Journal of Research Initiatives

Volume 9 | Issue 1 Article 8

9-2025

Like Playing Plinko: A Conceptual Framework for Student Financial Aid Communication

Alyssa Takatori
Georgia State University

Karla A. Weber-Wandel
University of Wisconsin-Madison

Z.W. Taylor
The University of Southern Mississippi

Follow this and additional works at: https://digitalcommons.uncfsu.edu/jri

Part of the Communication Commons, Educational Assessment, Evaluation, and Research Commons, and the Higher Education Commons

Recommended Citation

Takatori, Alyssa; Weber-Wandel, Karla A.; and Taylor, Z.W. (2025) "Like Playing Plinko: A Conceptual Framework for Student Financial Aid Communication," *Journal of Research Initiatives*: Vol. 9: Iss. 1, Article 8.
Available at: https://digitalcommons.uncfsu.edu/jri/vol9/iss1/8

This Research Article is brought to you for free and open access by the Journal of Research Initiatives at DigitalCommons@Fayetteville State University. It has been accepted for inclusion in Journal of Research Initiatives by an authorized editor of DigitalCommons@Fayetteville State University. For more information, please contact lmehaffey@uncfsu.edu.

Like Playing Plinko: A Conceptual Framework for Student Financial Aid Communication

About the Author(s)

Alyssa Takatori, MBA, is a Salesforce Developer for Georgia State University. She worked in financial aid for over a decade, overseeing financial aid communication initiatives and streamlining financial aid processes at the institution.

Karla Weber is the Director of Communications for Financial Aid at the University of Wisconsin-Madison and has worked in higher education for over 18 years.

Z.W. Taylor is an assistant professor at The University of Southern Mississippi.

Keywords

financial aid, FAFSA, college students, communication, colleges, universities, higher education

Cover Page Footnote

This paper is dedicated to the memory of Dr. Pat Somers.

This research article is available in Journal of Research Initiatives: https://digitalcommons.uncfsu.edu/jri/vol9/iss1/8

Like Playing Plinko: A Conceptual Framework for Student Financial Aid Communication

Alyssa Takatori, *Georgia State University*
Z.W. Taylor, *The University of Southern Mississippi*
Karla-Weber Wandel, University of Wisconsin-Madison

Abstract

The process of applying for and receiving student financial aid is an incredibly complex process involving multiple stakeholders (students, institutions, parents, counselors), levels of information (federal, state, institutional, personal), and modes of communication (print, email, text message, social media, phone calls). Moreover, first-generation students, low-income students, and students of color are most likely to struggle with the financial aid application and awarding process, further marginalizing these students. To date, research has examined how complicated the financial aid process is, how to identify financial aid communication issues, and how to remediate financial aid communication to render it simpler and more intuitive for students and their support networks. Building upon those decades of research, we aim to provide a conceptual framework to demonstrate the complexity of financial aid communication during a student's collegiate career. This conceptual framework will organize financial aid communication in a way that demonstrates the ebb and flow of the student's overall financial aid journey. The aim of creating and examining this conceptual framework is to help financial aid practitioners understand the complexity of the communication to address information gaps and provide students with information and resources in a timely manner that demystifies the financial aid application and awarding process.

Keywords: Financial aid, FAFSA, college students, communication, colleges, universities, higher education

Like Playing Plinko:
A Conceptual Framework for Student Financial Aid Communication

Applying for and receiving federal financial aid is critical for many prospective postsecondary students to access higher education, maintain continuous enrollment, and earn a postsecondary credential (Castleman & Long, 2016; Dynarski, 2003; Kane, 2007; Novak &

McKinney (2011); Page & Scott-Clayton (2016); Page et al. (2019); Scott-Clayton (2011); Scott-Clayton & Zafar (2016). Access to and availability of financial aid have been found to be key factors in the decision-making process for many students, particularly students of color and low-income students, when making enrollment and persistence decisions (Hahn & Price, 2008; Hickman, 2015; Swail et al., 2003). Conversely, when students of color have access to financial aid, the risk of them dropping out is reduced (Chen & DesJardins, 2010; Hickman, 2015). However, these efforts can mean very little when the complexity of the financial aid process is difficult for students to understand and navigate (Dynarski & Scott-Clayton, 2006; Taylor & Bicak, 2020), which could be the result of a lack of transparent and timely access to information (U.S. Department of the Treasury, 2019). In this regard, the benefits of simplifying the financial aid process and improving students' abilities to access funding are clear.

Every year, eligible students who do not complete the Free Application for Federal Student Aid (FAFSA) or file late are found to have missed out on significant portions of federal funding (Bird & Castleman, 2016; Daku, 2017; Kofoed, 2016). Additionally, early FAFSA completion has been directly linked to lower borrowing (Dynarski & Scott-Clayton, 2006) and higher persistence (Novak & McKinney, 2011). Moreover, access to need-based aid has also been shown to increase college entry rates and increase graduation rates for low-income students, as demonstrated by multiple examples (Castleman & Long, 2016; Dynarski, 2003; Kane, 2007; Page & Scott-Clayton, 2016; Page et al., 2019; Scott-Clayton, 2011; Scott-Clayton & Zafar, 2016). Therefore, if a student’s ability to access aid is correlated with many positive student outcomes, researchers and practitioners should explore every avenue to simplify the financial aid application process.

At the federal level, the U.S. Department of Education understands the importance of ensuring that students successfully apply for and receive aid. Yet, many attempts to simplify this process have not been successful (Collins & Dortsch, 2022). Researchers have conducted numerous studies pertaining to the complexity of the application process, verification, and maintaining eligibility (Dynarski et al., 2013; Schlittenhart, 2021; Taylor & Bicak, 2020). Initially, the FAFSA was created to simplify the application process for federal financial aid resources (Federal Student Aid, 2022). However, researchers have since found that students still

find the application to be complex and consider it a barrier that prevents some students from receiving financial aid (Dynarski & Scott-Clayton, 2006; Dynarski et al., 2013; Narayan, 2020; Taylor & Bicak, 2020). In response, multiple stakeholders have attempted to simplify the FAFSA, including President Obama's administration in 2009 (Davidson, 2015). Ultimately, these simplification efforts, although helpful, were not enough to significantly reduce the information barrier that applicants experience during the FAFSA completion process (Dynarski et al., 2013; Narayan, 2020; Taylor & Bicak, 2020).

In another attempt to simplify the FAFSA, the United States (U.S.) The Senate passed the FAFSA Simplification Act in December 2020 to overhaul the FAFSA with hopes of significantly expanding access to federal aid by streamlining the application and changing some of the methodology to increase Pell Grant access to more students (U.S. Department of Education, 2021). The verification process through which colleges confirm, correct, or assist students with updating their FAFSA form may be significantly reduced by FAFSA simplification, which many first-generation college students from low-socioeconomic backgrounds have found to be a significant barrier tied directly to a lack of social capital (Hickman, 2015; Schlittenhart, 2021; Swail et al., 2003). A recent study even shows that students—most often from low-income backgrounds—who are selected for verification are 4.9% less likely to enroll (Lee et al., 2021), further disenfranchising these students and reducing their access to stronger funding packages. They also found that students selected for verification are less likely to attend the longer they wait to complete the application (Lee et al., 2021), which indicates a great need for early proactive communication to students to prompt timely action and encouragement through the process. However, the FAFSA simplification effort does not address the pressing need for financial aid communication to be simplified so that students and their support networks can better understand how to apply, not only for federal financial aid but also for institutional and state aid.

With around half of high school seniors graduating before they complete the FAFSA (Bird et al., 2021), financial aid offices in universities and colleges play a critical role in communicating with prospective students and their support networks to provide information and resources to guide students through applying and paying for college (Cochrane et al., 2007;

Cochrane, 2010; Davidson, 2013, 2015; Taylor & Bicak, 2020) Yet, these financial aid offices have been found to communicate with students in language that is overly complicated and may inform students about different funding sources that students are not familiar with (Castleman & Page, 2016; Taylor, 2019a; Taylor & Bicak, 2020), confusing the process and rendering aid harder to apply for and receive.

A review conducted for the U.S. Government Accountability Office (GAO) pertaining to award letter communication found that most colleges are only following about half of the recommended best practices, and the lack of regulation pertaining to how this information is communicated (Emrey-Arras, 2022), which is likely confusing at best and misleading at worst, especially as students compare their options. As a result, compiling and explaining a conceptual framework of financial aid communication is important to examine the complex reality of applying for federal financial aid, helping financial aid offices map their communication, identify communication gaps, and better connect students to their financial aid.

There is no conceptual framework for financial aid, and no communication has ever been created to provide practitioners with a resource that outlines all communications a student may receive and identifies where problems occur, informing practitioners of where critical interventions may be considered or where simplification is necessary. Therefore, we examine the need and potential use of a conceptual framework for student financial aid based on a literature review of financial aid communications and interventions. The aim of creating and examining this conceptual framework is to help financial aid practitioners understand the complexity of the communication to address information gaps and provide students with information and resources in a timely manner that demystifies the financial aid application and awarding process.

Literature Review

Although researchers have written about financial aid for decades, an exhaustive review of all articles related to financial aid is unnecessary for the aims of this work. Instead, we will provide an overview of how researchers have examined financial aid communication and how the field of higher education has attempted to consolidate language and ease the postsecondary information burden for prospective students, families, and support networks.

Examinations of Financial Aid Communication

Much empirical work has chronicled the problematic nature of the FAFSA (Bettinger et al., 2012; Castleman et al., 2017; Davidson, 2013, 2015) and related subprocesses, such as working through verification (Davidson, 2015; Lee et al., 2021) and understanding one's financial aid award letter (Burd et al., 2018). This is one form of communication: Student interaction with the FAFSA, generally considered the first part of the financial aid application process (Bettinger et al., 2012). Beyond the FAFSA, several studies have examined how institutions communicate in ways that are too complex with students (Bryant, 2016; Cochran et al., 2007; Cochran, 2010; Wolsey, 2020), including through email and mailed communication, which can confuse the financial aid process, even if students have completed the FAFSA, accepted their aid, and are awaiting course registration (Cochran, 2010). Moreover, studies have investigated summer melt, or the phenomenon of students applying to an institution and being admitted in one term but failing to attend classes the following term and found that institutions communicate financial aid processes poorly and infrequently during the summer months, which may contribute to the phenomenon (Castleman & Page, 2015; Castleman et al., 2014; Hahn & Price, 2008).

Regarding financial aid information as presented on websites and institutional communications, several studies have found that institutions often communicate FAFSA instructions at reading levels far too high, frequently near the 20th-grade reading level, which is too difficult for the average prospective college student (Taylor, 2019a, 2019b). Financial aid information is also rarely translated into non-English languages (Taylor, 2019b) and contains complex financial jargon that students may not understand (Taylor & Bicak, 2020). Other studies related to digital accessibility of financial aid information have found that many financial aid websites are not Americans with Disabilities Act (ADA) compliant, therefore posing as barriers to financial aid information, and ultimately, financial aid (Erickson et al., 2013; Taylor, 2020).

In addition to simplifying the FAFSA (Collins & Dortsch, 2022) and other processes by crafting financial aid communication that is easier to understand (Taylor, 2019a, 2019b), researchers have investigated strategic interventions around known bottlenecks or in areas where student misunderstanding of financial aid information is likely to occur. Studies have shown that

interventions to promote early FAFSA completion and maintain aid among community college first-year students were found to increase retention by 14% in a randomized control trial (Castleman & Page, 2015). Additionally, timely communication about the financial aid process has been shown to be a key component of decision-making for college applicants. (Bryant, 2016). This was further corroborated by examining text communications about financial aid forms and deadlines, which revealed a positive impact on students navigating the college application process, indicating that students benefit from timely institutional intervention. (Castleman et al., 2017). Informational reminders and remote assistance with financial aid can improve college entry and persistence, according to previous experiments that have sent timely and individually specific outreach (Castleman et al., 2014; Castleman & Page, 2015, 2016, 2017; Page & Gehlbach, 2017).

Further experimentation implementing targeted text messaging communication indicates this is one of the best methods to prompt student action and progression through the financial aid process. (Wolsey, 2020). Similarly, loan offer nudges that were attention-grabbing and sent at a time when students are most likely to borrow were found to increase a student's borrowing by 40% (Marx & Turner, 2019). While students have been shown to successfully utilize texting to understand and negotiate specific tasks and processes, stakeholders should be selective in their use of automated text messaging and focus on timely responses and relationship building to be most effective (Avery et al, 2021), with social media also serving as a communication tool that may be effective but underutilized by financial aid professionals (Deil-Amen & Rios-Aguilar, 2014). However, despite these communication interventions and strategies, no comprehensive financial aid communication framework has emerged from the literature, necessitating the undertaking of this work.

Addressing Financial Aid Communication and Complexity

Institutions of higher education have employed various strategies to simplify financial aid communication. First, prior studies suggest that individual advising may be one of the most effective ways to support students' progression through the complex financial aid application and awarding process (Castleman et al., 2014; Davidson, 2013, 2015; Harper et al., 2021). In an experiment where families were provided with an advisor to assist them in completing the

FAFSA, students completed the application at higher rates. They showed increased college entry and persistence rates (Bettinger et al., 2012). However, lower-income areas and institutions in urban settings may struggle to facilitate financial aid advising and presentations due to human and financial resource limitations, marginalizing many communities of color and low-income future college students (Venegas & Hallett, 2008). Additionally, a poll sampling response from practitioners requesting that they self-identify the counselor-to-student ratio at their college showed that most institutions have a 1:1,000 student ratio (McKinney & Roberts, 2012). These studies suggest that many institutions may lack the capacity to provide each student and their support network with the individualized attention they may need to navigate the financial aid process (McKinney & Roberts, 2012; Venegas & Hallett, 2008). Therefore, other forms of financial aid communication (email, phone, text, print, etc.) must act as a mechanism to scale service, prompt student action, and guide students and their support networks through the process.

Review of the literature surrounding non-advising financial aid communications indicates there are several factors to consider, the first of which is directly tied to the complexity of the process and the students' overall ability to understand how to navigate it successfully (Taylor, 2019a, 2019b; Taylor & Bicak, 2020). Over the past several decades, researchers have examined how simplification might decrease access barriers (Bettinger et al., 2012; Bird et al., 2021; Taylor, 2019a, 2019b; Taylor & Bicak, 2020), including shortening the FAFSA and streamlining the verification and financial aid award process (Davidson, 2013, 2015). Even though there are national organizations and advocacy groups dedicated to improving the practice of financial aid administration, such as the National Association of Student Financial Aid Administrators (NASFAA) and the Pell Institute, there exists no conceptual framework of financial aid communication for both new and seasoned financial aid administrators to learn from. Having such a framework would allow practitioners and researchers to visualize student communication and both simplify and identify gaps in communication that could be remediated through intervention.

Conceptualizing the Framework

While developing the conceptual framework for financial aid communication, we drew

on our years of experience working in financial aid to outline the major elements of the framework. Across all research team members, we collectively hold over 20 years of experience in financial aid administration, which enhances our understanding of the numerous complex communication elements involved in financial aid. These elements included the stakeholder audiences for the communication, the levels of communication (federal, state, institutional, and departmental), the types of communication (email, phone, etc.), the frequency of the communication (monthly, semesterly, yearly, etc.), and the processes embedded within the communication itself, (completing the FAFSA, signing the master promissory note, etc.). The following sections outline each of these elements and how they fit within the conceptual framework. At the end of this section, we will outline limitations of the conceptual framework that future research, policy, and practice may address.

Below, we present a conceptual framework for understanding how the communication of financial aid can be visualized. Given the title of this paper, we have personally experienced that students and their support networks have reported feeling like they are in a game of Plinko (popularized by the game show *The Price is Right*) when they are interacting with the many forms of financial aid communication disseminated by various stakeholders. In Plinko, contestants stand above a giant wall of pegs and slots that eventually lead to dollar amounts. The contestant releases a chip into the Plinko wall, and the chip bounces from peg to peg before eventually landing within a slot that signifies the dollar amount of the winnings. The research team felt Plinko was an apt visualization and analogy of the financial aid communication process from a student and support network perspective, as these stakeholders may feel as if they enter the financial aid process believing they will follow one path but are often redirected through many paths to reach their destination (See Figure 1).

Figure 1

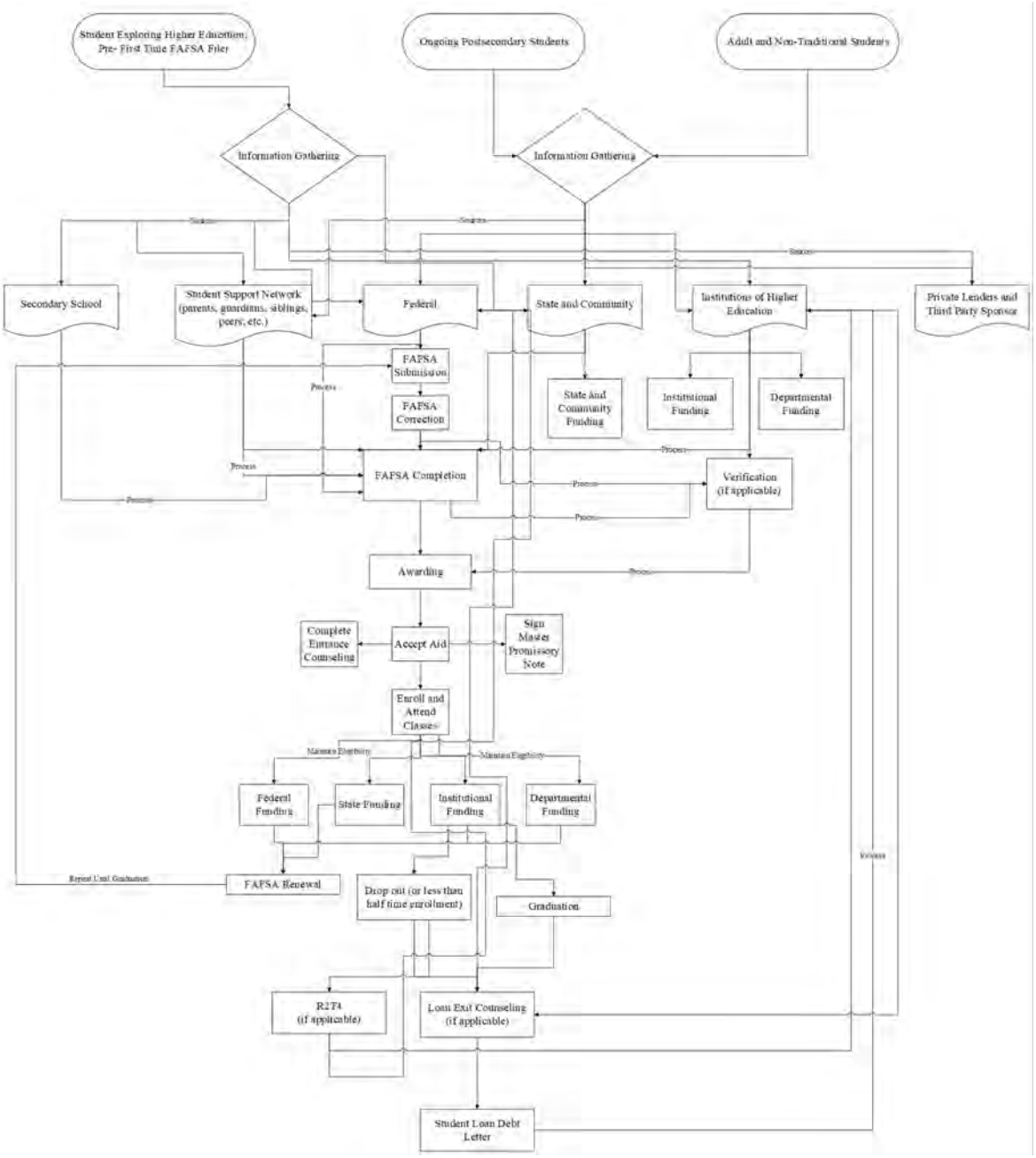
The Plinko game, as featured on the game show "The Price Is Right."

(Santistevan, 2019)

The conceptual framework for financial aid communication is displayed in Figure 2 below. Within this framework, it is essential to recognize that each stakeholder communicating with a student may employ various forms of communication, including email, text messages, and print collateral. Multiple stakeholders may confuse the financial aid process, as students may not receive timely communication across each channel, given delays in processing by the federal government and poor communication between the federal government and institutions.

Figure 2

Conceptual Framework for Financial Aid Communication



Communication Stakeholders

The most important communication stakeholder within the financial aid process is the student. However, it is equally important to understand which stakeholders communicate with the students throughout this process and how that communication may be differentiated. At the highest level, the federal government—through the U.S. Department of Education's Office of Federal Student Aid—communicates with the student during the FAFSA completion process (U.S. Department of Education, 2023)[1]However, as the FAFSA Simplification Act indicates, "long-standing concerns that the length and complexity of the FAFSA, and the lack of transparency and predictability its use provides for students and their families, may discourage postsecondary educational access and attainment" (Collins & Dortch, 2022, p. 2). The complexity of the FAFSA and other aid application processes, as well as the confusion that may arise after receiving an offer, may cause students to seek information from multiple sources.

Immediate Student Support Networks

First, a student may seek information from their immediate support network, including family members, parents and/or guardians, siblings, and other individuals who can provide insight into the financial aid application process. Moreover, a student may seek information from peers, including students/alums at their own secondary school who are familiar or who have support networks familiar with the financial aid application process. Then, whether the student is enrolled in secondary school or is a non-traditional adult student, a student may seek information from their secondary school or equivalent completion program, adding a layer of information beyond what is available from a student's immediate support network. Individuals who may provide financial aid-related information at the secondary or equivalent level include guidance counselors, school administrators, classroom teachers, extracurricular staff, club advisors, and others employed by the secondary or equivalent school.

Community-Based Non-Profit and College Access Programs

During a student's initial college exploration, they may also have access to or be approached by community-based nonprofits and/or college access programs. Many of these

[1]. Although the research team has considerable knowledge of financial aid, we will refer to the U.S. Department of Education's Federal Student Aid Handbook when articulating the financial aid application, verification, and communication process.

programs are free for students, while some are fee-based for their services. The need for these support services often stems from a lack of available resources for students whose secondary school, community, or support network may need to be supplemented. These programs sometimes provide information that students would otherwise have no access to. The degree of support these programs can offer is often based on how these programs are funded. Students paying a fee may receive more dedicated and personalized service and information; thus, a student's personal financial resources can still pose some impediment depending on how much assistance they may need (NACAC, 2023).

Community, Third-Party, and Private Sponsors

Early in a student's college and financial aid exploration process, they may be informed of their family's income status and encouraged to apply for community-based, third-party, or private funding. Community-based funding may come in the form of scholarships from local organizations such as the YMCA or Rotary Club. In contrast, third-party or private funding may come in the form of scholarships, employment benefits, or private loans from financial institutions or scholarships as part of a work-study or internship program (i.e., a company sponsoring a student intern if they pursue a degree within that company's scope of work). Nearly all forms of communication from community, third-party, or private sponsors stakeholders are through websites, 1-1 contact, email, phone, or print collateral, but many of these interactions occur in 1-1 settings or through email (NACAC, 2023).

Secondary (or Equivalent) School Stakeholders

Beyond the secondary or equivalent level, institutions of higher education communicate with students early in their secondary school career, with many enrollment management and financial aid offices recruiting students in their 8th grade year or earlier. In addition, many college access programs engage with prospective college students and their support networks to provide college information as students make their application and enrollment decisions (NACAC, 2023). As a result, students may receive information from a variety of institutional-level stakeholders regarding financial aid, including admissions staff, financial aid staff, administrators, alum outreach, and others in charge of communicating financial aid information and processes to prospective students. Nearly all forms of communication from

secondary or equivalent school stakeholders can be through websites, 1-1 contact, email, phone, text message, social media, or print collateral, but many of these interactions occur in 1-1 settings, through email, or through print.

Institutional- and Departmental Level Stakeholders

When a student has sought post-secondary information and decided on where to apply, students may receive financial aid-related information from both institutions and institutional-level departments, depending on their academic plan. Through their institutional website, institutions will communicate basic financial aid information such as how to complete the FAFSA, the federal school code to route the FAFSA information to the institution, and application deadlines for priority, merit, or need-based scholarships. Moreover, depending on a student's academic plan, an institutional department may communicate with a prospective student regarding department-level scholarship opportunities that may include an outline of eligibility requirements and application deadlines (U.S. Department of Education, 2023). Nearly all forms of communication from institution- and department-level stakeholders can be conducted through websites, email, phone, text messages, social media, or print collateral; however, many of these interactions primarily occur via email, phone, text messages, or print materials.

This complexity exists in most institutions and is further complicated by the fact that students often apply to multiple colleges, who then begin competing for the students' attention to secure their acceptance and enrollment. The timing, frequency, communication method, and language all drastically vary depending on the institution. The potential volume of these communications likely creates an information overload and considerable confusion for some students.

State-Level Stakeholders

Depending on the student's state of origin, birth, or residency, a student may be eligible for state-level funding, such as the state of California's Cal Grant program, Georgia's Zell/Miller or HOPE Scholarship program, or the state of Texas' TASFA process, which is the Texas Application for State Financial Aid. State-level organizations will communicate financial aid information to students, such as how to complete application processes and how to remain eligible for the funding (i.e., minimum GPAs, progress toward degree, etc.). Complicating

matters, institutional- or departmental-level stakeholders may communicate state-level processes, such as a public institution communicating state-level financial aid application processes on the institution's .edu website (U.S. Department of Education, 2023). As a result, students may receive numerous communications from state-level stakeholders through various channels, including websites, email, phone, text messages, social media, and print collateral; however, many of these interactions primarily occur via email, phone, text message, or print. Additionally, students may receive state-related communications from institution- or department-level stakeholders through various channels, potentially confusing the student if the information is inconsistent from state-level sources to institution-level sources.

Federal-Level Stakeholders

Finally, the most important process that most prospective and current postsecondary students complete to procure funding for postsecondary education is completing the FAFSA on a yearly basis before and during their postsecondary enrollment until their last year of their degree plan. However, before students begin FAFSA, a wide range of stakeholders may communicate federal- or FAFSA-related information to students. For instance, a high school counselor, a guardian, a sibling, and a community member may all attempt to provide a student with assistance in completing the FAFSA, and any one of these stakeholders may deliver inaccurate, incomplete, or contradictory information. As the FAFSA has evolved and become shorter over the years, stakeholders who have completed the FAFSA in the past may not have updated information, potentially misleading students during their FAFSA application process. Additionally, in many cases, students must first obtain the necessary tax documents from their parents to complete the FAFSA process. Undocumented students may also require information from their parents to complete state-level or other private financial aid application processes (Sallie Mae, 2023). Then, the federal government communicates with the students if they do not complete the application, if their application requires correction, or if it is subject to the verification process. Students are also sent their Student Aid Report (SAR), which provides the results of their application, as well as next steps (U.S. Department of Education, 2023).

Ultimately, one of the most complicated factors in student financial aid communication is that completing the FAFSA is the most crucial step on the path to postsecondary education

; yet, the federal government does not communicate much, if at all, with students until they begin the application process. Additionally, the student may have received 1-1 communication from a variety of stakeholders prior to the FAFSA process. The federal government communicates with students primarily through its website or email, and if a student has opted into assistance, through text message or phone. Here, not only is federal government communication sparse during the financial aid application process, but it also occurs near the end of a student's information-gathering process, potentially confusing students and forcing them to rely on inaccurate or incomplete information from other stakeholders. Here is where confusion among first-generation college students may appear, as these students may rely on sparse, untimely communication from the federal government in lieu of strong, reliable financial aid information from their immediate support network.

Modes of Communication

In creating the conceptual framework, we considered the myriad options that all stakeholders might employ when communicating with students. While not all stakeholders use all the communication types outlined below, many utilize at least one or more of the types identified. The variety of options allows stakeholders to pick and choose which methods/types of communication to use when providing students with information. However, this variety may confuse students and their support networks, especially if information is inaccurate or inconsistent from source to source.

Websites

Websites may be the most consequential method of communication that stakeholders can provide for students to utilize. Websites at every stakeholder level can serve as application portals, ranging from the most complex, such as the FAFSA, to smaller portions of the process, like scholarship applications and alternative loan applications (U.S. Department of Education, 2023). Websites also serve as informational repositories for complex regulations and policies involving federal, state, and institutional stakeholders. Stakeholder websites also seek to provide scaled supplemental advising and guidance through their individual portion of the process (Bettinger et al., 2012). Navigating and comprehending these sites can prove challenging for students, as there are many gaps in how processes overlap or interact and what the next steps may be (Venegas & Hallett, 2008). Often, students also need to lift information from one

stakeholder website to another to complete a process, such as finding the federal school code on an institution's website and inputting that code into the FAFSA application on the federal website (U.S. Department of Education, 2023). For these reasons, financial aid communications on websites are the most prevalent and important for students to complete any number of processes; therefore, stakeholders must focus on the clarity and consistency of their websites to ensure that students are receiving accurate, timely information from multiple websites to complete, in many cases, the singular process of applying for financial aid.

Email

Email communication is the most popular form of direct communication, with emphasis being placed on digital communication as individual preference increases for swifter, scalable, and less costly methods of communication compared to traditional methods such as personal advising, phone outreach, and printed collateral. For financial aid communication stakeholders, email is the fastest method of mass communication at the lowest overhead (Cochran, 2010; Taylor, 2019b). However, the effectiveness of email communication needs to be considered. Students are often inundated with emails from various higher education-related sources. Students may not check their email frequently, let alone open their messages and disseminate the information they receive (Taylor, 2019a, 2019b). Most colleges provide students with an official email address from the college or university. However, students often have at least one or potentially multiple email accounts, which may divide the student's attention and reduce the chances of email communication being read, depending on the students' habits and preferences (Deil-Amen & Rios-Aguilar, 2014). Simplifying these communications and using attention-grabbing subject lines may be a necessity to effectively utilize this medium (Taylor, 2019a, 2019b). Additionally, targeted, timely, and personalized communications that are specific to the student might make these messages more meaningful to students and prompt action. Whenever possible, stakeholders should align their email strategy with all other forms of communication to create consistency (Castleman et al., 2017; Taylor, 2019a).

1-1 Advising (In-Person and Virtual)

Personal advising may be the most effective means of assisting students in navigating the financial aid process (Bettinger et al., 2012; Venegas & Hallett, 2008). Not only does

this advising create an environment that allows students to ask questions specific to their personal circumstances, but it also provides advisors with the opportunity to probe students' understanding of the process and offer additional support for any gaps in understanding. These personal connections can help build a student's sense of community and belonging and provide them with at least one professional connection, which for some can make all the difference (Bettinger et al., 2012). However, many stakeholders have limited personnel, which makes it nearly impossible to provide personalized advising to students even when students might prefer this method of advising best (Venegas & Hallett, 2008). Stakeholders should consider how they can best utilize other forms of communication to supplement service limitations if staff capacity is an issue. Suppose most of the process can be communicated in a manner that will allow students to navigate a significant part of the financial aid process themselves. In that case, advisors might be used more strategically to intervene when necessary.

Phone

Contacting students by phone or receiving student inquiries by phone poses similar challenges to 1-1 advising, often relying on individual interaction between students and advisors. Limited availability of staff to complete phone calls also poses the same challenge. While technology has provided some relief, allowing automated call campaigns and auto dialers to scale some of this work and funnel responsive students into more manageable channels, students may not keep their stakeholders up to date with their contact information. Stakeholders may also lack access to the technology that would allow them to reach broader audiences. Additionally, students may find that reaching their institution by phone is difficult or undesirable. Verbal communication can also be misinterpreted, requiring stakeholders to document their conversations with students to ensure they understand the information provided and have the necessary resources. This is often done via email, which highlights the importance of email communication and the need for clear and concise written communication. Ideally, institutions align their email communication with their phone call scripts and campaigns to ensure accurate, consistent information across all channels. Stakeholders may need to consider the volume and effectiveness of this form of communication and determine how best to enhance their written communication methods to support reducing phone call communication needs.

Text Messaging

Text messaging may be the fastest and most effective way to reach students. While many stakeholders have begun using text messaging to reach students, some still lack the resources to use texting as a communication method. Texting is viewed as the type of communication that is most likely to gain the students' attention and prompt action (Castleman et al., 2017). However, texting may be limited in addressing the complex financial aid application process when attention span and character limits would discourage the processing of lengthy explanations. Carrier rates also limit students' desire to communicate using text messages. Stakeholders should consider what kind of messaging is most effective in this medium. Quick messages that prompt action, promote deadlines, remind students of informational events, or provide quick links to resources may be more effective than trying to communicate complex portions of the process if these messages cannot replicate targeted, personalized advising or put the student in immediate contact with advisors who can provide support.

Print Collateral

Printed collateral, such as formal letters, postcards, flyers, and informational handouts, is a method still employed by stakeholders. The cost of designing and printing materials, as well as consideration for the timing of when students receive these communications, is usually the concern for most stakeholders. In general, fewer stakeholders are mailing printed materials as factors like address changes, delivery delays, and lost mail can cause significant questions about the return on the investment for the cost of these materials. That is not to say that these materials do not have their place. Printed materials are easy to hand out on campus, at events, or pass to a peer or a neighbor. As more schools focus on electronic communications and move away from mail, mailed print pieces are more likely to have higher visibility and are less likely to get lost amongst the array of other communications a student receives. A postcard, for example, can provide accessible information to a student, as well as to anyone else who sees it, such as a parent or caregiver, without requiring the illegal opening of a student's mail. Access to and the affordability of internet service can hinder some people and communities from being able to review websites and emails, so printed materials might be the best way to reach specific audiences with technological obstacles. However, no studies have addressed how students or

support networks feel toward financial aid materials in printed form. However, through professional experience, many financial aid offices still rely on print collateral to connect with students and ensure financial aid processes are understood and completed. Printed materials can also draw the attention of the student's support network and could result in positively prompting student action.

Social Media

Social media is another method of communication. As text messaging may provide a supplemental tool for conveying information in a more in-depth format via email, social media may also serve to quickly and succinctly communicate information that can be found on more detailed stakeholder websites. Social media can amplify a message through follower/student engagement. Stakeholders can also establish connections with other stakeholders to enhance the overall messaging. For example, reposting FAFSA reminders that the Federal Student Aid account posts can help mitigate the need to create and utilize only original content and allow stakeholders to support and align their messaging. In fact, Federal Student Aid maintains active social media accounts that partially aim to help students and their families through the financial aid application process (Federal Student Aid, 2023). However, like print communication, no studies have addressed how financial aid offices may communicate with students through social media to ensure that financial aid processes are transparent and completed in a timely and accurate manner.

Artificial Intelligence (AI) and Chatbots

It would be remiss not to mention artificial intelligence (AIs) and chatbots, which in recent years have begun to gain popularity and attention in higher education. The ability for students to use a bot that is trained to answer frequently asked questions can be highly beneficial in scaling service, especially for stakeholders who may be under-resourced to manage the volume of inquiries that these questions sometimes require. Some stakeholders place these chatbots on their websites, while others elect to have them support text messaging software, or both. The potential to apply this technology within other modes of communication is very beneficial and can strengthen a stakeholder's ability to cover more ground with their messaging. While purchasing this technology can be costly to stakeholders, the return on the investment

should be strongly considered. Still, some may not be able to purchase such technology, or they might lack the ability to create it on their own. However, the benefit of having a well-managed and well-taught robot to answer some of the most basic questions that offices receive creates some space for stakeholders to focus on more complex questions and issues that their students might face.

Financial Aid Communication Frequency and Interventions

Middle and High School Exploratory Periods

Although most prospective college students apply for financial aid of all types during their senior year of high school or secondary school, many students begin exploring college options long before they turn 18 years old. During this exploratory period, students may receive information through a variety of channels (email, text message, phone call, print, social media) from a variety of sources (high school or secondary school counselors, community members, parents, family members, institutions of higher education, non-profits, college access organizations, etc.). However, this nebulous period is punctuated by the October 1 annual opening of the FAFSA, which allows individuals to apply for federal financial aid and indicate their preferred institutional recipients (if applicable) (U.S. Department of Education, 2023).

Interim Period Between FAFSA Submission and Reception of Aid

The interim period between FAFSA submission and reception of aid looks similar for first-year students and continuing students. The primary differences these students experience are the prior knowledge accumulated by the continuing students to ease the FAFSA application process and the need for continuing students who receive aid to maintain satisfactory academic progress (SAP) on their path to a postsecondary credential if they accept federal student aid from term to term or year to year.

Moreover, on a yearly or semesterly basis, all students need to apply and reapply for recurring scholarships and other forms of aid, such as from local or state sources and community-based organizations (U.S. Department of Education, 2023). However, many students may not be performing a needs assessment to understand how their cost of attendance or educational needs change from year to year or between FAFSA filings, possibly introducing additional communication from institutions and other stakeholders regarding student knowledge

of cost of attendance, student debt levels, and understanding the total cost necessary to earn a credential. Additionally, students may need to navigate the verification process between the FAFSA application and aid acceptance. Furthermore, first-year students must choose their initial institution of higher education, which further complicates the financial aid communication process for this population (U.S. Department of Education, 2023).

Subsequent Aid Years

Each year, all students need to renew their FAFSA if they choose to pursue federal financial aid sources, necessitating communication from both a student's institution and the federal government. Moreover, students will receive institutional information on maintaining aid eligibility, with some students needing to navigate verification (for possibly a second time) and institutional SAP requirements. Students may also transfer from one institution to another, requiring institutional communication from two or more institutions, depending on where the student applied and what institutions the student listed on their FAFSA (U.S. Department of Education, 2023). All these processes may require communication with federal and institutional authorities, as well as any communication associated with non-federal aid sources.

Repayment or Forgiveness Years

Once a student graduates or leaves an institution of higher education without enrolling in another, they move into repayment periods or federal student loan forgiveness processes. For repayment, students are first contacted by their institution to alert them of their outstanding loan balance. Then, all repayment-related information is communicated to the students by a guaranty agency, which administers the loan on behalf of the government. Suppose a student has a loan that is eligible for forgiveness. In that case, the government may contact the student to verify their eligibility requirements. However, primarily, students in this stage are responsible for understanding the terms of their loans and performing self-advocacy and proactive communication with governmental or third-party entities to ensure that they follow the required protocol (i.e., employment in a particular field for a certain length of time, etc.) and payment schedule for loan forgiveness (U.S. Department of Education, 2023). All these processes may require communication with federal and institutional authorities, as well as any communication associated with non-federal aid sources, loan forgiveness programs, or guaranty agency processes.

Financial Aid Processes

Financial aid communication facilitates the completion of many processes related to the actual application for aid, the reception of aid, the maintenance of eligibility for aid, and the repayment of aid (if in the form of student loans and not grant or scholarship aid). These processes involve many stakeholders and various types of communication, with this communication often following variable timelines depending on a student's academic plan, state, or financial situation (U.S. Department of Education, 2023).

Information Gathering and Application

At the beginning of the financial aid application process, students must procure the necessary personal and financial documents and information to complete FAFSA, state-level, and institutional-level applications. This may include students accessing their own personal information (social security number, parental status, etc.) in addition to their parents and/or guardians' personal and financial information (social security numbers, dates of birth, tax filing status, etc.). Then, the student must complete the FAFSA itself, in addition to providing their parents' information to the Internal Revenue Service's Data Retrieval Tool (DRT). However, if a student's parent and/or guardian does not have adequate credit, has not filed a FAFSA with another student, or has technical issues, the student and their parent may not be able to link their information to the IRS DRT. There are also just certain circumstances that do not allow the student or parent to participate, such as if marital status and filing status come into contact for either student or parent, or if the tax return is a foreign return, to name a few. All of which can add additional layers of communication and complexity onto the process (U.S. Department of Education, 2023).

Application Review and Possible Verification

After the FAFSA is filed, the student may encounter a request for corrections or be subject to income verification, both of which are known to delay a student’s financial aid and complicate the financial aid process. In the case of FAFSA corrections, a student may need to communicate directly with the federal government to amend their FAFSA if they were missing information or included inaccurate information, which may require additional communication via the federal government's website and/or email. In the case of verification, the student must

work with their parent and/or guardian to complete a request for a transcript of a tax return form (IRS 4506-T form). Then, the student and their parent and/or guardian must again interface with the FAFSA to make the necessary changes and complete their application (U.S. Department of Education, 2023).

Other Financial Aid Applications

However, the FAFSA is not the only financial aid application a student may need to complete to finance their postsecondary education. Depending on the student's state of residence, a student may need or want to complete an application for state financial aid in the form of scholarships, grants, tuition reimbursement, or tuition forgiveness. State-level applications require a student to interface with state-level websites and other forms of communication to gather the necessary information and complete the application. To complicate matters, if students' complete applications for and receive federal and state aid, students may need to interface with the state entity, the federal government, and their chosen institution to report their aid to ensure any federal aid does not exceed the cost of attendance, resulting in possible over-awarding and additional communication to reimburse the institution or federal government (U.S. Department of Education, 2023). These are the types of situations that financial aid practitioners need to anticipate in order to communicate effectively with students who may need additional intervention or information.

This is only the case for some states, further adding to the confusion for some stakeholders and students. Some states utilize the FAFSA as the primary application for state funding as well. Some states require both a state application and a FAFSA, and yet others might take either. As students may want or need to apply for state aid, students may want or need to apply for institutional or department aid, depending on their academic plan (U.S. Department of Education, 2023). The CSS Profile is an application used by many schools for processing institutional and/or departmental aid. However, they require more information than the FAFSA application, and there are fees associated with the account (U.S. Department of Education, 2023). Again, a student may need to interface with an institutional or departmental website, or a third-party website, to complete an application. If awarded, they must then communicate with federal and state aid sources to ensure their award covers the cost of attendance but does not exceed it.

Accepting the Award and Entrance Counseling

Once a student has successfully applied for aid at the federal level, they must interface with their institution to accept the award. This process can become complicated for prospective students, as students may be awarded aid to multiple institutions and need to negotiate each aid package to determine their best financial and academic fit. Moreover, students complete a federal application, after which they receive communication from an institutional source to understand and accept their aid. Moreover, students continue to toggle back and forth between institutional and federal sources of information during the completion of entrance counseling and signing of the master promissory note (MPN), as institutions and the federal government may both require entrance counseling processes. In contrast, the federal government requires a student to sign the MPN to officially acknowledge their aid amount and accept the aid (U.S. Department of Education, 2023).

Covering Cost of Attendance (If Necessary)

After a student signs the MPN, a student may have a remaining balance on their account and require additional funding beyond federal, state, and institutional aid. This is when students may interact with community-based, third-party, or private sponsors of aid to ensure they can cover their cost of attendance and attend their institution. Here, students may interface with various forms of communication from multiple stakeholders to bridge the gap and cover their cost of attendance, complicating matters for many students who did not qualify or receive sufficient federal, institutional, or state aid (U.S. Department of Education, 2023).

Disbursement

However, once a student has accepted aid, this does not mean that they receive the aid. Students must then navigate institutional communication to understand how to have their aid disbursed into their accounts, which then pays their institutional balance. Some institutions require students to register for classes. In contrast, other institutions require students to register for classes and attend classes until the census day (usually the 10th class day or the second whole week of classes at the beginning of a semester) for student aid to be disbursed (U.S. Department of Education, 2023). This process may be complex for many students, including first-generation college students. Students may not understand that they will need to cover many of their own

living expenses until their aid is disbursed, potentially placing these students in a financially precarious position.

Navigating Aid Eligibility Requirements

Satisfactory academic progress (SAP) is a term that first appeared in 1976 as an amendment to the Higher Education Act of 1965, and its guidelines are in Section 34 of the Code of Federal Regulations (U.S. Department of Education, 2023). Typically, college students must maintain a 2.0 cumulative undergraduate grade-point average (GPA) and pass 67% of their courses to maintain eligibility for federal student aid programs, including loans, grants, and work-study dollars (U.S. Department of Education, 2023). Although institutional SAP policies vary, college students will likely receive various forms of communication (email, text message, phone call, print) to alert them of their SAP status and if students need to act, such as filing an SAP appeal, raising their grades, or accelerating their pace to degree completion to ensure federal aid eligibility. In these cases, students will receive institutional communication and then must interface with a website or application to file an SAP appeal if they do not meet institutional SAP criteria. If a student does not meet SAP requirements and loses aid, the institution and the federal government will typically communicate aid ineligibility to the student through email (U.S. Department of Education, 2023).

Although other sources of student aid are not subject to federal SAP requirements, many forms of aid, such as merit scholarships and community-based grants, are contingent upon a student earning a certain GPA, maintaining enrollment, or meeting other criteria. Many other sources of aid communicate in various ways. However, it is typically up to the student to be aware of the aid eligibility requirements for all forms and communicate effectively with aid sources if they are at risk of losing their aid eligibility.

Repayment or R2T4 and Exit Counseling

Finally, once a student changes their status upon graduation, or, unfortunately, withdraws or drops out, more financial aid communication is necessary. First, if a student receiving federal funds leaves the institution, the student will need to return the federal funds to Title IV (R2T4). Sometimes, this process involves the institution returning funds to the federal government and then asking the student to reimburse the institution, or the student must reimburse the federal

government directly. In either case, the student must interface with both institutional and federal communication through various sources to understand their legal obligations and return federal funds (U.S. Department of Education, 2023).

If a student graduates, falls below half-time enrollment, drops out, or withdraws, they will receive communication related to exit counseling and repayment, including federal and institutional notifications. First, the student must complete exit counseling if they receive federal aid, requiring communication with the federal government. Some states may also require students to receive student loan debt letters, which typically communicate the type of loan(s) a student holds, the interest rate of the loans, the overall repayment amount of the loans, and an estimated average monthly payment (Taylor et al., 2023). This process requires a student to interact with institutional communication if they hold federal student loan debt, and this communication may be over various communication channels, including email, print mail, and logging into an institutional portal to view their information. Moreover, at any time during their student career, if a student holds federal student loans, they can log into www.studentaid.gov, a federal portal, to view their outstanding loan types and balances. Ultimately, a student may toggle back and forth between institutional sources (debt letters) and federal sources of information (NSLDS) to understand their student loans, possibly confusing the process if institutional information does reflect federal information and vice versa (U.S. Department of Education, 2023).

Discussion

Building on prior empirical work, we aimed to develop a conceptual framework that can also serve as a guide for university and college administrators, guiding proactive intervention when assisting students through the financial aid application and award process. In addition to supporting students through the application process, continuous intervention is necessary because a significant portion of students who complete the FAFSA are found to be unable or unwilling to complete institutional requirements and be awarded financial aid (Hahn & Price, 2008). As previously discussed, verification can be a significant barrier to students and can often delay or deter a student entirely from being awarded. As a result, practitioners would benefit from this conceptual framework and utilize it to visualize where students are experiencing

difficulties throughout the financial aid process or to identify where additional communication may be needed. Communication interventions could be used to remediate these concerns and ensure that students have the information they need to finish the financial aid process successfully.

Creating awareness among stakeholders about this framework is key to creating improvements and consistency. The financial aid office is rarely the only office communicating with students about financial aid. Other college administrative offices, such as admissions, academic advising, and even faculty departments, may also take it upon themselves to provide additional support to students. This makes sense, as our review indicates, that financial aid offices are often under-equipped to provide all the support that their students might require. Students also tend to view the institution and its employees as one entity. They may have a basic service expectation that whoever they interact with should have some knowledge or at least point them to the correct office. Therefore, institutions may need to spend additional time coordinating financial aid communication for students and be transparent with institutional faculty and staff to create consistency across campus. The Admissions Office should be a key partner, as the conceptual framework relies initially on portions of the application process that occur during the admissions process.

The interventions suggest that institutions should rely heavily on creating communications that are consistent from application to active enrollment and promote a seamless handoff between departments, as well as support continued intervention by the financial aid office to help students renew and maintain eligibility year over year. Universities should compile and review all methods of student communication. Collateral that should be considered automatically includes, but is not limited to, email, text, and phone communications, all printed and website materials, as well as training and guidance provided to staff. However, without a more theoretical understanding of financial aid communication, practitioners may struggle to see the connections between departments and other stakeholders beyond institutions, such as the federal government and interested third parties, as well as student support networks. As a result, we aim to develop a conceptual framework for financial aid communication to share this research empirically with a community of both researchers and practitioners.

Implications for Theory

Although this conceptual framework is the first to address financial aid communication for practitioners and student audiences, this framework holds important implications for college choice theories. It extends specific theories related to information seeking and college opportunities. First, Perna's (2006) conceptual model of college access and choice focused mainly on two interconnected approaches: economic and sociocultural. Regarding economic approaches, several scholars hinted at the relationship between financial information and college choice (Perna, 2006). Olson and Rosenfeld's (1984) early study of parents of college students found that parents from lower socioeconomic backgrounds often held less information about various types of financial aid, which influenced what aid they believed their child or student could access, subsequently affecting the student's—and the parent's—college choice process. St. John and Asker (2001) also suggested that college students tend to make enrollment decisions based on financial aid outcomes, such as whether they receive institutional aid or scholarships.

Similarly, Kane's (1999) book on college choice suggested that students often lack information about college admissions and opportunities, and have differential access to information, as evidenced by the many struggles that first-generation college students face who do not have access to the same college information as their peers. Desjardins and Toutkoushian (2005) elaborated on the idea of differential access to information, suggesting that college students may not be "rational" in their college choice due to information gaps (p. 211). In many cases, as Desjardins and Toutkoushian (2005) note, students can only act on the information they have, much like consumers who make seemingly irrational financial decisions, often due to a lack of information. Through an economic lens, framing information as currency, our conceptual framework for financial aid communication suggests that college students and their support networks may choose different colleges based on the level of financial aid information that an institution can provide. Beyond loan, grant, and scholarship dollars, prior research has suggested that information about these resources may dictate student choice, and understanding financial aid communication may be critical for financial aid practitioners to help college students make the best-informed choice through quality, timely financial aid information.

Regarding Perna's (2006) notion of sociocultural approaches to college choice theory,

our financial aid communication framework also suggests that the social network a college student may inform us about the financial aid communication they receive, as well as the timeliness, accuracy, and quality of that information. We suggest that, in addition to students, many other stakeholders deliver financial aid communication to students during their college search and financial aid application processes: parents, siblings, peers, teachers, institutions, non-profits, guaranty agencies, and many more. Perna's (2006) conceptual model drew on both economic and sociological perspectives, assuming that "students' educational decisions are determined, at least in part, by their habitus, or the system of values and beliefs that shapes an individual's views and interpretations" (p. 115). As communication may be able to shape a student's values and beliefs in how they view and interpret an institution of higher education, we posit that better understanding how institutions communicate may inform how students view the institution and whether they decide to pursue an education there, including a better understanding of the role that financial aid communication plays in that decision-making process.

From here, future theorists need to situate and center institution-to-student communication to better understand how communication influences student behavior, including choosing where to apply for admission, applying for admission, applying for financial aid, and ultimately enrolling at an institution. Prior theories have suggested that access to information (Desjardins & Toutkoushian, 2005; Olson & Rosenfeld, 1984) and institutional communication (Kane, 1999; Perna, 2006) play a role in students' college choices. Now, more research is required to understand—from admissions and financial aid perspectives—how communication from institutions and other stakeholders may influence student choice and ultimately increase or decrease access to higher education, depending on the quality and timeliness of that communication.

Implications for Practice

From the outline of the conceptual framework for financial aid communication, many implications emerge for financial aid communications practice. First, creating consistency among communication methods and stakeholders is critical for student understanding and completion of the financial aid process. Although the financial aid office should be the institutional leader, other offices may communicate with students regarding their financial aid. This multi-pronged

approach is logical, as research and our personal experience suggest that financial aid offices are often under-equipped to provide all the support that their students might require, and this is further compounded by the tendency of students to view the institution and its employees as one entity rather than departments administering different operational components of their student processing. However, colleges may need to spend additional time coordinating financial aid communication and information given to students to create consistency across campus. The admissions office should be a key partner, as the conceptual framework relies initially on portions of the application process that occur during the admissions process. The interventions suggested relying heavily on creating communications that are consistent from application to active enrollment and promote a seamless handoff between departments, as well as support continued intervention by the financial aid office to help students renew and maintain eligibility year over year.

As stated above, institutions should compile and review all methods of student communication. Collateral that should be considered automatically includes, but is not limited to, email, text, and phone communications, all printed and website materials, as well as training and guidance provided to staff. These communications should also focus on the following three areas:

Audience Stakeholder Focus

Financial aid communications should first and foremost be student stakeholder-focused, putting the student first and then focusing on student support networks. Communications should guide the student through the processes relevant to them. Institutions should focus their communications on being student-centered and process-driven. For example, undergraduate students do not need the same information that graduate students need. Dependent students and their support networks may require an integrated communication plan that includes and welcomes parents and other members of their support network. This theme may need to continue throughout the student's life cycle, depending on their ongoing dependency status. New students often need more communication than continuing or transferring students. In these cases, institutions may want to consider distilling our conceptual framework for financial aid communication into a handout or infographic that alerts students and their support networks

about what types of financial aid communication they may receive, when they may receive it, and what information a student will need to provide—and when—in order to access financial aid and enroll at the institution.

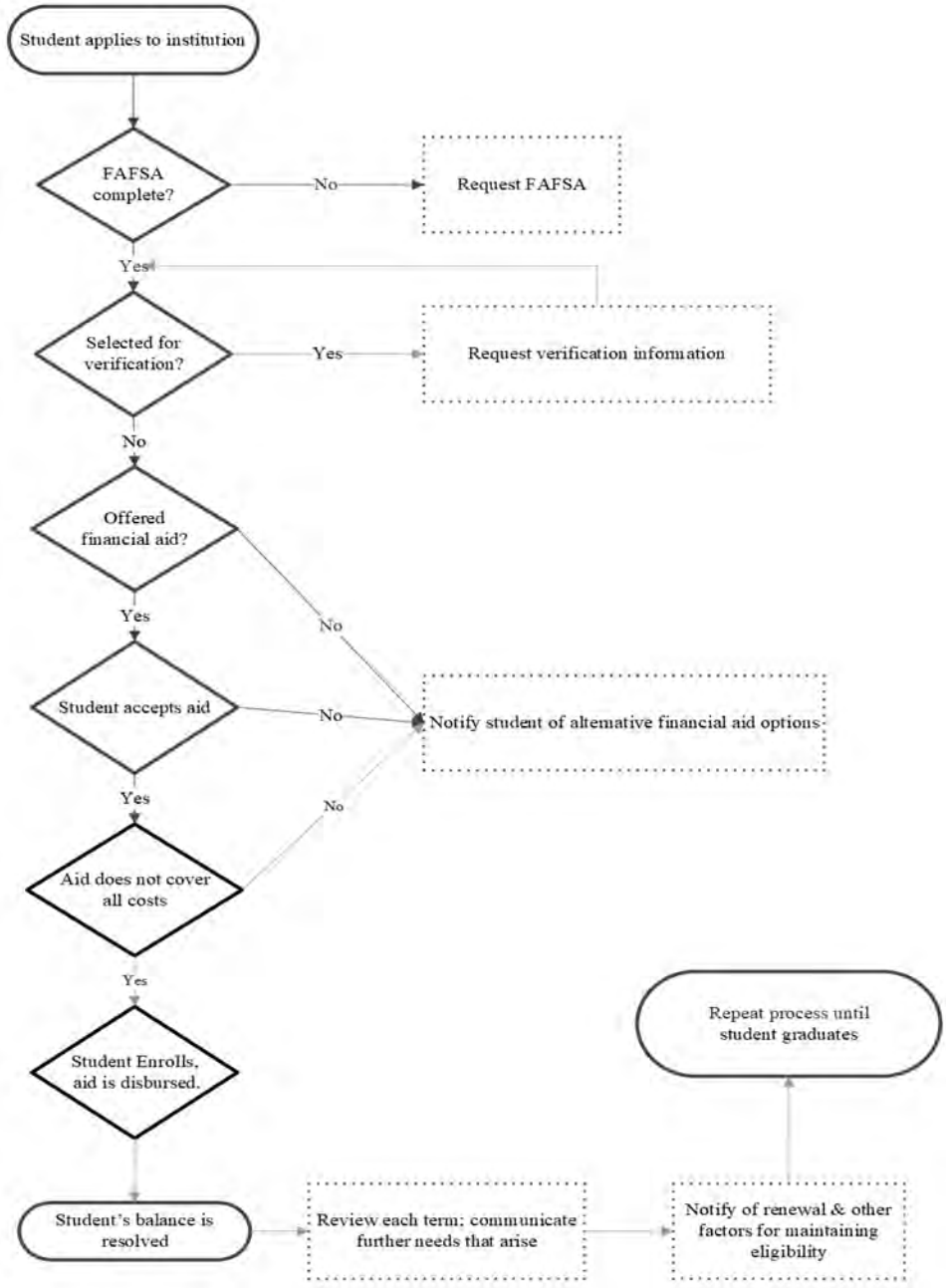
However, assumptions should not be made that once students enter the classroom, they will continue to retain the information they gained through their initial financial aid process, especially considering the myriad issues that students can face while maintaining their aid as they persist. Data and technology should be used to streamline students into communication flows that are specific to their student journey but also be flexible enough to identify variances to target and provide additional information resources and support. Students who experience homelessness, food insecurity, or are using alternative sources of funding like scholarships or veterans' benefits need supplemental communications that are timely and flow into their overall journey as identified or needed.

Navigation Focus

Once the student's journey has been determined by type, it should be navigable, ideally breaking their journey down into process-based action items. For example, the image below may serve as a basic step-by-step process map for a student. It could be translated and communicated to students in a variety of modalities, website steps, email campaigns, and other communications to clearly outline and set expectations for the steps the student will need to go through to apply for funding, be awarded, and resolve institutional balances. These clear action items should integrate data and technology to create targeted and timely communications about the students' specific next steps, serving as a model for institutional intervention. Students who pause in any portion of the process can be provided with information to explain and encourage action and progression through the process, as well as set expectations for institutional processing timeframes and next steps. An overview of this process is found in Figure 3.

Figure 3

Institutional Communication Process of Financial Aid Application, Award, and Disbursement



Simplification and Readability

Finally, financial aid communication should be clear and concise. This simplicity and readability are twofold. Communication at the sentence level can be simplified and made more

readable—using active voice, second person pronouns, and simpler sentence structures. Institutions should steer away from complex jargon and the use of acronyms that students do not understand. Institutions should also strive to minimize sentence length and, wherever possible, strive for an 8th-grade reading level to communicate the student's financial aid process. This can be accomplished using the second person. The use of "you" rather than "student" should be adopted whenever possible to acknowledge the stakeholder and personalize the steps. For example, "Once you complete the FAFSA, you may be awarded," as opposed to "Students who complete the FAFSA may be awarded," reduces the formality in these instructions and makes them more inviting. This simplification in language should be mirrored throughout all communications. Websites, emails, texts, and other forms of communication should all use the same language for each step of the student's journey to create cohesive messaging.

But communication flows can also be simplified and made more readable—allowing students to opt into preferred communication modes, sending communications in intelligible formats, and ensuring that formats like emails are not cluttered with too many graphics or that the font is large enough to be read. While maintaining ADA compliance is a must, the use of graphics and videos to quickly explain complex processes can benefit institutions and reduce the students' need to read through complex paragraphs that could be quickly explained and better retained using other media. If possible, all communications should be available in the language of preference indicated by the students or their support network; however, we acknowledge that this is not currently a widespread practice and may be difficult for some institutions to execute due to limited resources. Lastly, wherever possible, institutional contact information should be included in all forms of communication to allow students easy access to assistance should they require additional help.

Conclusion

Ultimately, this conceptual framework for institutional financial aid communications will initiate a conversation among administrators to shed additional light on the vast complexity of the financial aid process and the communications required to support students as they navigate their educational careers. Anecdotally, two of the authors of this paper have integrated elements of this study's model for financial aid communication into their operations, improving and

streamlining student-facing communication. Overall, this model prompts administrators to examine their financial aid communication and identify areas where institutions can simplify and consolidate their processes in ways that are both understandable to institutions and students. These practices help clarify communication and provide students with timely information and resources, thereby demystifying the financial aid application and awarding process.

References

Alon, S. (2005). Model misspecification in assessing the impact of financial aid on academic outcomes. *Research in Higher Education, 46*(1), 109-125. https://doi.org/10.1007/s11162-004-6291-x

Avery, C., Castleman, B. L., Hurwitz, M., Long, B. T., & Page, L. C. (2021). Digital messaging to improve college enrollment and success. Economics of Education Review, 84, 102170. https://doi.org/10.1016/j.econedurev.2021.102170

Bettinger, E., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *Quarterly Journal of Economics, 127*(3), 1205–1242. https://doi.org/10.1093/qje/qjs017

Bird, K., & Castleman, B. L. (2016). Here today, gone tomorrow? Investigating rates and patterns of financial aid renewal among college freshmen. *Research in Higher Education, 57*(4), 395-422. https://doi.org/10.1007/s11162-015-9390-y

Bird, K. A., Castleman, B. L., Denning, J. T., Goodman, J., Lamberton, C., & Rosinger, K. O. (2021). Nudging at scale: Experimental evidence from FAFSA completion campaigns. *Journal of Economic Behavior & Organization, 183*(March 2021), 105-128. https://doi.org/10.1016/j.jebo.2020.12.022

Bryant, A. V. (2016). *A Case Study for Georgia Southwestern State University: The Discrepancies of Financial Aid Services that Impact Student Enrollment* [Doctoral dissertation, Walden University]. https://www.proquest.com/docview/1796371254

Burd, S., Fishman, R., Keane, L., Habbert, J., Barrett, B., Dancy, K., Williams, B. (2018, June). *Decoding the cost of college*. New America. https://www.newamerica.org/education-policy/policy-papers/decoding-cost-college/

Castleman, B. L., & Long, B. T. (2016). Looking beyond enrollment: The causal effect of need-

based grants on college access, persistence, and graduation. *Journal of Labor Economics, 34*, 1023–1073. https://www.journals.uchicago.edu/doi/abs/10.1086/686643

Castleman, B. L., & Page, L. C. (2015). Summer nudging: Can personalized text messages and peer mentor outreach increase college going among low-income high school graduates? *Journal of Economic Behavior & Organization, 115*, 144–160. https://doi.org/10.1016/j.jebo.2014.12.008

Castleman, B. L., & Page, L. C. (2016). Freshman year financial aid nudges: An experiment to increase FAFSA renewal and college persistence. *Journal of Human Resources, 51*, 389–415. http://jhr.uwpress.org/content/51/2/389

Castleman, B. L., & Page, L. C. (2017). Parental influences on postsecondary decision-making: Evidence from a text messaging experiment. *Educational Evaluation and Policy Analysis, 39*, 361–377. https://doi.org/10.3102/0162373716687393

Castleman, B. L., Page, L. C., & Schooley, K. (2014). The forgotten summer: Does the offer of college counseling after high school mitigates summer melt among college-intending, low-income high school graduates? *Journal of Policy Analysis and Management, 33*, 320–344. https://doi.org/10.1002/pam.21743

Castleman, B. L., Meyer, K. E., Sullivan, Z., Hartog, W. D., & Miller, S. (2017). Nudging Students beyond the FAFSA: The Impact of University Outreach on Financial Aid Behaviors and Outcomes. *Journal of Student Financial Aid*, *47*(3), 4-27. https://doi.org/10.55504/0884-9153.1637

Chen, R., & DesJardins, S. (2010). Investigating the impact of financial aid on student dropout risks. Racial and ethnic differences. *Journal of Higher Education*, *81*(2), 179-208 https://doi.org/10.1080/00221546.2010.11779048

Cochrane, D.F., Hernández-Gravelle, H., Shireman, R., Asher, L., Irons, E., Luna De La Rosa, M., & Bogan, E. (2007). Green Lights and Red Tape - Improving Access to Financial Aid at California's Community Colleges. *Higher Education Policy for Minorities in the United States*. http://hdl.handle.net/10919/83339

Cochrane, D.F. (2010). After the FAFSA: How Red Tape Can Prevent Eligible Students from Receiving Financial Aid. Institute for College Access & Success. https://eric.ed.gov/?id=ED515393

Collins, B., & Dortch, C. (2022). The FAFSA Simplification Act. CRS Report R46909, Version 4. Updated. *Congressional Research Service*. https://files.eric.ed.gov/fulltext/ED617513.pdf

Daku, F. (2017). *Factors Influencing the Timing of FAFSA Application and the Impact of Late Filing on Student Finances* [Doctoral dissertation, Virginia Polytechnic University]. VTech Works. http://hdl.handle.net/10919/81073

Davidson, J. C. (2013). Increasing FAFSA Completion Rates: Research, Policies, and Practices. *Journal of Student Financial Aid, 43*(1), 38–54. https://doi.org/10.55504/0884-9153.1003

Davidson, J. C. (2015). Improving the financial aid process for community college students: A literature review of FAFSA simplification, information, and verification. *Community College Journal of Research and Practice, 39*(5), 397-408. https://doi.org/10.1080/10668926.2013.820157

Deil-Amen, R., & Rios-Aguilar, C. (2014). From FAFSA to Facebook: The role of technology in navigating the financial aid process. In A. P. Kelly & S. Goldrick-Rab (Eds.), In: *Reinventing Financial Aid: Charting a New Course to College Affordability* (pp. 75–100). Harvard Education Press.

Desjardins, S.L., & Toutkoushian, R.K. (2005). Are students really rational? The development of rational thought and its application to student choice. In J.C. Smart (ed.), *Higher Education: Handbook of Theory and Research* (Vol. 20, pp. 191–240). Kluwer Academic Publishers.

Dynarski, S. M. (2003). Does aid matter? Measuring the effect of student aid on college attendance and completion. *The American Economic Review, 93*, 279–288. https://doi.org/10.1257/000282803321455287

Dynarski, S., Scott-Clayton, J., & Wiederspan, M. (2013). Simplifying tax incentives and aid for college: Progress and prospects. *Tax Policy and the Economy, 27*(1), 161-202. https://doi.org/10.1086/671247

Dynarski, S. M., & Scott-Clayton, J. E. (2006). The cost of complexity in federal student aid: Lessons from optimal tax theory and behavioral economics. *National Tax Journal, 59*, 319–356. https://www.journals.uchicago.edu/doi/abs/10.17310/ntj.2006.2.07

Emrey-Arras, M. (2022). *Financial Aid Offers: Action Needed to Improve Information on College Costs and Student Aid* (GAO-23-104708). U.S. Government Accountability Office. https://files.eric.ed.gov/fulltext/ED628355.pdf

Erickson, W., Trerise, S., Lee, C., VanLooy, S., Knowlton, S., & Bruyère, S. (2013). The accessibility and usability of college websites: Is your website presenting barriers to potential students? *Community College Journal of Research and Practice*, *37*(11), 864-876. https://doi.org/10.1080/10668926.2010.484772

Federal Student Aid. (2022). About us. *U.S. Department of Education Office of Federal Student Aid*. https://studentaid.gov/about

Federal Student Aid. (2023). Official account of Federal Student Aid, an office of the U.S. Dept. of Education. *Twitter*. https://twitter.com/FAFSA

Hahn, R. D., & Price, D. (2008). Promise lost: College-qualified students who don't enroll in college. *Institute for Higher Education Policy*. https://files.eric.ed.gov/fulltext/ED503317.pdf

Harper, C. E., Scheese, L., Zhou, E., & Darolia, R. (2021). Who do College Students Turn to for Financial Aid and Student Loan Advice, and is it Advice Worth Following? *Journal of Student Financial Aid*, *50*(3), 1-23. https://doi.org/10.55504/0884-9153.1729

Hickman, M.K. (2015). Financial aid literacy: Minority student and stakeholder perceptions of barriers and challenges. [Doctoral dissertation, Hampton University]. *ProQuest*. https://www.proquest.com/docview/1680832966

Kane, T. (2007). Evaluating the impact of the D.C. tuition assistance grant program. *Journal of Human Resources, 42,* 555–582. http://jhr.uwpress.org/content/XLII/3/555

Kane, T.J. (1999). *The Price of Admission: Rethinking How Americans Pay for College*. Brookings Institution Press.

Kofoed, M. S. (2016). To apply or not to apply: FAFSA completion and financial aid gaps. *Research in Higher Education, 58,* 1–39. https://doi.org/10.1007/s11162-016-9418-y

Lee, J. C., Dell, M., González Canché, M. S., Monday, A., & Klafehn, A. (2021). The Hidden Costs of Corroboration: Estimating the Effects of Financial Aid Verification on College Enrollment. *Educational Evaluation and Policy Analysis, 43*(2), 233–252. https://doi.org/10.3102/0162373721989304

Marx, B. M., & Turner, L. J. (2019). Student loan nudges: Experimental evidence on borrowing and educational attainment. *American Economic Journal: Economic Policy*, *11*(2), 108-141. https://doi.org/10.1257/pol.20180279

McKinney, L., & Roberts, T. (2012). The role of community college financial aid counselors in helping students understand and utilize financial aid. *Community College Journal of Research and Practice, 36(*10), 761-774. https://doi.org/10.1080/10668926.2011.585112

Narayan, A. (2020). Does simplifying the college financial aid process matter? *Economics of Education Review, 75*(April 2020), 1-10. https://doi.org/10.1016/j.econedurev.2020.101959

National Association for College Admission Counseling [NACAC]. (2023). NACAC directory of college access and success programs. *NACAC.* https://casp.nacacnet.org/

Novak, H., & McKinney, L. (2011). The consequences of leaving money on the table: Examining persistence among students who do not file a FAFSA. *Journal of Student Financial Aid, 41*(3), 5-23. https://doi.org/10.55504/0884-9153.1012

Olson, L., & Rosenfeld, R.A. (1984). Parents and the process of gaining access to student financial aid. *The Journal of Higher Education, 55*(4), 455–480. https://doi.org/10.1080/00221546.1984.11780660

Page, L. C., & Gehlbach, H. (2017). How an artificially intelligent virtual assistant helps students navigate the road to college. *AERA Open, 3*(4), 1-12. https://doi.org/10.1177/2332858417749220

Page, L. C., Kehoe, S. S., Castleman, B. L., & Sahadewo, G. A. (2019). More than dollars for scholars: The impact of the Dell Scholars program on college access, persistence, and degree attainment. *Journal of Human Resources, 54*, 683–725. http://jhr.uwpress.org/content/54/3/683

Page, L. C., & Scott-Clayton, J. (2016). Improving college access in the United States: Barriers and policy responses. *Economics of Education Review*, *51*, 4–22. https://doi.org/10.1016/j.econedurev.2016.02.009

Perna, L. W. (2006). Studying College Access and Choice: A Proposed Conceptual Model. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (pp. 99-157). Springer.

Perna, L. W. (2010). Toward a more complete understanding of the role of financial aid in promoting college enrollment: The importance of context. In *Higher Education: Handbook of Theory and Research* (pp. 129-179). Springer.

Perna, L. W., Wright-Kim, J., & Jiang, N. (2021). Money Matters: Understanding How Colleges and Universities Use Their Websites to Communicate Information About How to Pay College Costs. *Educational Policy*, *35*(7), 1311–1348. https://doi.org/10.1177/0895904819867398

Sallie Mae. (2023). Private student loans for every type of student. *Sallie Mae.* https://www.salliemae.com/student-loans/private-student-loans/

Santistevan, R. (2019). 'The Price is Right Live' returns to Poughkeepsie in October. *The Poughkeepsie Journal.* https://www.poughkeepsiejournal.com/story/news/local/2019/08/13/price-right-live-returns-poughkeepsie/1995261001/

Schlittenhart, E. (2021). First-generation and Pell grant-eligible, navigating the financial aid verification process: A case study. [Doctoral dissertation, Northern Arizona University]. *ProQuest*. https://www.proquest.com/docview/2572565419

Scott-Clayton, J. (2011). On money and motivation: a quasi-experimental analysis of financial incentives for college achievement. *Journal of Human Resources, 46*(3), 614-646. http://jhr.uwpress.org/content/46/3/614

Scott-Clayton, J., & Zafar, B. (2019). Financial aid, debt management, and socioeconomic outcomes: Post-college effects of merit-based aid. *Journal of Public Economics, 170*, 68-82. https://doi.org/10.1016/j.jpubeco.2019.01.006

St. John, E.P., & Asker, E.H. (2001). The role of finances in student choice: A review of theory and research. In M.B. Paulsen and J.C. Smart (eds.), *The Finance of Higher Education: Theory, Research, Policy, and Practice* (pp. 419–438). Agathon Press.

Swail, W. S. (2003). Retaining Minority Students in Higher Education: A Framework for Success. *ASHE-ERIC Higher Education Report*. https://eric.ed.gov/?id=ED483024

Takatori, A., & Taylor, Z.W. (2020). Simplifying and consolidating your financial aid communication. *Trellis Company*. https://www.trelliscompany.org/portfolio-items/simplifying-and-consolidating-financial-aid-communication/

Taylor, Z.W. (2017). A Failure to Communicate: Are University Websites Readable? *IRA International Journal of Education and Multidisciplinary Studies, 8*(2), 149-163. http://dx.doi.org/10.21013/jems.v8.n2.p1

Taylor, Z.W. (2019a). Six easy steps: Do aspiring college students understand how to apply for federal aid? *Journal of Student Financial Aid, 48*(3), 2-17. https://ir.library.louisville.edu/jsfa/vol48/iss3/1/

Taylor, Z.W. (2019b). Writing dollars into sense: Simplifying financial aid for L2 students. *Journal of Student Affairs Research and Practice, 56*(4), 438-453. https://doi.org/10.1080/19496591.2019.1614937

Taylor, Z.W. & Bicak, I. (2020). First-generation college student financial aid: Results from a national financial aid jargon survey. *College Student Affairs Journal, 38*(1), 91-109. https://doi.org/10.1353/csj.2020.0006

Taylor, Z.W. (2020). Clicking in the Dark: Are Student Financial Aid Websites Accessible for Students with Disabilities? *Journal of Student Financial Aid, 49*(2), 1-17. https://doi.org/10.55504/0884-9153.1687

Taylor, Z.W., Rainey, E., Charran, C., Rainey, E., Holthaus, G., Eguiluz, L., Horne, A., Francisco, M., & Weber-Wandel, K. (2023). Talk Debt to Me: An Applied Linguistics Approach to Exploring College Student Preferences for Student Loan Debt Letters. *Journal of Student Financial Aid, 52*(1), 1-27. https://doi.org/10.55504/0884-9153.1759

Wolsey, T. (2020). Finishing the Financial Aid Process: Increasing Student Access to Higher Education In a Community College [Doctoral dissertation, Arizona State University]. https://www.proquest.com/docview/2476808941

U.S. Department of Education. (2023). 2023-2024 Federal Student Aid Handbook: Application and Verification Guide. *Federal Student Aid.* https://fsapartners.ed.gov/knowledge-center/fsa-handbook/pdf/2023-2024

U.S. Department of the Treasury. (2019). Federal financial literacy reform coordinating and improving financial literacy efforts. *U.S. Department of the Treasury.* https://home.treasury.gov/system/files/136/FFLRCoordinatingImprovingFinancialLiteracyEfforts.pdf

Venegas, K.M., & Hallett, R.E. (2008). When a group presentation isn't enough: Financial aid advising for low-income urban college-bound students. *College & University, 83*(4), 16-20. https://eric.ed.gov/?id=EJ794573