit Registration” video with 28,000 views, and a “Teacher Ed Summer Enrollment” video with 27,114 views. The popularity of these particular videos points to the critical information seeking and information needs of students during the entry stage of the conceptual framework of this study.

Common themes found among the enrollment and registration videos on Maryland community college YouTube channels included information about the registration process, registration dates for upcoming sessions, and early registration reminders. Fifty-six percent, or

17, of the enrollment and registration videos were general announcements about registration, the start of the next semester, and advertisements to enroll today. The majority of these short videos were under one minute in duration. By comparison, 40 percent of the videos in this sample set were considerably longer because they provided students with detailed information and instructions about how to register and use enrollment services. For example, these videos included information about searching for classes, understanding the waitlist process, using express registration, and finding drop deadlines. These longer duration videos ranged from one minute 15 seconds to eight minutes 21 seconds, with a median duration of four minutes 20 seconds.

From a production perspective, this study found enrollment and registration videos differed in their approach. Many of the videos appeared to be professionally produced commercial advertisements with a generic call to action of “Enroll Today.” In contrast, some of the videos were basic screen recordings which took students step-by-step through the online registration process. However, there were a few videos which were more innovative in their approach to providing information on enrollment and registration. For example, “Enrollment Through their Eyes” was an interesting video that featured Astra Community College students sharing their personal stories about successfully navigating the enrollment process. It is reasonable to assume that providing information and advice from the student perspective could help new students going through similar situations with enrollment. Lastly, Figure 6 shows frames from a short entertaining video which received 4,800 views and featured a student providing advice and explaining why it is important to register on time. A representative sample of enrollment and registration videos on Maryland community college YouTube channels is listed in Appendix D.

Figure 6

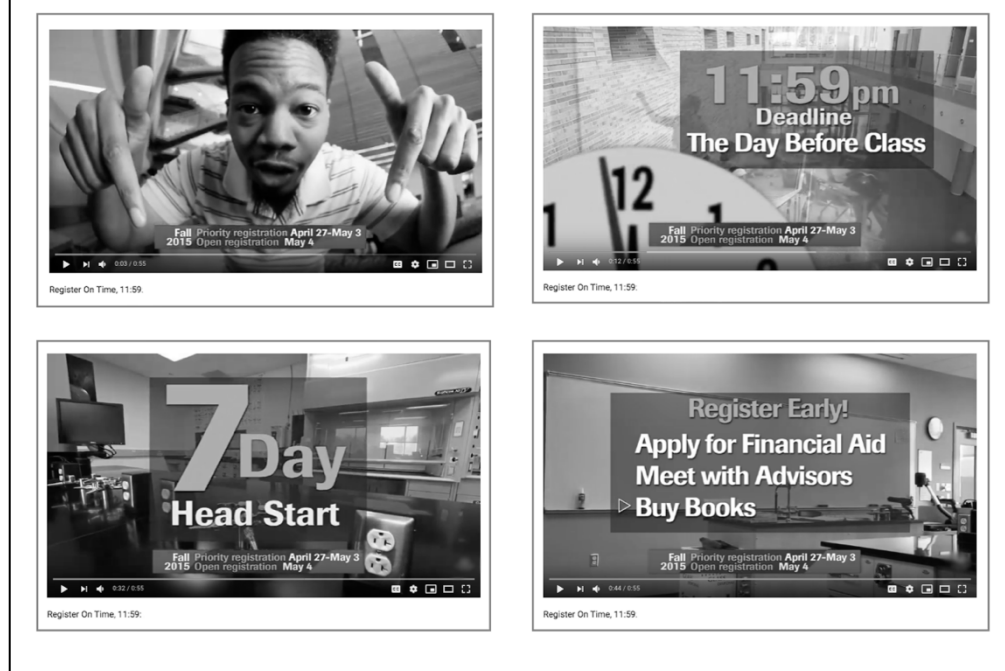
Register on Time, 11:59

Figure 6 YouTube Screenshots

Financial Aid Videos. The findings of this study revealed that videos providing information about financial aid were prevalent on all of the Maryland community college YouTube channels. To broaden the number of search results, “scholarship” was also used as a keyword search term. In addition, some of the financial aid videos selected for this sample set were identified in new student orientation playlists. As a result, there were 44 financial aid videos selected for this sample set which represented 5.6 percent of all student success videos in this study. Although the number of financial aid videos ranked among the top five student success topics, it ranked eighth in the total number of views. This ranking seems to suggest that although institutions are making financial aid information available on their YouTube channels, these videos may not be popular based upon views.

The majority of financial aid videos included in this sample set provided information about paying for college, the financial aid process, scholarships, and profiles of scholarship recipients. More than half, 54 percent of the videos in this sample set, provided either an overview of financial aid, or detailed information about types of financial aid, how to apply, and the requirements. These videos ranged in duration from 30-second “Frequently Asked Questions” about financial aid videos to 30-minute television programs about financial aid, scholarships, and financial literacy. For example, a “Financial Aid” playlist on the Marson Community College YouTube channel provided a series of nine short videos featuring students asking questions about financial aid. The most popular questions, as shown in Figure 7, based upon the number of views, included “What is financial aid?” with 1849 views, “What types of financial aid are available from the state of Maryland?” with 1016 views, and “Does Marson offer scholarships?” with 902 views.

Videos providing information about scholarships and profiles of scholarship recipients were recurrent themes among the financial aid video sample set. Thirty-four percent, or 15, of the financial aid videos in this sample set, focused on a variety of scholarships available to students. Perch Community College had the largest number of financial aid videos, with more than half devoted to a series of videos profiling scholarship recipients. These videos ranged in duration from one minute and 29 seconds to four minutes and featured students sharing their personal stories of how Perch Community College scholarship funds allowed them to pursue their education. Similarly, Barney Community College, Wren Community College, and Astra Community College also provided videos about scholarships available at their institutions.

*Figure 7**Financial Aid “Frequently Asked Questions” Video Series*

Figure 7 YouTube Screenshots

Financial literacy was the focus of the most popular financial aid video in this sample set. With more than 10,000 views, “Beyond the Classroom Walls” was an eight minute ten second video that profiled how four students at Nevar Community College manage the financial challenges of paying for college and reaching their educational goals. The other most popular financial aid videos included a “Student Employment Orientation” video on the steps to student employment by Astra Community College with 2,200 views, a “James Rouse Scholars Program” video by Wren Community College with 2,000 views, and a “Paying for College” video by Nevar Community College with 1,800 views. These popular videos were relatively short, ranging from a two minutes and 17 seconds to five minutes and 21 seconds in duration. By comparison, the

two longest financial aid videos, ranging from 28 to 32 minutes in duration, were among the least viewed in this sample set with fewer than 500 views each.

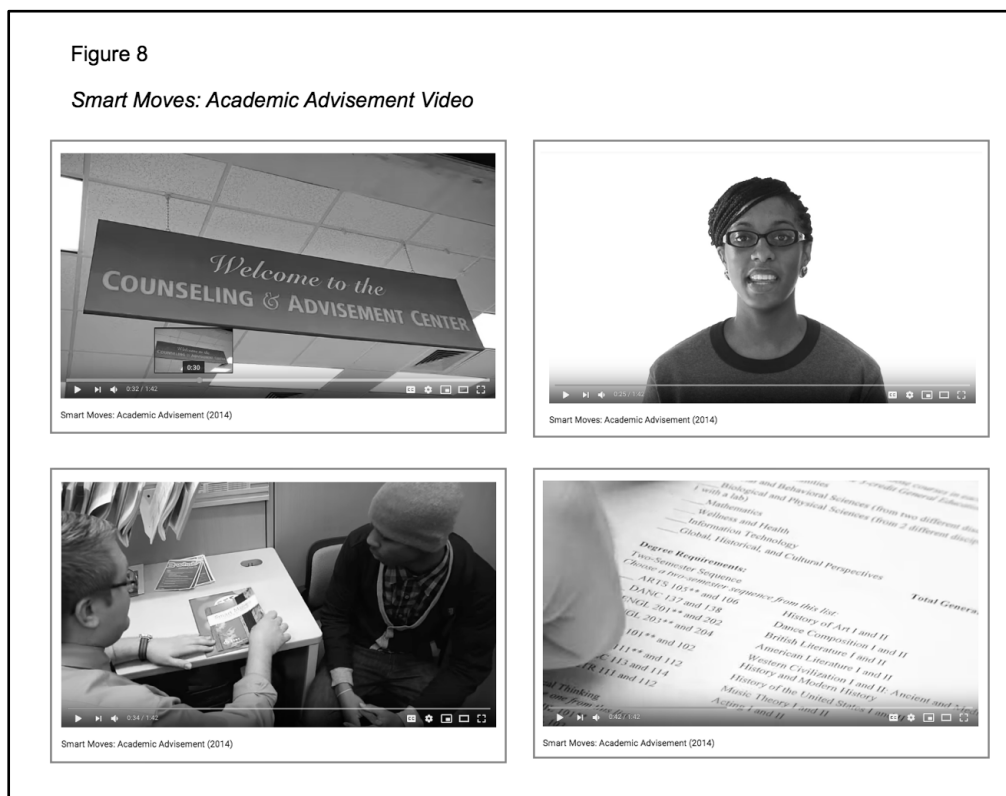


Figure 8 YouTube Screenshots

Advising Videos. There were 22 advising videos selected for this sample set which accounted for 2.8 percent of all of the student success videos in this study. Advising videos in this sample set were viewed 13,314 times, which represents only 1.2 percent of student success video views. These videos included a wide variety of information about academic advising, career exploration, and educational planning to help students accomplish their goals. The content of the videos varied from students and staff providing general overviews of advising services at the institution, to narrated screen recordings of how-to choose English and Math courses. For example, the “Smart Moves: Academic Advisement” video on the Nevar Community College YouTube channel featured a student providing an introduction to academic

advising. As shown in Figure 8, the video shows a student meeting with an advisor, and the script explains how advisors can help students with . . .

understanding and preparing for placement tests, making sense of college course terminology, credit load and degree requirements, selecting courses, registering and paying for the upcoming semester, and finally, connecting with other important student resources here at CCBC.

In addition to providing a general overview of advising services, 54 percent of the videos in this sample set focused on specific advising information needs of students. For example, Marson Community College, which had the greatest number of advising videos on its YouTube channel, featured a series of “Advising and Career Services” how-to videos. The short videos in this series were all less than one minute and 30 seconds in duration and covered the following topics: program evaluations, “What If?” scenarios, course descriptions, placement test prep, programs of study, general education course listings, and tutoring services. Additional advising videos that received the greatest number of views on its YouTube channel included “Getting Started: Choosing Classes,” views, and “How to Select English and Math Courses” with 1,418 views combined. Overall, the most popular advising video in this sample set, based upon the number of views, was “Nevar Pathways” by Nevar Community College. This two-minute and 38 second animated video provided information on Pathways and explained how it would help students meet their academic and career goals. Lastly, this study did not find any advising videos for students on the Barney Community College YouTube channel. However, it is important to note that the institution did have several extensive training videos for advisors on what programs are available in different departments.

The major findings of advising videos in this study show that Maryland community colleges are using videos on YouTube to provide students with information typically received in person during one-on-one meetings. I would argue that these findings suggest that students should consider online advising videos as a supplement to traditional advising. First, these videos appear to be a rich resource for important information which responds to the information needs of students. Second, these videos were easily accessible, which responds to the information-seeking behaviors of students. A representative sample of advising videos on Maryland community college YouTube channels is listed in Appendix D.

Developmental education videos. The major findings of this study revealed that there are a minimal number of videos providing information on developmental education on Maryland community college YouTube channels. To generate the great number of search results, the term “remedial” was added to the keyword search. However, only six videos were selected for this study sample, which represents less than one percent of all the student success videos in this study. Five of the seven community college YouTube channels had no videos with information about developmental education. By contrast, Astra Community College had four videos and Perch Community College had eight videos. Combined, these videos received 4,042 views which represented less than one percent of all student success video views. These videos ranged from nearly three minutes to over seven minutes in duration.

This study found two notable developmental education videos, both of which provided students with an overview of developmental education, one at Perch Community College and the other at Astra Community College. First, the “PASS: Program for Accelerated Student Success” video on the Perch Community College YouTube channel provided an overview of the renamed developmental program of the institution, Figure 9. The video featured

developmental staff and instructors welcoming students to the PASS program, and explaining why students may have to take PASS classes. The video also explained the structure and philosophy of the PASS program. The video also included students sharing their experiences in the PASS program. The video was three minutes 54 seconds in duration and received 315 views.



Figure 9 YouTube Screenshots

Similarly, a report on “Developmental Education at Astra Community College” was another notable video, as shown in Figure 10. Narrated by a student, the in-depth video report featured interviews with administrators and students. The comprehensive video used extensive graphics to highlight information in the video, which included research on students in developmental education, developmental education outcomes at Astra Community College, charts regarding curricular alignment of development education program with the public school

system, and detailed course sequence maps. The video was seven minutes 40 seconds in duration and received 781 views.

The major findings of this sample set seem to suggest that the majority of Maryland community colleges are not using videos to provide information about developmental education. Especially in light of the high number of community college students enrolled in developmental education courses and the low completion rates of these students, it would point to the need for community colleges to leverage video to help provide these students with more information about these programs.

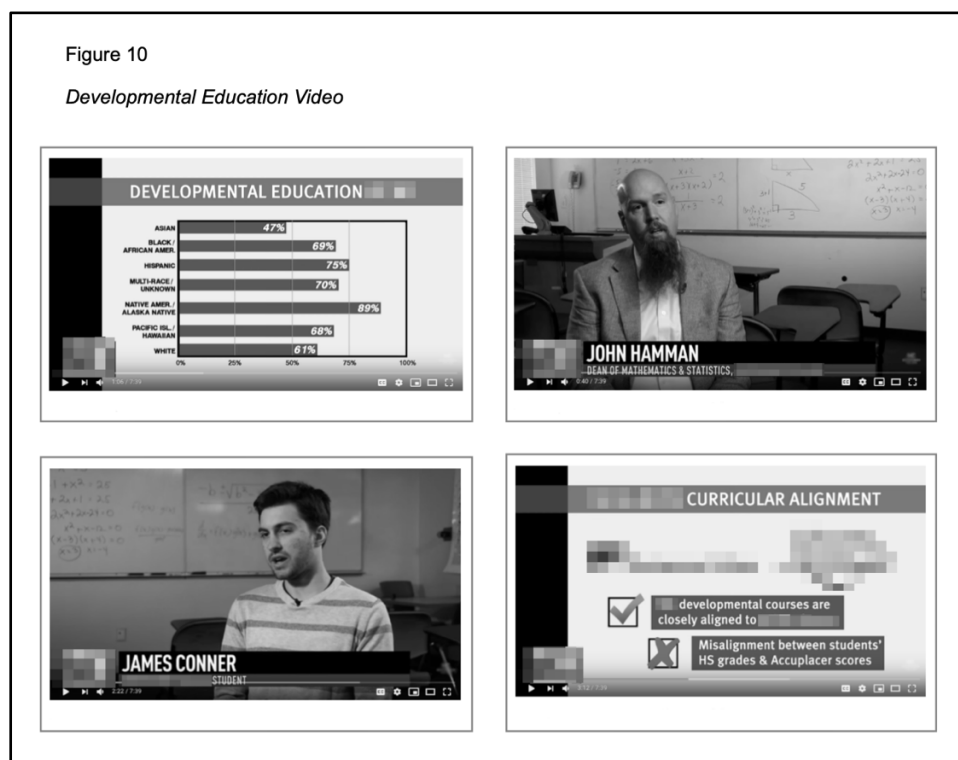


Figure 10 YouTube Screenshots

Programs of study videos. The major findings of this study have revealed that there are more videos on Maryland community college YouTube channels providing information about programs of study than any other student success topic. To help identify these videos, the term

“major” was added as a keyword search term. As a result, there were 175 videos selected for the program of study sample set, which represents 22.3 percent of all the videos in this study. In addition, based upon their view count, these videos ranked second in popularity with 240,354 views, which represents 22.3 percent of all student success video views in this study. The minimum number of programs of study videos ranged from nine on the Eldan Community College YouTube channel to a maximum 36 on the Marson Community College YouTube channel. The majority of these institutions, six out of seven, had at least 20 videos about programs of study on their channel. On average, the number of programs of study videos was 25 per college, and the average number of views was 34,336 per college YouTube channel.



Figure 11 Word Cloud

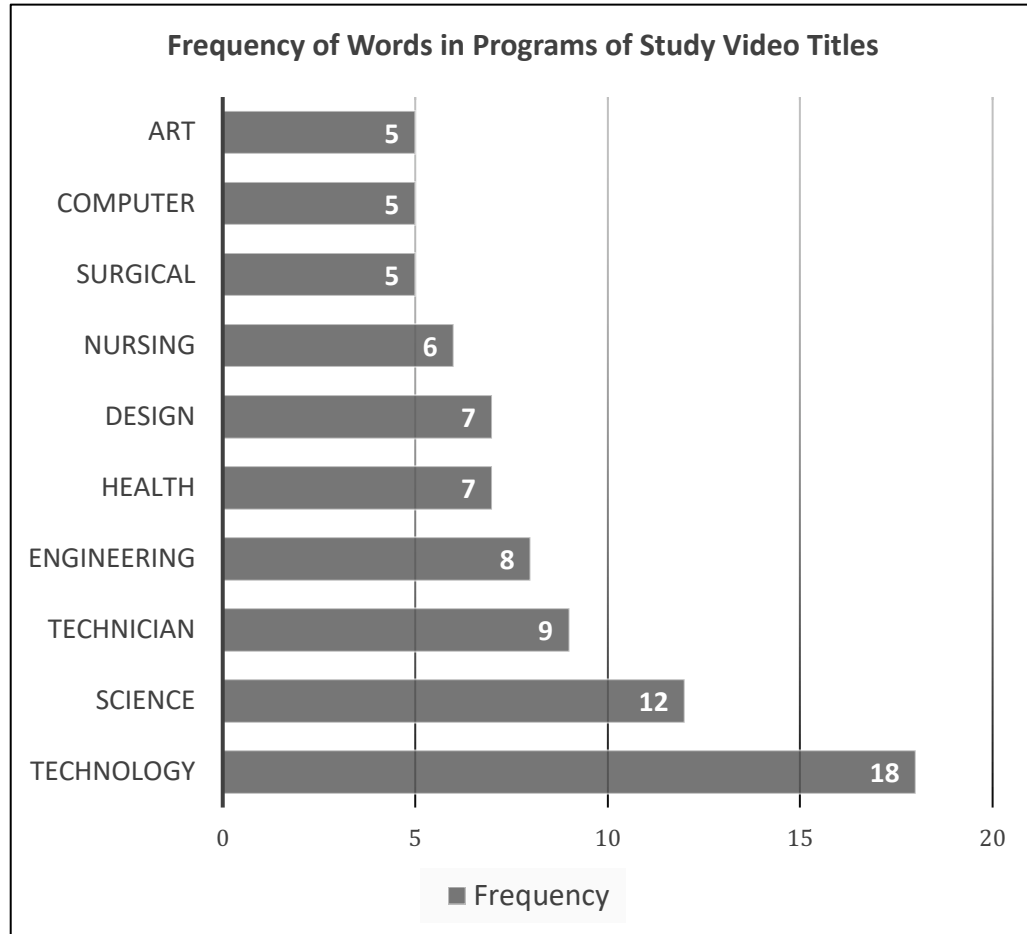


Figure 12 Bar Chart

The findings of the programs of study sample set revealed several common themes among the videos on Maryland community college YouTube channels. These themes were developed after analyzing the frequencies of 316 words included in the titles of programs of study videos. A visualization of the results was created using a word cloud generator, as shown in Figure 11, in which the size and color of each word indicates its frequency. Analysis of Figure 12 shows the top ten words with the greatest frequencies among program of study video titles included the following: technology, science, technician, engineering, health, nursing, and design. These words appeared a combined total of 82 times in the titles of programs of study videos,

which represents 47 percent of all videos in this sample set. Overall, programs of study videos were categorized into the following five themes:

1. Nursing and Allied Health programs
2. STEM (Science, Technology, Engineering and Math) programs
3. Art, Design, and Media programs
4. Business and Legal Studies Programs
5. Culinary, Hospitality, and Sports programs

Videos promoting Nursing/Allied Health and STEM programs were abundant on the YouTube channels of Maryland community colleges. Approximately one-quarter, or 25 percent, of the program of study videos provided information or promoted Nursing and Allied Health programs, which represents 25 percent of the videos in this sample set. In addition to nursing, some of these were videos for surgical technician, radiology technician, pharmacy technician, medical sonographer, nuclear medicine, and physician assistant programs. Likewise, videos about STEM programs represented 17 percent of the program of study videos. These videos provided information on computer science, information technology, engineering, cyber security, environmental science, and mathematics programs.

The most popular program of study videos, based upon the number of views, provided information on Nursing/Allied Health and Legal Studies programs. Remarkably, a 19-minute video entitled “Health Sciences Careers: The Movie” had been viewed 48,000 times on the Astra Community College YouTube channel, as shown in Figure 13. This professionally produced 19-minute video highlights health science programs available at Astra Community College by following the victim of a simulated accident from the time the ambulance arrives through the stages of hospital admission, treatment, and recovery. The second most popular program of

study video was a short 15 second “Paralegal Program” video that was viewed 17,000 times on the Perch Community College YouTube channel. Lastly, a three minute 58 second Astra Community College video, “What is a Surgical Technologist?,” was viewed 14,450 times, making it the third most popular program of study video.

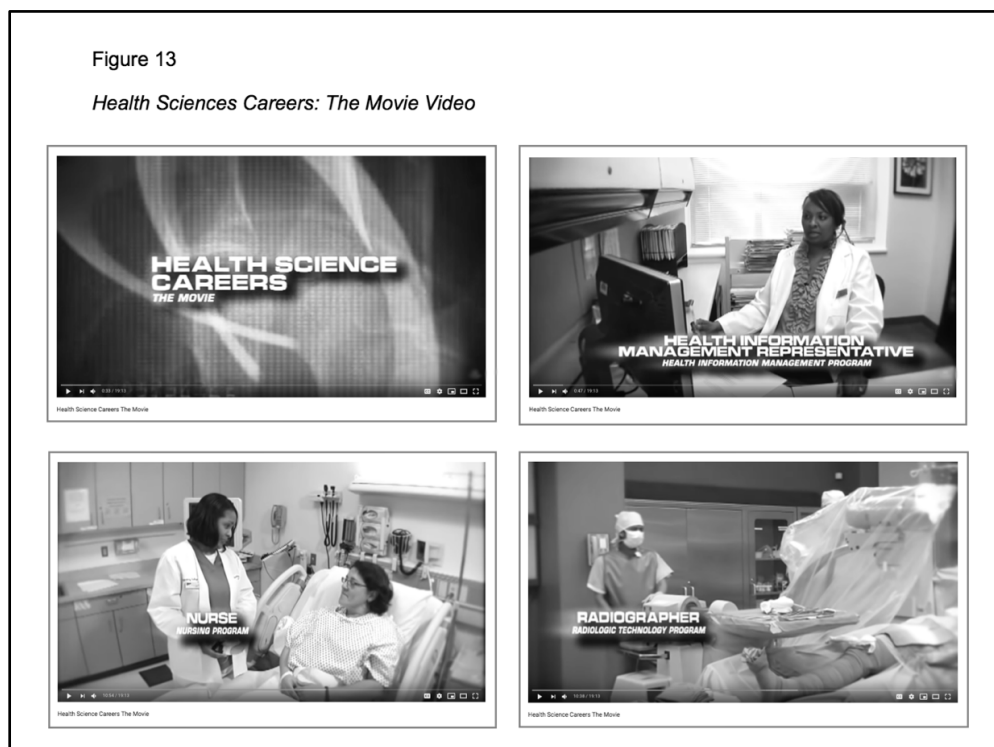


Figure 13 YouTube Screenshots

Overall, program of study videos varied widely in duration, ranging from a minimum of 15 seconds to a maximum of approximately 30 minutes in duration. Nearly a quarter of the program of study videos, 23 percent, were less than 60 seconds in duration. However, the majority of the program of study videos, 64 percent, were between 60 seconds and five minutes in duration. Longer videos, over five minutes in duration, represented 13 percent of all program of study videos.

The proliferation of program of study videos on Maryland community college YouTube channels appears to be strong evidence of their efforts to use video to provide information to help students explore and choose a program of study. Many of these videos featured interviews with program faculty, current students, successful alumni, and employers. Most notably, a series of videos in a YouTube playlist titled “Programs at Astra Community College,” as shown in Figure 14, goes a step further by providing information about the regional employment outlook for program graduates and a list of potential employers. An example of one of the videos in this series focusing on “Hospitality Management” is shown in Figure 15.

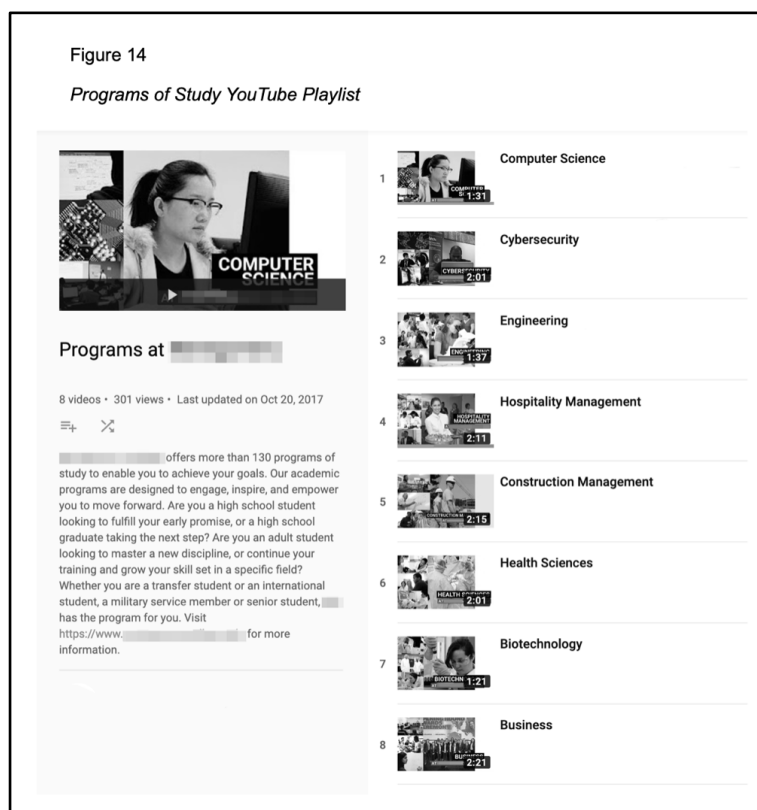


Figure 14 YouTube Screenshot

Overall, it seems evident that program of study videos fulfill some of the information needs of community college students during the entry stage of the conceptual framework of this

study. Moreover, the review of the literature related to college-age students' use of YouTube for information seeking suggests that providing this type of information would be extremely beneficial in helping students choose a program of study. A representative sample of program of study videos on Maryland community college YouTube channels is listed in Appendix D:



Figure 15 YouTube Screenshots

Faculty, staff, and student success profile videos. Videos featuring student success stories and profiles of faculty and staff are in plentiful supply and easy to find on the YouTube channels of Maryland community colleges. Due to the similarities of this video content, this section will compare the results of the analysis of these two sample sets. There were 105 videos featuring student success stories and 46 videos profiling faculty and staff on Maryland community college YouTube channels. This study found that there were twice as many student success stories as there were faculty and staff profiles. Student success stories accounted for 13.4 percent of all the videos in this study; faculty/staff profiles accounted for only 5.9 percent.

Based upon the total number of videos in this study, student success stories and faculty and staff profiles ranked third and fourth, respectively.

There were significant differences in the popularity of student success stories and faculty/staff profiles. Based upon the total number of views, student success stories received 157,933 views, compared to 11,692 views for faculty/staff profile videos. Accordingly, views of student success stories ranked fourth, which represented 14.6 percent of the total number of views in this study. In comparison, views of faculty/staff profiles videos ranked 14th with only 1.1 percent of the total number of views in this study. However, combined these videos accounted for 15 percent of all video views in this study. The most popular student success stories, based upon the number views, were on Eldan Community College YouTube channel with a view count of 107,642. By contrast, the most popular faculty/staff videos, based upon the number of views, were found on the Astra Community College YouTube channel with a view count of 5,913. However, combined, student success stories and faculty/staff profiles had been viewed 169,625 times, which represents nearly 15.6 percent of all views in this study.

This study also compared the total number of videos of student success stories and faculty/staff profiles by college. There was an average of fifteen student success videos and seven faculty/staff profile videos on Maryland community college YouTube channels. Analysis of Table 10 shows Astra Community College had the greatest number of student success stories and faculty staff videos with a combined total of 48. By contrast, the least number of student success stories and faculty/staff videos were found on the Perch Community College YouTube channel with a combined total of six.

Videos of student success stories ranged from 30 seconds to 30 minute television programs and featuring a diversity of current students and successful alumni. The most

compelling examples were found in the “Redefine Yourself” series of 30-second videos on the Eldan Community College YouTube channel. The five most popular student success story videos, based upon the number of views, were all part of this series. Five of the videos in the series were viewed 80,388 times for an average of 16,077 views per video. These popular videos, as shown in Figure 16, featured student success stories of a single mother and military veteran who enrolled in the casino dealer program; a mother of four who became the college valedictorian; a flight attendant who received a four-year scholarship; a transfer student studying entrepreneurship; and a student pursuing his passion in theatre and dance. It is important to note the diversity represented in these videos, as four of the five students were people of color and four out of five were women.



Figure 16 YouTube Screenshots

An important aspect of the student success stories in this study was the diversity of students who appeared in these videos. Many of the student success stories in this study featured first generation college students, students of color, immigrant students, military veterans, and single parents. In addition, these videos often featured student leaders, honors students, scholarship recipients, transfer students, and student athletes. It was apparent that the students featured in many of the student success story videos reflect the diversity of the majority of students enrolled in the community colleges of America.

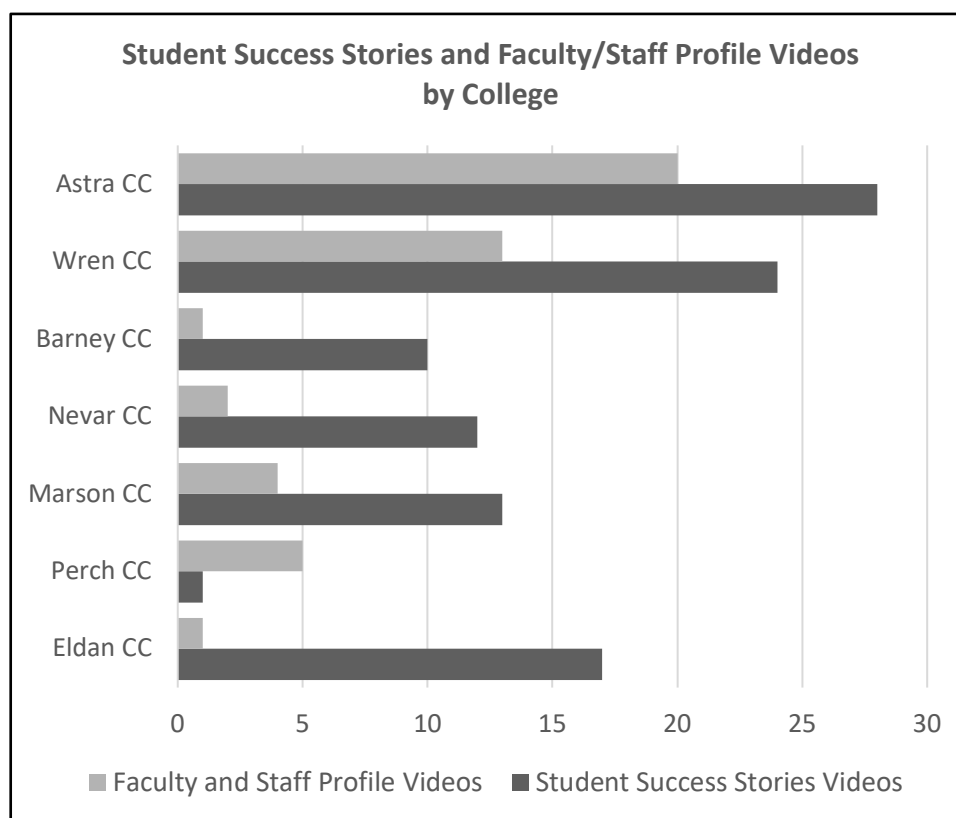


Figure 17 Bar Chart

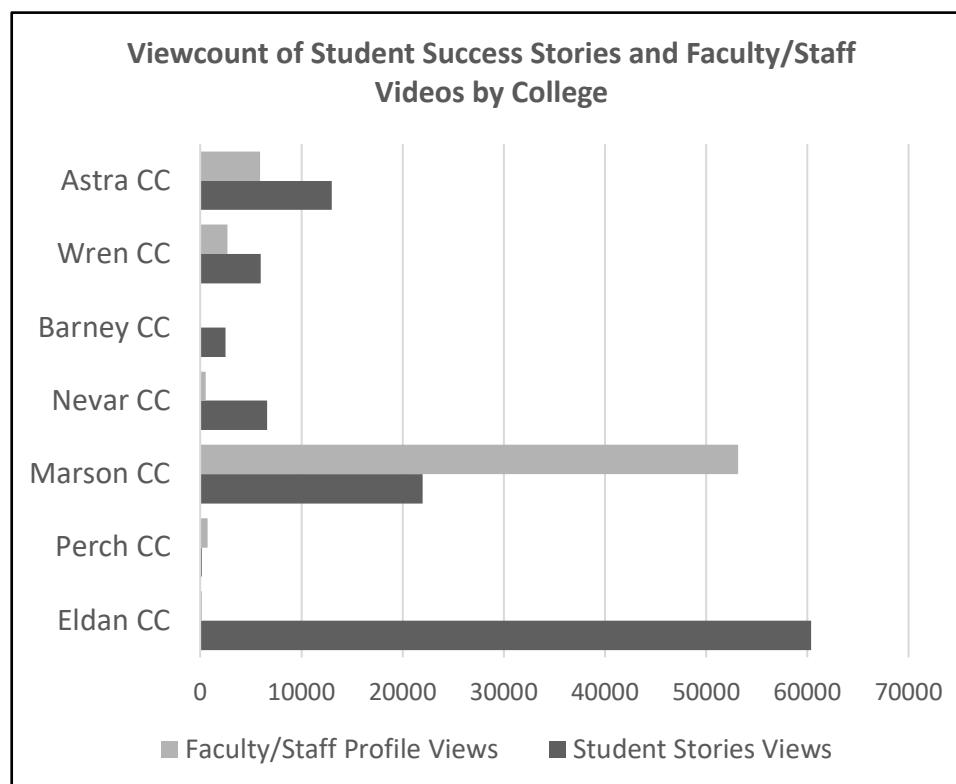


Figure 18 Bar Chart

As shown in Figures 17 and Figure 18, faculty and staff profile videos were not as common as student success stories on Maryland community college YouTube channels. The majority of these videos, 71 percent, were found on the YouTube channels of Astra Community College and Wren Community College. Similarly, the majority of student success stories, 50 percent were also found on the YouTube channels of these two institutions. In terms of video views, 74 percent, or 8,614 of all the views of faculty and staff profile videos were also from these two institutions. The three most popular faculty and staff profile videos, based upon views, included “Faculty - In their Own Words” with 1300 views, “Maryland Professor of the Year” with 840 views, and “Career Profile: Government Relations” with 783 views. One of the most compelling faculty staff profile videos, as shown in Figure 19, was part of the “New Beginnings” campaign that featured short videos highlighting the inspiring stories of faculty at

the institution. A representative sample of videos featuring faculty/staff profiles and student success stories on Maryland community college YouTube channels is listed in Appendix D.

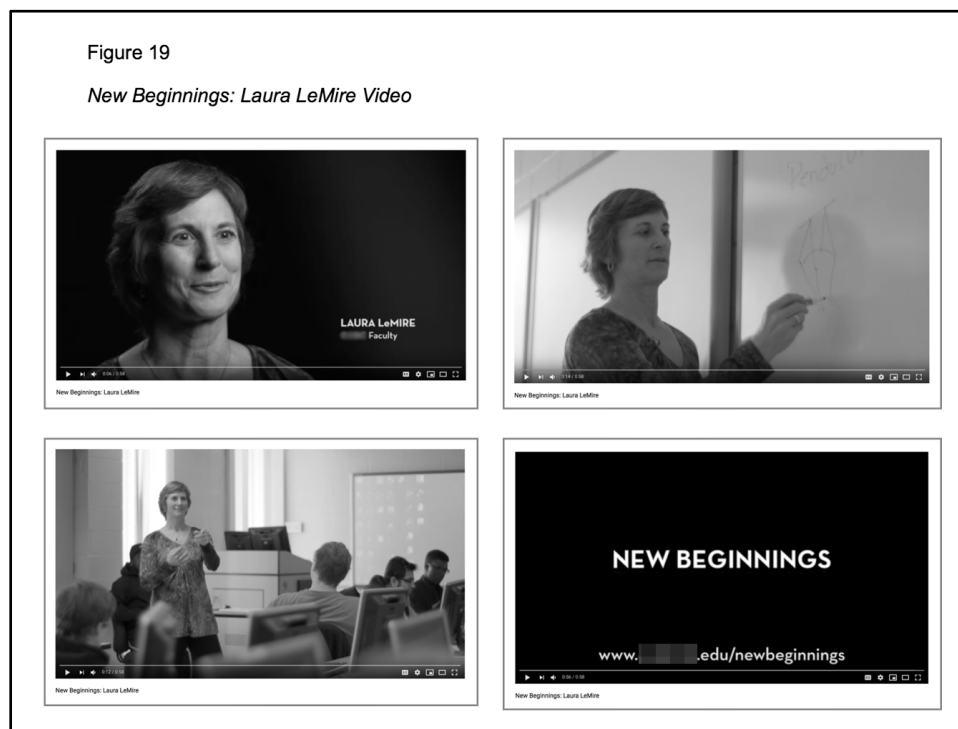


Figure 19 YouTube Screenshots

Resources for Students Videos. The major findings of this study revealed numerous videos providing information about college resources for students on the YouTube channels of Maryland community colleges. As shown in Table 9, there were 145 videos in the “resources for students” video sample set, which represented 18.5 percent of all of the student success videos in this study. These videos primarily focused on college resources, support services, and programs available at the institution to help students succeed, such as tutoring, mentoring, or first-year experience (FYE) programs. It also included facilities-related resources such as libraries, writing centers, and computer labs. Furthermore, this sample set included videos with information to help specific student populations, such as ethnic/racial minorities, first-generation college students, and military veterans.

Although “resources for students” videos ranked second in the total number of videos in this study, there were significant differences in the number of videos by community college. The frequency of “resources for students” videos ranged widely from a minimum of six on the Nevar Community College YouTube channel, to a maximum of 46 videos on the Wren Community College YouTube channel. Comparatively, all of the community colleges had multiple videos, but it is important to point out that five out of the seven community colleges in this study had at least ten or more videos in the “resources for students” sample set. In particular, more than two-thirds, or 69 percent, of the videos in this sample set were on the YouTube channels of Eldan Community College, Astra Community College, and Wren Community College.

Several recurrent themes emerged from the analysis of the “resources for students” videos sample set. These themes were developed after analyzing the frequencies of more than 1000 words included in the titles of the “resources for students” videos. A visualization of the results was created using a word cloud generator, as shown in Figure 20, in which the size and color of each word indicates its frequency.



Figure 20 Word Cloud

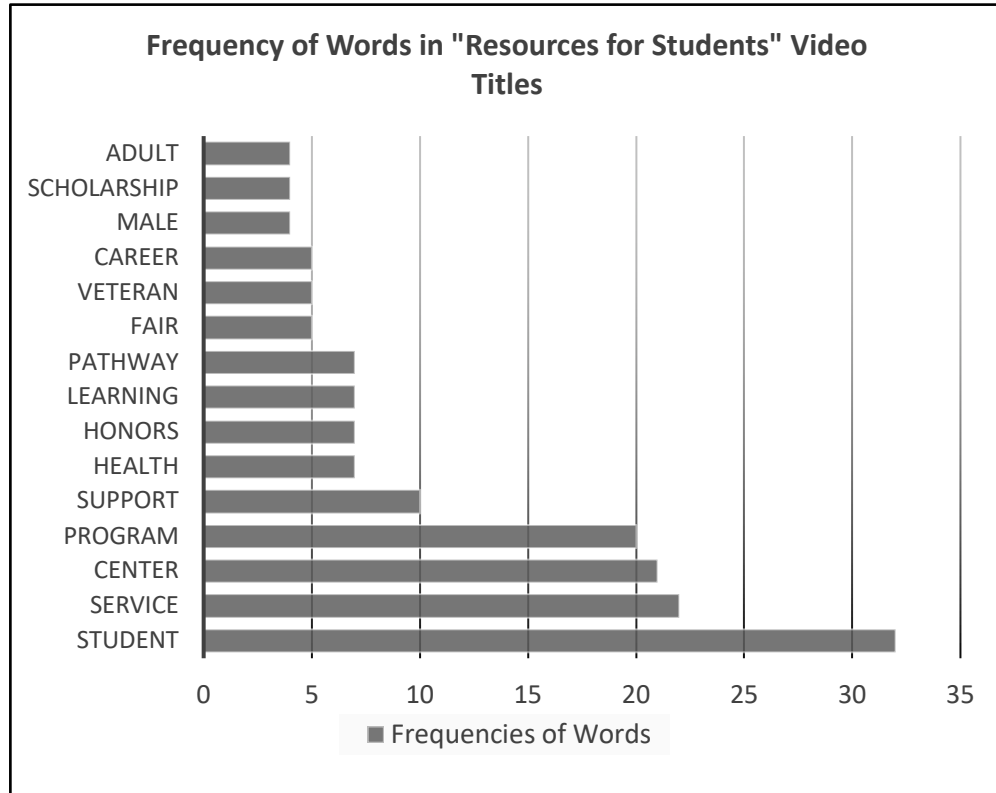


Figure 21 Bar Chart

Predictably, analysis of Figure 21 shows the five words with the greatest frequencies appearing in the “resources for students” video titles included the following: “student,” “services,” “center,” “program,” and “support.” These words appeared a total of 105 times in 85 different video titles, which represents 59 percent of all the videos in this sample set. In addition, the following words appeared five or more times in the “resources for students” sample set: health, honors, learning, pathways, fair, veterans and career. Subsequently, “resources for students” videos were categorized into the following common themes:

1. Services to Support Student Success
2. Centers to Support Student Success
3. Programs to Support Student Success
4. Resources to Support Special Student Populations

5. Events to Support Student Success

Services to support student success videos. The word “services” appeared 22 times in the video titles of “resources for students” sample set. Generally, these videos provide specific information on a variety of services such as tutoring, advising, career, and health and wellness. In particular, Eldan Community College presented a series of “Eldan Student Services” videos in a “Resources for Students” playlist on its YouTube channel. As shown in Figure 22, the playlist includes five videos, a link for more information and a description that states the following:

Eldan Community College is committed to providing the most effective programs and services to enhance your learning experience and develop your full potential as a student. This series of videos demonstrates just some of what we have to offer.

The videos in the playlist are approximately three to four minutes in duration and have been viewed more than 2,000 times. Interestingly, three videos on the Eldan Community College YouTube channel, “Disability Support Services,” “Health and Wellness Services,” and “Counseling, Advising, and Retention Services” videos were not included in the “Resources for Students” playlist. To ensure the success of students with disabilities, the first video provides information about services available to these students. The second video explains the basic health services offered to students, which includes first aid, non-prescription drugs, HIV testing, and health care referrals. The third video provides information on counseling and advising services to help retain students. A representative sample of “resources for students” videos focusing on services to support student success on Maryland community college YouTube channels is listed in Appendix D.

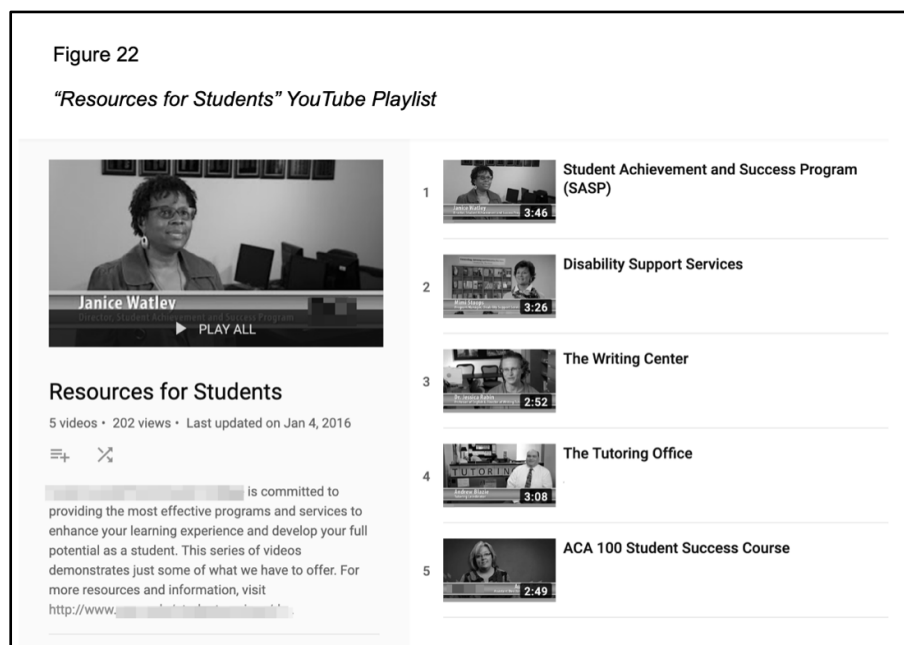


Figure 22 YouTube Screenshots

Programs to support student success videos. The word “program” appeared in the title of 15 different videos in the “resources for students” sample set on Maryland community colleges YouTube channels. These videos provided information on college programs that support student success, such as first-year experience (FYE) programs for newly-enrolled students, honors programs, mentoring programs, service-learning programs, and study abroad programs. For example, the “Step UP Program” video on the Wren Community College YouTube channel provides information about a program that offers one-on-one faculty and staff support and coaching to help students navigate the challenges of college and life. The four minute 38 second video has been viewed 1,200 times. Another example, as shown in Figure 23, was an “Applying for an Internship” video that provided step-by-step instructions on how to participate in the internship or coop program. Lastly, a “Student Engagement” video from Eldan Community College featured a student leader providing information about student engagement programs on campus. A representative sample of “resources for students” videos that focus on programs

to support student success on Maryland community college YouTube channels is listed in Appendix D.

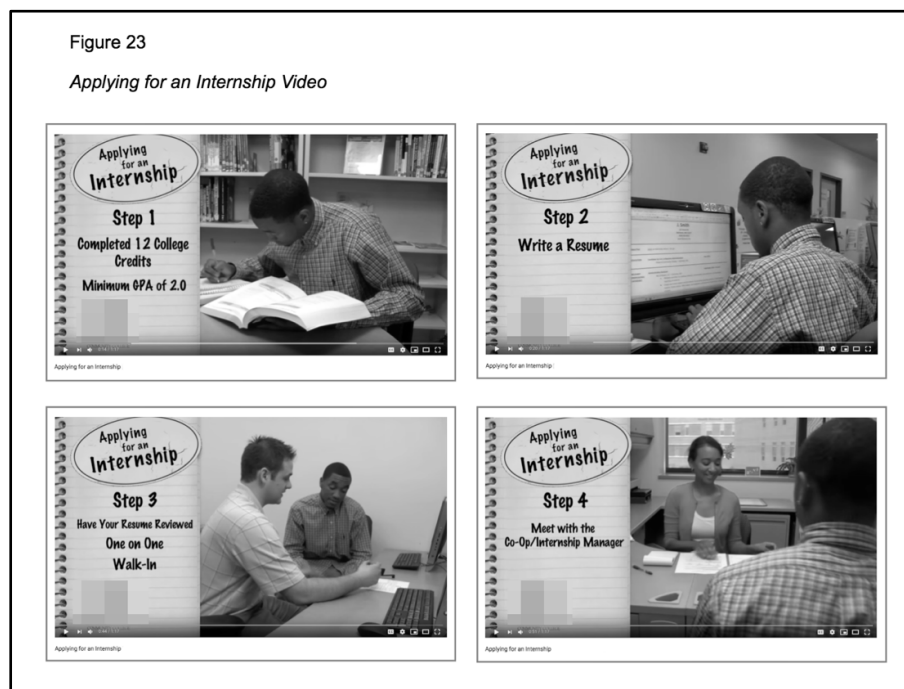


Figure 23 YouTube Screenshots

Centers to support student success videos. Videos providing information about centers for students where they can receive specialized support was another common theme among the “resources for students” video sample set. For instance, the word “center” appeared in the title of 21 videos, which represented 14.4 percent of the “resources for students” sample set. These videos provided information about writing centers, academic support centers, English language centers, veterans’ centers, welcome centers, and more. For example, Perch Community College featured an “Academic Support Center” video and a “Guided Tour of the Learning Resource Center” video on its YouTube channel. By comparison, as shown in Figure 24, these videos demonstrate how institutions use different types of speakers to provide information.

Figure 24

Speakers used to provide information in resources for students videos.



An academic support center video featuring staff providing information



A guided college tour video featuring students providing information

Figure 24 YouTube Screenshots

The Academic Support Center video featured a staff member formally providing information on how students can receive free tutoring in a variety of subjects at the center. By contrast, the Learning Resource Center video featured two students informally and more actively showing the location of computers, the help desk, and tutoring available in the center. Both videos were just over one minute in duration and received a combined total of 640 views. By contrast, the two minute 25 second “Learning Commons - Student Perspectives” video on the Barney Community College YouTube channel featured students using the facility and sharing their thoughts about the resources and services available inside. A representative sample of “resources for students” videos focused on centers to support student success on Maryland community college YouTube channels is listed in Appendix D.

Resources to support special populations videos. There were a number of “resources for students” videos with information for special student populations. For example, there were videos providing information to support the success of military and veteran students, male students of color, LGBT students, and adult students. In addition, there were different videos on the Wren Community College YouTube channel which featured information about resources for veterans, single parents, and black male students. Similarly, there was a “International Student Connections at Astra” video on the Astra Community College YouTube channel. Furthermore, both Wren Community College and Astra Community College had a series of “It Gets Better” videos on their YouTube channels featuring students and staff sharing their personal perspectives and commitment to providing a supportive environment for LGBT students. In addition to the “It Gets Better” series of short videos, Astra Community College also had a nearly 30 minute “Being LGBT on Campus” video for students on its YouTube channel, which received 1,700 views. A representative sample of “resources for students” videos focusing on special populations on Maryland community college YouTube channels is listed in Appendix D.

Events to Support Student Success Videos. Some of the videos in the “resources for students” sample set provided information about special events and activities to support student success. For instance, the word “fair” appeared in the title of “resources for students” videos five times. Some examples include a video promoting opportunities for students at a job fair. The video featured interviews with prospective employers on the Perch Community College YouTube channel. Two other videos on the Barney Community College YouTube channel informed students about a health and wellness fair and Transfer Day.

This study found that “resources for students” event videos seem to serve multiple purposes. These videos promoted upcoming events to students, highlighted the success of past

events, and often provided information about services related to the event or activity. This dual purpose was evident in the “Veterans Appreciation Week” video, as shown in Figure 25, on the Eldan Community College YouTube channel. In addition to featuring the college president promoting the upcoming activities for the week, the video also provided information about services and resources available to support military and veteran students and their families. Likewise, the “Male Student of Color Summit” video from Astra Community College featured highlights of the summit and provided information about services available to these students at the institution. A representative sample of “resources for students” videos focused on events to support student success on Maryland community college YouTube channels is listed in Appendix D.

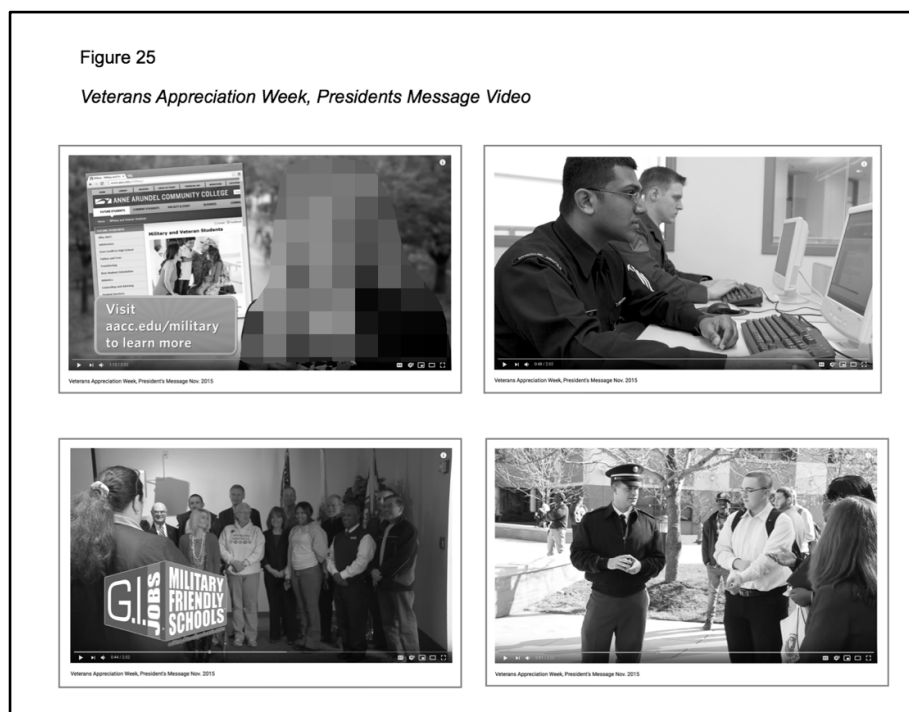


Figure 25 YouTube Screenshots

Overall, the most popular “resources for students” videos, based upon the number of views, were found on the YouTube channels of Marson Community College, Barney Community

College, and Astra Community College. A 38 second “Discover Marson - Southern Campus” video was viewed 3,989 times. A four-minute “College Safety and Security” video was viewed 3,500 times on the Barney Community College YouTube channel. An eight-minute “Assistive Technology at Astra” video was viewed 3,000 times on the Astra Community College YouTube channel. The video featured examples of assistive technology available to help students with disabilities succeed. These three videos accounted for 10,489 views or fifteen percent of all of the “resources for students” video views, and the average number of views per video was 456.

Program evaluation and tracking tools videos. Videos providing information on “tracking tools and degree audits” were scarce on the YouTube channels of Maryland community colleges. To broaden the initial search results, the term “program evaluation” was added as a keyword, but the results were minimal. Because this study describes a “degree audit” as a comparison of courses completed to the requirements for certificates and degrees at the institution, a “program evaluation” serves the same purpose. Furthermore, although “degree audit” was a variable identified in the “Loss/Momentum Framework,” which is the basis of the conceptual framework of this study, “program evaluation” is a more accurate term because not all community college students are working towards a degree. Similarly, this study describes “tracking tools” as technological tools for helping students monitor their academic progress toward completion of the requirements for certificates and degrees. Consequently, the results of the keyword search for “degree audit and program evaluation” and the search for “tracking tools” generated duplicate videos. Therefore, the results of these two sample sets of videos were combined, analyzed, and renamed “program evaluation and tracking tools.”

There was a total of five unduplicated videos providing information on “program evaluation and tracking tools” on the YouTube channels of the seven Maryland community

colleges in this study. Four of the seven community colleges in this study had at least one video, and the three remaining institutions had none. Combined, the sample set of “program evaluation and tracking tools” videos ranked last in the number of videos and the number of views, representing less than one percent of all the videos and views in this study. The majority, 80 percent, of the videos in this sample set were narrated screen recordings between one and approximately two minutes in duration. These short videos accounted for two-thirds or 66 percent of all the video views in this sample set. The total number of views for all “program evaluation and tracking tools” videos ranged from a minimum of 33 to a maximum of 316.

Short, narrated screen recordings demonstrating technological tools used for “program evaluation and tracking” were a common approach used among the videos on the YouTube channels of Maryland community colleges. Eldan Community College presented a “How to: Program Process Evaluation” screen recording video which demonstrated how to evaluate program progress through the online student portal of the institution. The video showed students how to view courses they have taken, courses they still have left to complete in their current program of study, and courses they would have to take if they changed to a different program of study. Similarly, Marson Community College presented a video which also showed students how to view their program evaluation via the online portal of the institution. By contrast, a longer, nearly six-minute narrated screen recording video was found on the Perch Community College YouTube channel. As seen in Figure 26, the “Colleague Student Planning” video guided students step-by-step through an online technology platform for planning, evaluating programs, and tracking their progress semester by semester.

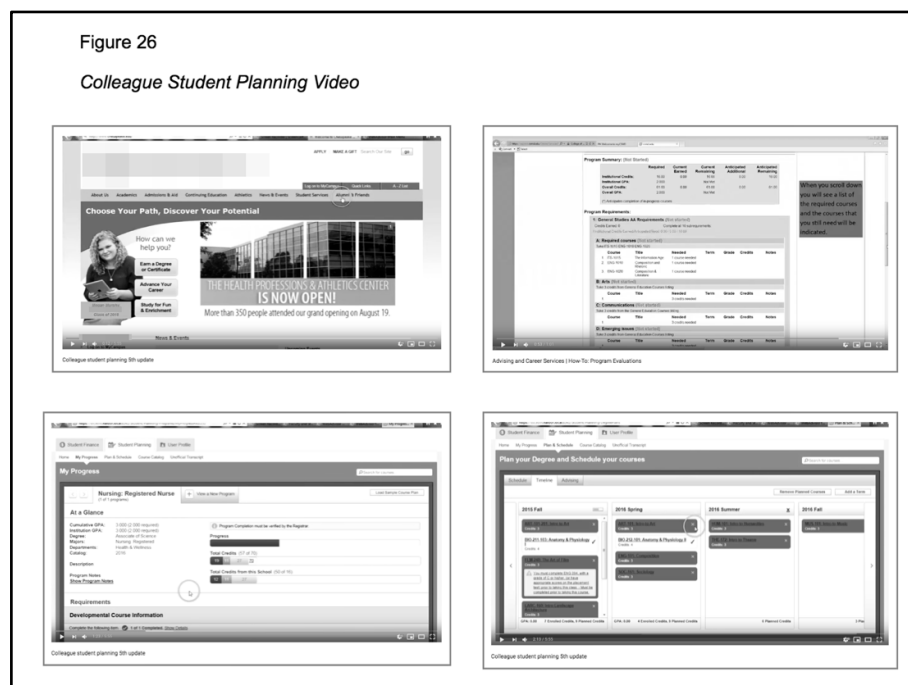


Figure 26 YouTube Screenshots

The majority of videos in the “program evaluation and tracking” sample took an instructional approach, but there was one video on the Astra Community College YouTube channel which was entirely informational. The “Starfish Retention System” video provided information about a technological tool used by students and staff for scheduling support services, developing educational plans, and tracking educational progress. Instead of a screen recording, the video featured shots of the advising center, students using the Starfish system, and interviews with students and administrators sharing their perspectives about the tool. In a comparison of the two different approaches to “program evaluation and tracking tools” videos, this study suggests that an informational approach may help students understand the purpose and benefits of the technological tool before they actually need instructions on how to use it. A representative sample of “program evaluation and tracking tools” videos on Maryland community college YouTube channels is listed in Appendix D.

Articulation and Transfer Videos. Overall, the findings of this study reveal that Maryland community colleges do not provide a significant number of videos with information on articulation and transfer on their YouTube channels, and the numbers vary widely by institution. Analysis of Table 10 shows there were 25 articulation and transfer videos, which represented 3.2 percent of all the videos in this study. However, the number of videos ranged from a minimum of one each on the YouTube channels of Eldan Community College, Nevar Community College, and Barney Community College, to a maximum of 10 on the YouTube channel of Astra Community College. The majority, 72 percent of articulation and transfer videos and 76 percent of the video views, were from two institutions, Astra Community College and Marson Community College.

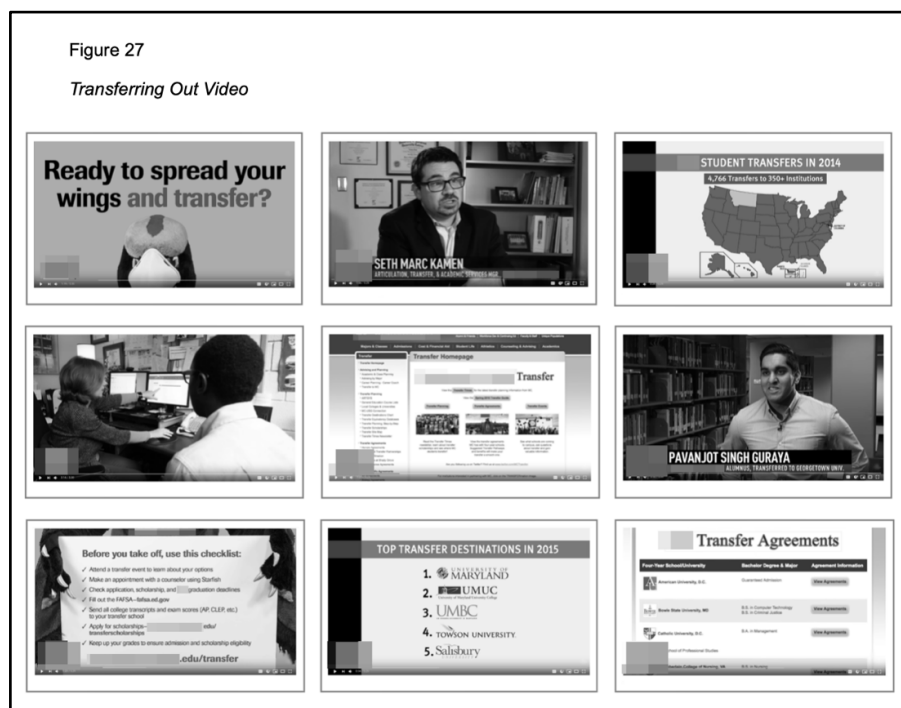


Figure 27 YouTube Screenshots

The sample set of articulation and transfer videos in this study provided information on planning for transfer, articulation agreements with four-year institutions, scholarships for

transfer students, and profiles of transfer students. The majority of the videos ranged in duration from 16 seconds to 30 minutes. One notable example, as shown in Figure 27, was a five minute 29 second “Transferring Out of Astra” video that provided a comprehensive overview of how the institution successfully prepares students for transfer. The video featured interviews with transfer staff, faculty, students, and alumni. The video also highlighted impressive institutional data on the number of students who transferred, the number of transfer institutions, the top transfer destinations, and the top transfer study areas. The results of the content analysis of this particular video were significant because it found that the video included the following: a transfer checklist, a review of the transfer website with step-by-step instructions on transfer planning, benefits of transfer partnerships, a list of transfer partnership programs in the state of Maryland, information on transfer day fairs and events, benefits of dedicated transfer counselors, and how to access the online transfer guide and scholarship applications.

The most popular transfer and articulation videos, based upon views, focused on transfer student profiles and scholarships. A two minute 21 second “Jack Kent Cooke Foundation Scholars” video received approximately 4,500 views on the Astra Community College YouTube channel. This video profiled the stories of two recipients of a highly competitive undergraduate transfer scholarship. A four-minute and 21 second “James W. Rouse Scholars Program” video received approximately 2,000 views on the Wren Community College YouTube channel. The videos provided information about a selective honors program for students. Lastly, a 30-second “Meet David: Engineering Transfer Student” video received approximately 1,300 views on the Marson Community College YouTube channel. These videos accounted for 75 percent of all the views of articulation and transfer videos in this study. These results appear to suggest that using

videos to provide information about transfer scholarships may be of great interest to students.

A representative sample of articulation and transfer videos on Maryland community college YouTube channels is listed in Appendix D.

Career planning and job placement videos. A moderate number of videos provided information on career planning and job placement on Maryland community college YouTube channels. These videos focused on providing students with specific information about careers, employment opportunities, regional labor outlook, salaries, and job placement potential. The results of this study revealed 27 career planning and job placement videos which represents 3.4 percent of all the videos and 6.1 percent of all the video views in this study. These videos ranked tenth in the number of videos and ranked sixth in the number of video views in this study. The majority of these videos, 59 percent, were found on the YouTube channels of Wren Community College and Astra Community College. However, one particular video had extraordinary viewership and represented 90 percent of all career planning and job placement video views.

This study found that the “Health Science Careers: The Movie” video was viewed 59,686 times on the Astra Community College YouTube channel. This extremely popular video also appeared in the programs of study sample set because it highlights specific health careers related to health sciences programs offered at the institution. The video shows healthcare workers on the job helping an accident victim from the crash scene to the hospital and recovery. These career fields included diagnostic medical sonography, emergency medical technician, fire science and emergency services, nursing, physical therapist assistant, radiology technician, and surgical technology.

This study found varied durations and approaches to career and placement videos. The videos ranged in duration from a minimum of one minute to a maximum of 24 minutes. The

majority of the videos, 40 percent, were between two and five minutes in duration; 37 percent were less than two minutes in duration; 26 percent were longer than five minutes in duration. One example of a short one minute “career planning and job placement” video was on the Perch Community College YouTube channel. The “Job Fair: What We Bring to the Community” video featured fast-paced introductions by 44 employers recruiting at the annual job fair of the institution. Another example of short videos included a series of four “Job and Career Fair Techniques” videos on the Marson Community College YouTube channel. The videos were approximately one minute in duration. These videos featured career services staff interviewing employment recruiters about how students can be more successful at the job fair. The videos also provided tips on interviewing, writing resumes, making a first impression at job fairs, and applying for jobs online.



Figure 28 YouTube Screenshots

Longer duration videos represented more than a quarter of the videos in the career planning and job placement sample set. For example, the “Discover a Career Path” video on the Wren Community College YouTube channel was the longest video at nearly 30 minutes, as shown in Figure 28. The professionally produced half an hour television-talk-show-style video seemed to be part of a larger Pathways series featuring the president of the institution discussing a variety of topics with administrators, faculty, staff, and students. The topic of this particular episode focused on jobs that require a high school diploma, but not necessarily a four-year degree. This video that had been viewed 222 times, featured guests who included career services staff, regional employers, and students.

Three of the videos in the career planning and job placement sample set focused on providing information about institutional employment programs, initiatives, and partnerships. For instance, the “ACE: Accelerating Connections to Employment” video on the Eldan Community College YouTube channel provided information about a program that provides intensive support services to assist students to become job-ready for an in-demand job and career pathway. Another video on the Eldan Community College YouTube channel about an initiative, “Maryland One Step Away,” provided information for students who are close to completing their associates degree, which is the “completion” stage of the conceptual framework of this study. This narrated video featured interviews with students and alumni interspersed with animated graphics highlighting workforce data comparing the education level and salary of people with an associate degree and unemployment rates by educational attainment. Lastly, the “Future Link” video on the Astra Community College YouTube channel provided information about a program that provides young adults with academic support and

career connections. A representative sample of the career planning and job placement videos on Maryland community college YouTube channels is listed in Appendix D.

Graduation Videos. Videos of commencement festivities were in abundance on the YouTube channels of Maryland community colleges. However, there were significantly fewer videos providing students with information about graduation requirements. In this case, the initial keyword search strategy yielded 762 videos; however, through purposive sampling the graduation sample set was narrowed down to 39 videos which accounted for five percent of all the student success videos in this study. These initial search results may be explained by the fact that the majority of the community colleges, 85 percent, featured multiple commencement videos dating back several years. Another possible explanation may be that the word “graduation” appeared often in the video titles and descriptions. For this reason, the videos in the graduation sample set were selected to be a representative sampling of the different types of graduation videos on the YouTube channels of Maryland community colleges.

Videos in the graduation sample set ranged in approach and duration from 30-second behind-the-scenes highlights to more than two-hour commencement ceremony videos. More than one quarter, 28 percent, of the videos in the graduation sample set were live recordings of the full college commencement or graduation ceremonies of particular programs of study. Not surprisingly, these videos ranged from a minimum of 30-minutes for an “Adult Education Graduation” video on the Marsom Community College YouTube channel to a maximum of two hours and nine minutes for the “55th Annual Commencement Ceremony” video on the Eldan Community College YouTube channel. Combined, these videos received 5,665 views, which represents 31 percent of all the videos views in the graduation sample set.

Commencement videos. The graduation sample set also included a significant number of commencement highlight videos that were typically shorter in duration. Eleven commencement highlight videos represented 31 percent of the videos in the graduation sample set, ranging from a minimum of two minutes 30 seconds to a maximum of just over 11 minutes in duration. In general, highlight videos featured a recap of commencement from beginning to end and captured the exciting sights and sounds before, during, and after the ceremony. In particular, this study also found video excerpts of the ceremony, which typically featured the keynote address, the student address, and the valedictorian address on several of the Maryland community college YouTube channels.

In addition to the typical commencement ceremony and highlight videos, this study also found some creative approaches to graduation videos. For example, the “Nevar Commencement 2012” video went behind-the-scenes of the graduation ceremony and featured graduates and staff sharing their perspectives. The effective use of titles was noted in this video because it not only identified the graduates, it included scholarships received, and the institutions to which students transferred. Another interesting approach was a series of “Graduate Thank You Messages” on the YouTube channel of Eldan Community College. These short one to two-minute videos featured graduates sharing college memories and answering the question, “What are you thankful for?” Two congratulatory videos featured advice and congratulations from Eldan Community College alumni and faculty. Similarly, a one-hour “Countdown to Commencement” video on the Astra Community College YouTube channel featured graduates sending video messages to friends and family while they waited for the ceremony to start. Although the video did not provide information for graduates, it was

certainly a novel and intriguing approach to communicating information about its graduates before the commencement ceremony.

Graduation requirements videos. This study found only four videos, which represented 10 percent of the videos in this sample set, provided instructions for students about the requirements for graduation. These four videos used different production approaches to providing this information. A formal approach was used by Eldan Community College in its “Commencement is Coming, President’s Message” video. As shown in Figure 29, the video featured the president providing information about important deadlines students need to meet to prepare for graduation and the numerous activities that will be held. The video was nearly three minutes in duration and received 195 views. By contrast, an informal approach was used by Nevar Community College in its 30-second fully animated “Grad Prep” video about graduation requirements. This video was viewed 200 times. As shown in Figure 30, the video provided students with a simple and fun five-step “Grad Prep” checklist and a web link where they can find more information online.

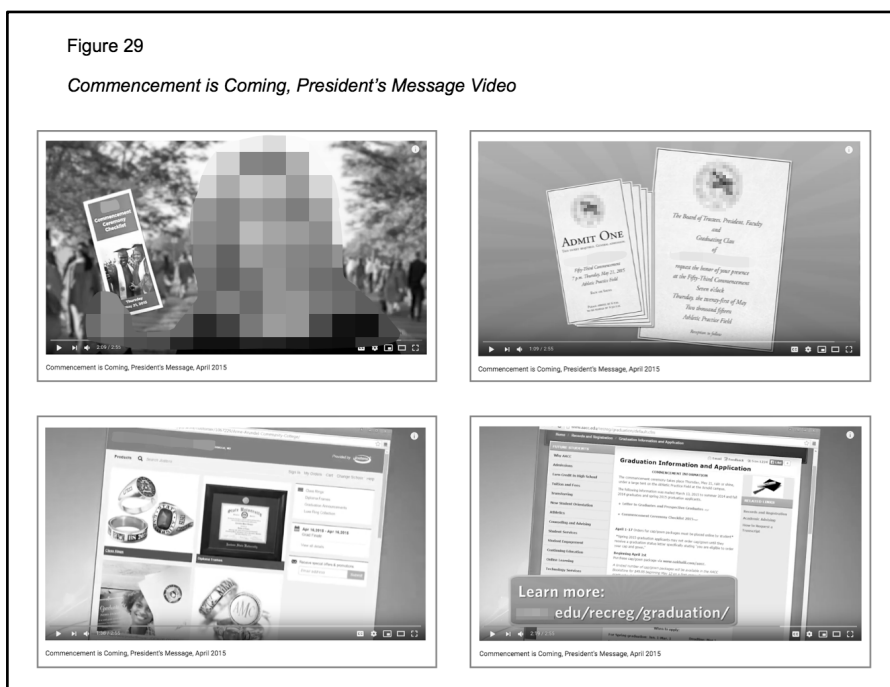


Figure 29 YouTube Screenshots

A narrated presentation style was another approach used by Maryland community colleges to provide students with information and instructions about graduation. The “Graduation Instructions” video on the Marson Community College YouTube channel and the “Ceremony Instructional Video for Graduates” on the Barney Community College YouTube are two examples. A significant number of full screen informational text and graphics were interspersed extensively throughout both videos, along with various supporting shots of graduates and the commencement ceremony. A comparison of the two videos found 19 full screen text or graphics in the nearly five-minute “Ceremony Instructional Video for Graduates” and nine full screen text or graphics in the three minute 25 second “CSM Spring Graduation Instructions” video, with a combined total of 1,164 views.

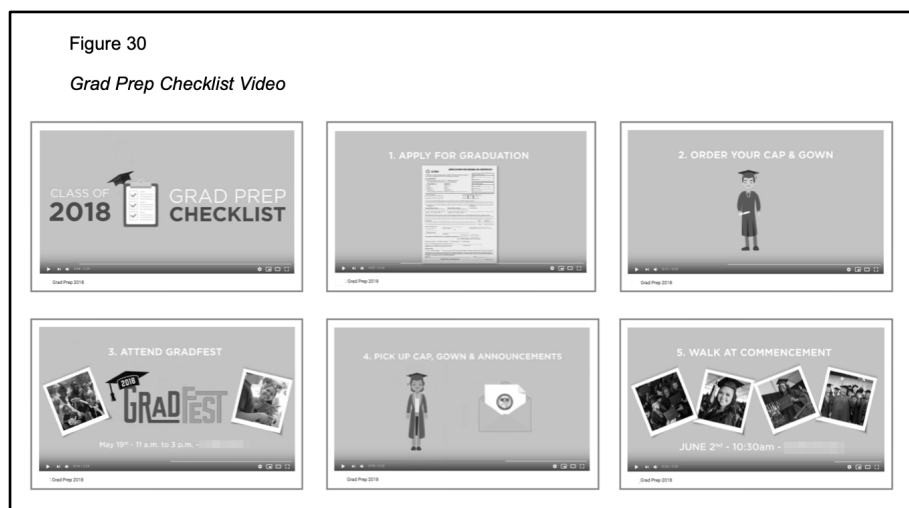


Figure 30 YouTube Screenshots

Analysis of the two graduation videos using a narrated presentation-style approach revealed that they provided a comprehensive overview of everything graduating students need to know about preparing for commencement. The videos included both practical tips and detailed instructions about the following: how to prepare and wear the cap and gown, how to secure tickets and seating, how to complete phonetic name pronunciation forms available online, where to receive honors tassels, stoles, and cords, how to shake hands when receiving the degree, check-in times and locations, special accommodations for students and guests with disabilities, maps, parking, and more. Although there were noticeable differences in the production quality of these two videos, they both clearly seem to provide important information students need to participate successfully in graduation. A representative sample of graduation videos on Maryland community college YouTube channels is listed in Appendix D.

Research Question 3

RQ 3: What tutorial videos are presented on the YouTube channels of public community colleges in Maryland to support the orientation of new students, and what is the popularity of these videos?

Based upon the conceptual framework of this study, Research Question 3 aimed to explore the content and characteristics of tutorial videos presented on Maryland community college YouTube channels. To generate the maximum number of search results, the term “how-to” was used in conjunction with “tutorial” as a keyword. Analysis of Table 12 shows the initial keyword search results for tutorial videos yielded 336 videos. However, subsequent purposive sampling of tutorial videos focusing on the information needs and orientation of newly-enrolled students narrowed the tutorial sample set to 21 videos.

Table 12

Table 12				
<i>Tutorial Search Results, Videos and Views</i>				
TUTORIAL VIDEOS				
YouTube Channel	YouTube Keyword Search Results	Tutorial Videos Selected for Sample	Total No. of Tutorial Views	Avg. No of Tutorial Views Per channel
Eldan Community College	24	2	222	111
Perch Community College	8	3	256	85
Marson Community College	85	8	3376	422
Nevar Community College	60	2	3900	1950
Barney Community College	29	2	2331	1165
Wren Community College	25	0	0	0
Astra Community College	105	4	118000	29500
TOTALS	336	21	128085	33233

Tutorial videos for new student orientation. The major findings of the analysis of the sample set of tutorial videos on Maryland community college YouTube channels revealed a relatively low quantity of videos, but a significantly high level of popularity. Analysis of Table 12 shows that tutorial videos for newly-enrolled students were not present on the YouTube

channel of Wren Community College. Furthermore, the majority of Maryland community colleges in this study, 71 percent, only had between two and four tutorial videos on their YouTube channels. Notably, eight tutorial videos for newly-enrolled students were present on the Marson Community College YouTube channel.

As described in this study, tutorial videos provide step-by-step instructions and how-to information to help orient new students to the institution. For example, a series of “Advising and Career Services How-To” videos on the Marson Community College YouTube channel provided step-by-step instructions on the following: placement test prep, programs of study, tutoring services, and general education course listings. Additional tutorial videos on the Marson Community College YouTube channel included the following: “Exploring the Student Portal,” “Searching for Classes Through the college webpage,” and “How to Select your English and Math Course.”

The analysis of tutorial videos revealed a variety of orientation topics to help students navigate successfully through the entry stage to the progress stage of the conceptual framework of this study. One recurrent tutorial topic included how to use online student portals, as in the “Welcome to the New Student Portal” tutorial video, and “Exploring the Student Portal” video, as shown in Figure 31. Another recurrent tutorial topic was registration and enrollment, as in “How-to: Express Registration using the Student Portal” and “Credit Registration at Astra Community College” tutorial videos. Tutorials on how to pay for classes was also a common topic as in the “Making Payment” and “Student Financial Self Service” videos on the Perch Community College YouTube channel.

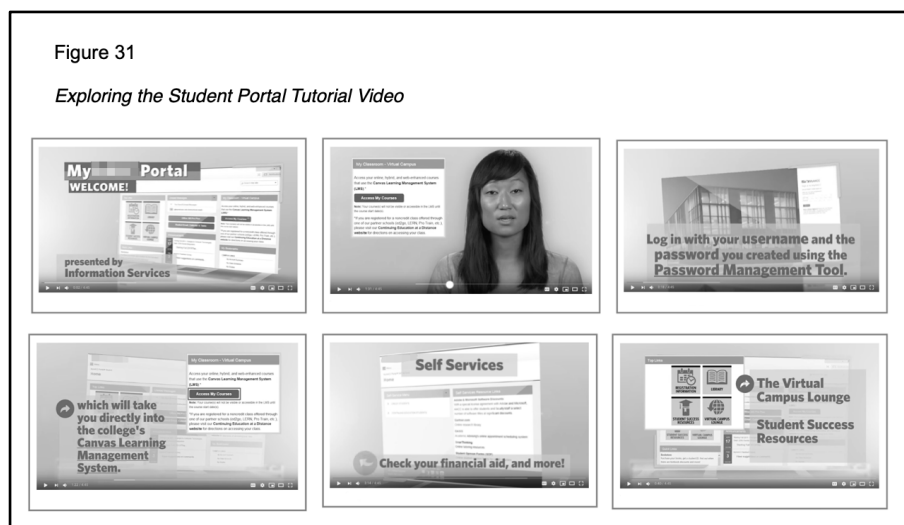


Figure 31 YouTube Screenshots

Alternatively, while most tutorial videos covered a singular topic, one video in the sample set covered a wide variety of topics. The eleven-minute “Online Orientation” tutorial video on the Barney Community College YouTube channel provided an overview of 19 different orientation topics. The video included both how-to instructions and detailed information on degrees and certificates, college terminology, developmental education, academic requirements, college success tools, curriculum pathway, academic planning, scheduling, time management, college catalog, academic calendar, advising, student success alerts, academic standing, FERPA, career and transfer goals, where to go for help, Title IX, and campus activities.

The popularity of tutorial videos, based upon the number of views, varied widely among Maryland community college YouTube channels. In total, views of tutorial videos to support the orientation of new students ranked fifth among all student success video views. Although Marson Community College had the greatest frequency of tutorial videos, Astra Community College had the highest frequency of tutorial video views. The YouTube channels with the lowest average tutorial video views, with 85 views per video, was Perch Community College. By

comparison, Astra College had the highest average number of tutorial views with 29,500 views per video.

Remarkably, the majority of tutorial video views, 92 percent or 118,000, were attributed to four videos on the Astra Community College YouTube channel. These four most popular tutorial videos included the following: “How to Search for Classes” with 53,000 views, “Credit Registration” with 28,000 views, “Finding Drop Deadlines for Classes” with 25,000 views, and “The Waitlist Process” with 12,000 views. These videos ranged in duration from approximately five minutes to over eight minutes. Overall, the results suggest that the majority of Maryland community colleges are not using a substantial number of tutorial videos on their YouTube channels to support the orientation of new students. However, the popularity of several tutorial videos suggests the potential of using YouTube to support the orientation of new students. A representative sample of tutorial videos on the YouTube channels of Maryland community colleges is listed in Appendix D.

Conclusion

In conclusion, chapter four provided the results of the content analysis of the YouTube channels of Maryland community colleges and the student success videos presented on these channels. First, the chapter provided the results of the baseline descriptive analysis of all 16 Maryland community colleges. Then, the chapter presented the results of the content analysis of student success videos categorized into 17 variables of student information needs. Lastly, the chapter provided data on tutorial videos used to support the orientation of newly-enrolled students.

Overall, the data showed that Maryland community colleges have an active presence on YouTube with an average total number of 112 student success videos per channel. However,

these data must be interpreted with caution because there may be a minimal overlap between certain variables of student information needs. This overlap may have resulted in a duplication of a few student success videos into more than one variable category or information stage. For example, a few videos in the new student orientation sample set may also appear in the “resources for students” sample set. In another example, a few videos in the programs of study sample set may also appear in the career and job placement sample set. However, the overall results of this content analysis still imply that there are a significant number of student success videos on Maryland community college YouTube channels to support student success throughout each stage of the student experience.

CHAPTER 5: DISCUSSION

This chapter interprets the significant findings of this study and explain the results of each research question. This section analyzes what the major findings mean in relationship to the conceptual framework, literature review, and purpose of this study. This section examines the significant findings of each research question. Next, this section considers the limitations of this study and the implications for practice as seen by the researcher. Lastly, this section provides recommendations for further study. Overall, this section concludes that the major findings of this content analytic study are that there is an extremely active use of YouTube as a channel of communication for Maryland community colleges, an extensive use of online videos as sources of information to support student success, and a limited use of tutorial videos to support the orientation of new students.

Significant Findings of Research Question 1

The following section describes the significant findings from the results of Research Question 1: How are public community colleges in Maryland using YouTube as a channel of communication and source of information for students?

A. Baseline Descriptive Analysis. The baseline descriptive analysis of Maryland community college YouTube channels provided several significant findings for Research Question 1. First, the results revealed that Maryland community colleges have been using YouTube as a channel of communication and source of information for students for a long period of time. Second, these official institutional YouTube channels present thousands of videos, receive millions of views, and reach thousands of subscribers. Third, these institutions actively upload a substantial number of videos on their YouTube channels each month. Lastly, although results from RQ 1 found that all sixteen public community colleges in Maryland

operate an official YouTube channel, the most surprising findings were the significant differences in the use of YouTube by institution.

In terms of a YouTube presence, the results of RQ 1 indicate that half of Maryland community colleges have been using YouTube for nearly a decade, and the average age of these channels was 7.8 years. In terms of YouTube reach, based upon the number of subscribers, the results of RQ 1 are that nearly 20,000 people subscribe to Maryland community college YouTube channels, with an average of more than 1000 subscribers per channel. In terms of YouTube channel activity, the conclusion of RQ 1 is that Maryland community colleges have a combined total of 5,834 videos on their official channels with an average of 365 videos per channel. Furthermore, these institutions actively upload video content to their YouTube channels with an average of three videos per month. Lastly, in terms of popularity, the findings of RQ 1 indicated that videos on the YouTube channels of Maryland community colleges were viewed nearly eight million times, with an average of nearly a half a million views per channel, and an average of over 4,000 views per video.

Differences in YouTube use and activity by institution. However, the most striking findings to emerge from the analysis of the results of RQ 1 were the differences in YouTube use and activity by institution. In particular, one unanticipated finding was the size, use, popularity and reach of the Marson Community College YouTube channel. In terms of YouTube presence, this study did not expect the Marson Community College YouTube channel would have a more active presence, more videos, a greater number of video views and more subscribers than many of the larger community colleges in the state. For example, Marson Community College had more YouTube subscribers than full-time/part-time students enrolled in the institution. By contrast, the most obvious finding from the results of RQ 1 was the size, activity, popularity, and

reach of the YouTube channel of Astra Community College, one of the largest public community colleges in Maryland.

Overall, the significant findings of RQ 1 are consistent with the review of the literature on YouTube use and popularity of online video (YouTube, 2108; Pew, 2018). These findings are also consistent with the recommendation by the American Association of Community Colleges (2017) to leverage video to reach and engage community college students. Furthermore, these findings are also consistent with the conceptual framework of this study which points to YouTube as one of several “channels of communication” available to community colleges (the communicator) to support the information needs and facilitate the information-seeking behaviors of students.

Significant Findings of Research Question 2

The following section describes the significant findings from the results of Research Question 2: What videos are presented on the YouTube channels of public community colleges in Maryland to support student success based upon the Loss/Momentum Framework, and what is the popularity of these videos?

The content analysis of student success videos provided several major findings for Research Question 2. First, the results revealed that Maryland community colleges present a substantial number of videos on their YouTube channels to support student success based upon the four stages of the Loss/Momentum Framework. However, the frequency, popularity and temporal characteristics of these videos differed widely by institution. Second, the results revealed the most common student success videos and the most popular student success topics, based upon the number of videos and views, presented on Maryland community college

YouTube channels. Third, the results revealed common themes and characteristics of these student success videos.

The most significant finding of RQ 2 was the substantial number of videos supporting student success on Maryland Community College YouTube channels. A total of 784 videos were selected for content analysis on these YouTube channels based upon variables of student information needs developed from the Loss/Momentum Framework, upon which the conceptual framework of this study rested. Even when multiple keywords were used to search for student success videos, and purposive sampling was used to narrow the search, the number of videos identified was significant across all four stages of the information needs for students. These results are supported by research recommending videos as a strategy to improve the provision of community college online information that supports student success and completion (Jaggars, 2014; Karp, 2012; Karp, 2011; Nodine, 2011).

A. Connection Stage Videos. There were two significant findings of the analysis of connection stage videos available on the YouTube channels of Maryland community colleges. Connection stage video topic variables included “early college opportunities” videos and “placement and testing” videos. First, there was a substantial number of videos providing information on early college opportunities. Second, contrary to expectations of this researcher, this study found a minimal number of videos providing information on assessment and placement testing. The information needs of students in the connection stage range from their initial interest in the institution through the submission of the application. Among the two categories of videos in this stage, there were 35 videos that provided information about early college opportunities, but only nine videos that provided information on placement tests, testing procedures, preparation, and results. These results were unexpected and suggest that

Maryland community colleges prefer to use videos on YouTube to provide information to support the success of prospective and dually enrolled high school students.

However, a comparison of the “early college opportunity” and “placement and testing” results might imply that Maryland community colleges provide an insufficient number of videos on their YouTube channels with information to support the success of students taking the placement test. Nevertheless, these results must be interpreted with caution. Although there were few videos in the assessment and placement sample set, they provided comprehensive information about entrance and placement testing, the testing centers at the institutions, and tutorials for students to prepare successfully for testing. The low number of views for these videos is another significant finding of RQ 2. Views of placement and testing videos represented less than two percent of all student success video views in this study. Based upon student enrollment, it is possible that very few students actually watch these videos before taking the test. Not viewing these videos is disappointing because most community college students are required to take a placement test before enrolling in classes, and the majority of community college students place in developmental courses based upon their placement test results.

B. Entry Stage Videos. The prevalence of videos providing information for students in the entry stage was another important finding of RQ 2. Analysis of the results yielded a combined total of 494 entry stage videos on Maryland community college YouTube channels. The information needs of community college students in the entry stage include new student orientation, welcome messages, enrollment and registration, financial aid, advising, developmental education, programs of study, faculty/staff profiles, and student success profiles.

Among the nine different topics of student information needs in the entry stage, “programs of study” and “student success profiles” videos led to the most significant findings

with a combined total of 280 videos. Equally as important, “faculty/staff profiles,” “new student orientation” videos, and “financial aid” videos provided significant findings. The substantial number of entry stage videos was one of the most obvious findings to emerge from this study because previous research found that newly-enrolled community college students have the greatest information needs, and they receive minimal information prior to enrollment (Nodine, 2012; Karp, 2012). Therefore, it is not surprising that Maryland community colleges are using videos on YouTube to broadcast an abundance of information to help these students succeed.

Significant findings of programs of study videos. By far, the most significant finding of RQ 2 was the extraordinary number of “programs of study” videos, making it the number one student success video topic. With 175 programs of study videos, this finding strongly suggests that Maryland community colleges are using YouTube as a communication channel to provide information about programs students can study at their institutions. A possible explanation for this finding might be that program of study videos not only provide information for current students, but community colleges may also be using these videos as a recruitment tool for prospective students. Of particular note, the number of programs of study videos among Maryland community colleges is inconsistent with previous research that found community colleges provided insufficient information about programs of study (Dadgar, 2013; Nodine, 2011). However, these results support previous research into the information needs of community college students during the entry stage, especially as it related to helping them explore, choose, and enter a program of study (Dadgar, 2013; Nodine, 2011; Completion By Design, 2012; Zeidenberg, 2008).

Significant findings of student success profiles. The number of “student success profile” videos on Maryland community college YouTube channels was another important

finding of RQ 2. There were 105 “student success profile” videos, ranking it the third largest student success video topic in this study. Although these results were unanticipated by the researcher, using videos to profile community college student success stories was suggested in research by Karp (2011; 2012) as a potential strategy to help students clarify their goals and increase their commitment to college. Likewise, the large number of faculty/staff profile videos was another unanticipated finding of RQ 2. It is difficult to explain this result, but the researcher suggests that faculty/staff profile videos may be similar to program of study videos and student success stories. It is possible that videos profiling outstanding faculty/staff in specific programs may be another way of providing information to help students choose a program of study.

Significant findings of new Student orientation and financial aid videos. The percentage of new student orientation and financial aid videos and views on Maryland community college YouTube channels was an important finding. With 44 videos each, new student orientation and financial aid videos represented a combined total of 11.2 percent of all the student success videos in this study and a combined total of 15.7 percent of all the views in this study. Overall, the results seemed impressive, but upon further analysis, the study found the vast majority of new student orientation and financial aid videos and views were attributed to two institutions, Perch Community College and Astra Community College.

One surprising finding was that Perch Community College, one of the smallest community colleges in Maryland, based on full-time and part-time student enrollment, had the largest number of new student orientation and financial aid videos on its YouTube channel. Another significant finding was that Astra Community College had the largest number of new student orientation and financial aid video views, nearly 150,000, on its YouTube channel. There are two possible explanations for this result. Astra Community College is one of the

largest community colleges in Maryland based upon full-time and part-time enrollment, and the institution has operated its YouTube channel for longer than a decade.

Research on communication-related barriers to community college completion found that minimal information is provided to students prior to enrollment, and students are confused about how to navigate college (Karp, 2012; Jaggars, 2014). However, the significant findings of entry stage videos show that Maryland community colleges are using YouTube to help orient new students to the institution, which may help address barriers to completion by providing important information new students need to succeed.

C. Progress stage videos. Another significant finding of RQ 2 was the substantial number of videos providing information about “resources for students” in the progress stage. The information needs of community college students during the entry stage include resources for students, program evaluation and tracking tools, degree audit and career planning, and job placement. Among the four categories of student information needs during the progress stage, there were 145 “resources for students” videos providing information about college resources, programs, and services to support student success, making it the second most common student success video topic. Moreover, these videos represented 18.5 percent of all the student success videos in this study.

Significant findings of “resources for students” videos. The five recurrent themes among “resources for students” videos on Maryland Community College YouTube channels were also an important finding of this study. All of the “resources for students” videos were categorized into one of these themes, which included services to support student success, centers to support student success, programs to support student success, resources to support special student populations, and events to support student success.

The need for these videos is consistent with studies in the literature review that found community college students are unaware of college resources, programs, and services available at their institution (Public Agenda, 2012; Nodine et al., 2012; Zeidenberg, 2008). Therefore, these findings seem to suggest that Maryland community colleges may also be using “resources for students” videos on YouTube to help address communication-related barriers to completion.

Significant findings of articulation and transfer videos. The number of videos providing information on “articulation and transfer” was another significant finding of progress stage videos. There were 25 videos focusing on planning for transfer and articulation agreements with four-year institutions on Maryland community college YouTube channels. It is important to note that the most popular transfer videos, based upon the number of views, focused on profiles of transfer students and transfer scholarships. It is possible that these results are related to the large number of student success profiles on Maryland community college YouTube channels, which may have resulted in a duplication of some videos appearing in the articulation and transfer video sample set. Based upon the findings by Jenkins (2014) on the difficulties community college students face locating transfer information, these videos help address the articulation and transfer information needs of students in the progress stage.

D. Completion stage videos. The most significant finding of the videos providing information for students in the completion stage was the extremely popular “Health Sciences Careers: The Movie” video on the Astra Community College YouTube channel. With more than 55,000 views, this video was the most popular of all student success videos in this study, based upon the number of views. The video was novel in its dramatized approach to highlighting the variety of health jobs related to health sciences programs of study at the institution. This

professionally produced video is an excellent example of how other community colleges could use videos to provide information about careers related to programs of study.

Significant findings of graduation videos. The minimal number of graduation requirement videos was a surprising finding of the completion stage videos. Although there were 39 videos in the graduation sample set, it was somewhat surprising that only four of these videos focused on providing information about graduation requirements. The majority of the videos provided graduation highlights and live recording of commencement ceremonies. Ensuring that community college students know the requirements to succeed was a main principle of Completion By Design (2012), a community college completion initiative from which the Loss/Momentum Framework was developed.

Significant Findings of Research Question 3

The following section describes the significant findings from the results of Research Question 3: What tutorial videos are presented on the YouTube channels of public community colleges in Maryland to support the orientation of new students, and what is the popularity of these videos?

Tutorial videos. The most significant findings about tutorial videos on Maryland community college YouTube channels were the relatively low quantity of videos among all of the institutions and the high number of video views for one institution. The majority of Maryland community colleges in this study, 71 percent, only had between two and four tutorial videos on their YouTube channels. The minimal number of tutorial videos was an unexpected finding considering the massive information needs of new students during the entry stage. However, the huge number of views of tutorial videos on Maryland community college YouTube channels was another significant finding.

The popularity of tutorial videos based upon the number of views on the YouTube channel of one institution was remarkable. The huge popularity of several Astra Community College tutorial videos that provided step-by-step instructions on how-to choose classes and how-to navigate the registration process, clearly indicates the potential of using videos on YouTube to supplement the information provided during new student orientation. It is reasonable to assume that the enormous number of views these tutorial videos received could have been attributed to new students looking to satisfy their entry stage information needs. Therefore, this researcher suggests that community colleges should use tutorial videos on YouTube to support the successful orientation of new students.

Study Limitations

Despite several important findings and contributions to the literature on content analysis of YouTube videos and YouTube use in higher education, several limitations of this study should be acknowledged. YouTube publicly provides numerous video metrics on the number of videos on a channel, the number of views of each video, the most watched video, as well as the number of subscribers of each channel; however, these indicators do not evaluate the effectiveness of a video. Accordingly, it is important to point out that this study does not assess the effectiveness of videos to support student success on Maryland community college YouTube channels, as the purpose of this study was principally to explore how Maryland community colleges actually use YouTube as a channel of communication and online videos as sources of information to support student success.

Second, the number of video views is a limitation of this study because view counts do not measure how many of the viewers are students, nor does it measure the number of unique viewers. It is possible that an individual viewed a video multiple times. However, view counts

could be considered a good indication of the popularity of a video. In addition, the number of subscribers to a community college YouTube channel is also a limitation of this study because there is no way to determine how many of the subscribers are students of the institution.

Other limitations of this study include inaccurate video titles, missing descriptions, and videos longer than five minutes in duration. For instance, some video titles do not accurately reflect the content of the video. Some videos do not provide a description of the video. In addition, although videos over five minutes in duration were included in this study, they were not viewed in their entirety.

Lastly, the geographical region, the small number of community college YouTube channels, and the select number of videos analyzed are also limitations of this study. The use of YouTube by Maryland community colleges may not be representative of other public two-year post-secondary institutions in other areas of the United States. Furthermore, the sample size of videos analyzed may not reflect the entire volume of content supporting student success available on the YouTube channel of each community college.

Implications for Practice

The major findings of this content analysis study of Maryland community college use of YouTube to support student success convey several implications for the practice of higher education communication and information provision. Following upon the literature of communication-related barriers to completion and community college deficiencies in information provision, the findings of this study offer support for the use of YouTube to help address and mitigate some of these issues. In addition, based upon the conceptual framework of this study, students have specific information needs at different stages of their community

college journey. Therefore, the findings of this study may have profound implications for community college administrators, communication professionals, and video producers.

The findings of this study have provided a baseline descriptive analysis of the use, activity, popularity, and reach of the YouTube channels of the 16 public community colleges in Maryland. This information could be employed by community college administrators to assess and compare Maryland community college YouTube metrics with their own institutions. This study could also help administrators address information-related barriers to completion at their institution by helping them understand the information needs of students and the possibilities of using videos on YouTube to improve the provision of information to support the success of students.

In addition, these findings also provide higher education communication professionals with a comprehensive overview of video topics and a content analysis of 784 videos used by Maryland community colleges to provide information to support student success. The videos presented on community college YouTube channels help address communication-related barriers to completion. YouTube is an immensely popular platform among college age students, and these videos are important sources of information that may help students succeed throughout each stage of the conceptual framework of this study.

Furthermore, this study has provided higher education video producers with the video titles, screenshots, and YouTube links of a wide variety of videos representing 17 different information needs of students during the four meaningful components of community college study: the connection, entry, progress, and completion stages. The characteristics of these videos represent different creative approaches, durations, and use of speakers, which can help higher education video producers develop content for their institutions. This study also

provides support for community colleges to explore the possibilities of collaborating with other institutions to produce videos that could be shared on multiple YouTube channels to serve the information needs of community college students throughout the state. For example, this researcher recommends that it might be beneficial for Maryland community colleges to collaborate on videos providing general information about similar programs of study or high demand careers within the region.

Recommendations for Future Research

Despite the promising and somewhat surprising results of this content analysis study of Maryland community college use of YouTube as a channel of communication, and videos as a source of information to support student success, there are many unanswered questions. The use of video and YouTube in higher education, especially to support the success of community college students, is an intriguing area for future research. To develop a full picture of how these institutions are using video to address communication and information-related barriers to completion, additional studies will be needed.

Primarily, further research should be undertaken to assess the effectiveness of videos to provide information that students need to succeed. For instance, researchers should survey students about which specific videos they have viewed on the YouTube channel of their institution. In addition, research should seek to discover which types of videos are most effective in terms of creative approach, production styles, and duration.

Because this study only explored YouTube use among a small sample of community colleges, future research should also be conducted to provide a baseline descriptive analysis of the use, activity, and popularity of the largest community college YouTube channels across the United States. Furthermore, researchers should compare the differences between the YouTube

channels of public community colleges and private for-profit two-year institutions. In addition, as video technology and online media platforms evolve, researchers should study the benefits and viability of presenting videos to students in different formats, such as on social media, via display wall monitors, or through internal institutional video platforms that are only available to students enrolled at the institution and unavailable to the public.

Conclusion

In conclusion, the purpose of this content analysis was to explore how public community colleges in Maryland use YouTube as a channel of communication and source of information to support student success. This study conducted a review of the literature on community college completion, information-related and communication-related barriers to completion, video use in higher education, and the appeal of online video. The conceptual framework of this study was based on the Loss/Momentum Framework of Completion By Design (2013), which classifies the information needs of students into four stages of their community college experience.

This study analyzed the official YouTube channels of Maryland community colleges. The results suggest that these institutions use YouTube massively as a channel of communication. This study also identified and analyzed the content of hundreds of student success videos on the YouTube channels of these institutions. The findings have indicated that Maryland community colleges present a huge number of videos on YouTube as sources of information to support student success. Furthermore, the content analysis of these videos has revealed a wide variety of topics covering student information needs throughout the connection, entry, progress, and completion stages of the community college student experience. The findings from this study enhance and advance the literature, enabling administrators to understand how community colleges can use videos on YouTube to address beneficially the information needs of students.

Most importantly, this study should prove the valuable service of community colleges supporting student success with videos.

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APPENDICES

Appendix A: Student Success Video Topics Codebook

Codes of Student Success Video Topics	Description of Variables Operationalized
Early College Opportunities	Videos about summer bridge programs, early assessment, early remediation and early college programs.
Assessment and Placement	Videos with information about placement exams, testing procedures, test preparation and test results, as well as program admission assessments.
New Student Orientation	Videos with information for new students about the orientation process.
Enrollment and Registration	Videos with specific information about how to enroll in the college and register for classes.
Financial Aid	Videos with information about applying for financial aid, including institutional scholarships.
Welcome Messages	Videos which welcome students to the institution and provides general information about the college and/or navigating the campus.
Advising	Videos with information about academic and career advising including developing educational plans and goals.
Programs of Study	Videos with information about programs of study, offered by the college, including both academic and workforce development and continuing education.
Resources for Students	Videos with information about resources, programs, and support services, such as tutoring, mentoring and disability services. It also includes information about dedicated spaces and facilities such as computer labs and libraries.
Developmental Education	Videos with information about remedial programs or courses available for students.
Tracking Tools	Videos with information about technological tools for helping students stay on track.
Degree Audit	Videos with information about comparing courses taken to the requirements for certificates and degrees at the institution.
Articulation and Transfer	Videos with information about planning for transfer and articulation agreements between the community college and four-year institutions.
Graduation	Videos with information about graduating from the community college.
Career and job placement	Videos with information about specific careers, regional labor outlook, salaries and potential for job placement.
Student Success	Videos with general information about student success, or specific student, alumni or graduate success stories and/or testimonials.
Faculty and Staff	Videos with information about or highlighting faculty and staff at the institution.

Appendix B: Community College YouTube Channel Coding Sheet

COMMUNITY COLLEGE YOUTUBE CHANNEL CODING SHEET

MASTER CODING SHEET	
Coding Start Date	
Coding End Date	
YouTube Channel Meta Data	
Institution Name	
Channel Name	
Channel Description	
Link on Institutional Website	
Channel URL	
Date Established	
Date of First Video	
No. of Channel Videos	
No. of Channel Views	
No. of Channel Subscribers	
Total No. of Videos Uploaded in 2017	
No. of Playlists	
Student Success Playlists	
Total No. Videos Selected for Sample	

Appendix C: Student Success Video Coding Sheet

STUDENT SUCCESS VIDEO CODING SHEET					
Name of Institutional YouTube Channel					
Coding Start Date:			Coding End Date:		
STUDENT SUCCESS TOPIC VARIABLE					
EXACT SEARCH TERM(S)			NO. of SEARCH RESULTS	NO. SELECTED	
TOTAL VIDEOS SELECTED FOR SAMPLE					
	VIDEO TITLES, URLS & DESCRIPTIONS	DATE UPLOADED	DURATION	VIEWS	NOTES
1	Title				
	URL				
	Description				
2	Title				
	URL				
	Description				
3	Title				
	URL				
	Description				
4	Title				
	URL				
	Description				
	TOTAL VIEWS				

Appendix D: Representative Sample of Student Success Videos

Early College Opportunities Videos:

Earn College Credits While in High School <https://youtu.be/sj2wkcjs5Eo>

Early College Access Programs https://youtu.be/upZpuTNet_s

Dual Enrollment Advantages <https://youtu.be/34VJCKdyMQg>

StarTalk Summer Program <https://youtu.be/IUJXxXF3vS8>

ACES Summer Program <https://youtu.be/Vvv-F4qLjw>

ACES Overview <https://youtu.be/oSs1IEPWxyM>

Assessment and Placement Videos:

Smart Moves: Testing and Placement <https://youtu.be/6EfLS1PgjoU>

Introduction to Accuplacer Testing <https://youtu.be/Ryn84Jfc7mw>

Placement Testing <https://youtu.be/XrEUaoG59gw>

The Testing Center <https://youtu.be/gnGDDhAJfIY>

Assessment Zone <https://youtu.be/Y6RjBwRnQPQ>

TEAS Video Tutorial https://youtu.be/haiQxs4_ZCM

New Student Orientation Videos:

How to Search for Classes <https://youtu.be/AdfKZsRW0jA>

Getting Involved on Campus <https://youtu.be/IV3mtkpATPk>

Getting to Know Campus <https://www.youtube.com/watch?v=vAJ-I0unG14>

Getting Started <https://www.youtube.com/watch?v=FL0iG9R5Ye4>

Online Orientation <https://www.youtube.com/watch?v=QLIVLQkV5gA>

Welcome Videos:

Welcome to the Fall Semester <https://www.youtube.com/watch?v=H-EyTMsL0JE>

Welcome to Perch <https://www.youtube.com/watch?v=4GT339X0BNg>

Welcome to Astra <https://youtu.be/bT42M8Ae-U4>

Welcome message videos featuring student leaders and campus tours:

2016 SGA Welcome <https://youtu.be/yvjaSxk21jg>

Getting to Know Campus <https://www.youtube.com/watch?v=vAJ-l0unG14>

Hawk Bytes: Welcome to Marsom <https://www.youtube.com/watch?v=6f7760y46Ro>

Welcome to Astra Virtual Tour <https://www.youtube.com/watch?v=kXXYXAYJ08>

Enrollment and Registration Videos:

7-Week and 12-Week Bonus Sessions <https://youtu.be/eOWKBHkCDzU>

Smart Moves: Enrollment Services <https://www.youtube.com/watch?v=r04Yv-k9F3c>

Register on Time 11:59 <https://www.youtube.com/watch?v=ivoakHeJ9kY>

How to: Express Registration <https://youtu.be/asH253gCDdE>

Enrollment Through Their Eyes <https://youtu.be/ljUjKZi2jWk>

Advising Videos:

Smart Moves: Academic Advisement <https://youtu.be/wQv3FV7JRW0>

Counseling, Advising and Retention Services. <https://youtu.be/a71TTg-gIVA>

Academic Advising https://youtu.be/DnV7jFy_TEA

Pathways. https://youtu.be/N02Y4Y_mtfE

Getting Started: Choosing Classes. <https://youtu.be/w2Ohnv86BX4>

Programs of Study Videos:

Health Science Careers: The Movie <https://youtu.be/Jbnu03k3RtE>

Paralegal Program <https://youtu.be/KMBO7We1n00>

What is a Surgical Technologist? <https://youtu.be/uCQDf1dhHH4>

Medical Laboratory Program <https://youtu.be/vst2TwMLv2c>

Cyber Security <https://youtu.be/kCk8ru9uril>

Medical Laboratory Technology <https://youtu.be/mifGy7cB0RM>

Theatre Program <https://youtu.be/wLETJBeh0Ko>

Building Trades <https://youtu.be/QUUhuQwFVvI>

Automotive Program <https://youtu.be/cgeZdptayS8>

Mechatronics Technology at AACC <https://youtu.be/YiCjwHSJSP4>

Hospitality Management <https://youtu.be/HXNzZdIU1Y>

Faculty/Staff Profile Videos:

New Beginnings: Laura LeMire <https://youtu.be/Fg8n5ij3JUk>

In the Spotlight - Melvin Smith <https://youtu.be/8b5qiE2c2PY>

In a Minute Professor Episode 1 <https://youtu.be/7nuu2o4cX1w>

Faculty - In Their Own Words <https://youtu.be/jyHR2KEbnoo>

Student Success Stories:

Women in Cyber Technology https://youtu.be/Qcj_b0L00v0

Redefine Yourself - Ashley Stokes <https://youtu.be/BuLSlLSKYWU>

Meet David: Engineering Graduate <https://youtu.be/87XiwVtv3OY>

New Beginnings: Traci Williams <https://youtu.be/jAOobSpe6qk>

Student Thrives in Cyber Security Program <https://youtu.be/ersfviYZfoU>

Student Profile: Alejandra Ramos <https://youtu.be/QYotPa97RxA>

Services for Student Success Videos:

Health Services <https://youtu.be/MAkTxBfw7qY>

Disability Support Services https://youtu.be/ZJ6PAuG_8s4

Assistive Technology <https://youtu.be/JoHsGE2PwCs>

Counseling, Advising and Retention Services <https://youtu.be/a71TTg-glVA>

Programs to Support Student Success Videos:

Study Abroad Program <https://youtu.be/qS-1-HmCE2k>

Applying for an Internship <https://youtu.be/r9acnzDNWAU>

The James W. Rouse Scholars Program <https://youtu.be/JAQ06nw2g-w>

Service-Learning Program https://youtu.be/qQc2TFoYJ_I

Student Engagement <https://youtu.be/LBWiqTac5gs>

Student Achievement and Success Program <https://youtu.be/4aWbka2NziY>

PASS: Program for Student Success <https://youtu.be/cYIA5InLVKY>

STEM Scholars and Learning Community https://youtu.be/xP_ePKcJrT8

Centers to Support Student Success Videos:

Getting to Know the Student Services Building <https://youtu.be/TrWMwtxsKEU>

Academic Support Center https://youtu.be/hwFTvap_1jI

A Guided Tour of the Learning Resource Center <https://youtu.be/H2rjOsvrMYo>

Learning Commons - Student Perspectives <https://youtu.be/wa4pCDliWKA>

Veterans Services Center https://youtu.be/hLgHLctW_DA

Resources for Special Populations Videos:

It Gets Better <https://youtu.be/oH1SJGabfFE>

International Student Connections <https://youtu.be/poeSuTmBr7g>

African American Male Sections <https://youtu.be/2eQ8ymIKeaY>

Being LGBT on Campus <https://youtu.be/P5MOw7RDox8>

Events to Support Student Success Videos:

Perch College Job Fair: <https://youtu.be/638IV6s4Q5A>

Maryland Male Student of Color Summit <https://youtu.be/nN77PZMr2qg>

Transfer Day <https://youtu.be/AZwsdSJVqBM>

Veterans Appreciation Week President's Message <https://youtu.be/Z-FA7XSkceU>

Program Evaluation and Tracking Tools Videos

Colleague Student Planning <https://youtu.be/orFEix7PCZM>

How to: Program Process Evaluation <https://youtu.be/yOEJx4Q3gK8>

Starfish Retention System <https://youtu.be/QefSG2ajab0>

Articulation and Transfer Videos:

Transferring Out: <https://youtu.be/DoC20POk6Hs>

Meet David: Engineering Transfer Student <https://youtu.be/87XiwVtv3OY>

Jack Kent Cooke Foundation Scholars <https://youtu.be/cxchVXF0zJ8>

Athletes Transferring to Four-Year Schools <https://youtu.be/nCCTJrTcdmg>

Transfer Advising Day (360 Degree Video) <https://youtu.be/IDuA35WsU14>

Career Planning and Job Placement Videos:

Discover a Path <https://youtu.be/YOkCELb4LJs>

Job and Career Fair Techniques Part 1 of 4 <https://youtu.be/B86Rmu5eBes>

Health Sciences Careers: The Movie <https://youtu.be/Jbnu03k3RtE>

ACE: Accelerating Connections to Employment <https://youtu.be/lfPnofg2wGs>

Maryland One Step Away <https://youtu.be/vpmKHw1uzxs>

Future Link <https://youtu.be/C9unKkgi6jA>

Graduation Videos:

Commencement is Coming, President's Message <https://youtu.be/ZnvKTCig7js>

Grad Prep <https://youtu.be/4CLEupxZHTI>

Spring Graduation Instructions <https://youtu.be/la0hr-iq74>

Grad Instructions <https://youtu.be/EC-3ciEW83g>

Commencement 2012 (Behind the Scenes) <https://youtu.be/cLGVYTVcvgY>

Graduate Thank You Messages <https://youtu.be/2WhuxWQslZk>

Congratulations Class of 2017 <https://youtu.be/6DklgqllNr8>

Tutorial Videos:

Online Orientation <https://youtu.be/QLIVLQkV5gA>

How to Select Your English Course <https://youtu.be/ndi3oWUZjrM>

Welcome to the New Student Portal <https://youtu.be/yUn4P73Ry3M>