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Fake News and Libraries: How Teaching Faculty in Higher Education View Librarians' Roles in Counteracting the Spread of False Information

Fausses nouvelles et bibliothèques : la perception du corps professoral postsecondaire quant aux rôles des bibliothécaires pour lutter la diffusion de la fausse information

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Article abstract

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Abstract / Résumé

This paper reports on a survey of faculty members at California State University, Northridge (CSUN) in Los Angeles, California, regarding their attitudes about libraries' and librarians' roles in the area of fake news. This study is a continuation of a previous paper that reviewed the origins of fake news and faculty perceptions of the concept (Weiss et al., 2020). The survey results suggest that faculty members have differing views of how libraries and librarians can help them address fake news. Across disciplines, ages, and genders, faculty members' views show little belief in the use of the library or librarians to help combat fake news. Notably, only lecturers seem to have a strong view of libraries and librarians playing helpful roles in dealing with the fake news phenomenon. These findings may have future implications for librarians who attempt to address fake news with either their faculty or their students. It may be necessary to develop broader outreach and awareness programs to change traditional conceptions of academic librarians and library services, which are often conflated.

Cet article présente les résultats d'une enquête menée auprès des membres du corps professoral de la California State University, Northridge (CSUN) à Los Angeles en

Californie concernant leurs attitudes au sujet des rôles des bibliothèques et des bibliothécaires en ce qui a trait aux fausses nouvelles. Cette étude est la suite d'un autre article qui offrait un aperçu des origines des fausses nouvelles et de la perception des professeurs de ce concept (Weiss et al., 2020). Les résultats de cette enquête suggèrent que les professeurs ont des perspectives divergentes sur la façon dont les bibliothèques et les bibliothécaires peuvent aider pour lutter contre les fausses nouvelles. Quelles que soient les disciplines, les âges et les sexes, les opinions des membres du corps professoral montrent qu'ils croient peu à l'utilisation de la bibliothèque ou des bibliothécaires pour aider à combattre les fausses nouvelles. Notamment, seuls les chargés de cours semblent avoir une opinion forte que les bibliothèques et les bibliothécaires peuvent avoir un rôle utile pour contrer le phénomène des fausses nouvelles. Ces résultats peuvent avoir des implications futures pour les bibliothécaires qui tentent d'aborder les fausses nouvelles avec les professeurs et leurs étudiants. Il peut être nécessaire de développer des programmes de sensibilisation et d'information pour changer la perception traditionnelle des bibliothécaires universitaires et des services de la bibliothèque, perception qui demeure confondue.

Keywords / Mots-clés

Fake news; Misinformation; Libraries; Higher Education; Information literacy; fausses nouvelles, mésinformation, bibliothèques, enseignement supérieur, formation documentaire

Introduction

This paper builds on the research published by Weiss et al. (2020) and reports on the results of survey questions about fake news posed to faculty members at California State University, Northridge (CSUN). This paper focuses on questions regarding faculty perceptions of libraries and librarians in relation to fake news that were not covered in the previous paper by Weiss et al.

Fake news, which exists under many different names—including propaganda, misinformation, parody, satire, yellow journalism, and the like—has a long history of being used to fool or mislead unwary readers (Soll, 2016). Since 2014, however, the mention of fake news has increased dramatically, being amplified by news networks, social media platforms, and those who hold key positions or prominent profiles within those platforms (Vargo et al., 2018). The current proliferation of fake news poses a tangible problem for academic libraries and librarians in particular. Academic librarians tend to envision themselves as vigilant social moderators subject to the awe of their vocation (Ettarh, 2018); professionalized keepers of the keys to knowledge and wisdom (Dilevko, 2009); or even figures positioned at the center of an information ecosystem (or *infosphere*) and, as such, the neutral and natural arbiters of quality information (Filbert & Ryan, 2016). Unfortunately, these idealistic vocational perspectives can be problematic as there are much broader forces at play beyond the lenses through which librarians tend to view themselves. Academic libraries and librarians currently exist in a precarious position as the online world is perpetually dynamic and constantly changing, while

libraries struggle to adapt to current conditions that are increasingly unfavorable to them. Certainly, information and ideas flow freely and abundantly within the internet, but they often spread without regulation or verification. Information and data also increasingly fall under the proprietary interests of private organizations or the surveillance systems of government agencies, which are not always mutually exclusive.

Though traditionally labeled as digital natives and technologically savvy (Tapscott, 1999), university students are not impervious to information technology problems, and their levels of facility and comfort with technology are “not uniform” (Bennett et al., 2008, p. 783). The same might be hypothesized about current university students and their ability to identify fake news. Indeed, as Weiss et al. (2020) reported, teaching faculty noted that the use of questionable resources remains a common problem when working with students. To assist with these types of problems, academic libraries and librarians have endeavored to create support systems for both students and the faculty who teach them by providing information literacy instruction and support.

Yet a nagging question lingers among librarians: Are teaching faculty taking full advantage of these resources? In light of this important question, the researchers designed and distributed a mixed-methods survey aimed at investigating how faculty at CSUN address the phenomenon of fake news in their classrooms with their students. Additionally, the survey attempted to determine whether faculty use the library and academic librarians to help teach and inform their students about the issue of fake news in their assignments and research projects.

The target population for the survey recruitment was tenured, tenure-track, and term contract faculty (e.g., lecturers and adjunct faculty). This population was specifically targeted based on the hypothesis that higher education teachers would function as a front line on the issue of fake news, providing students with the critical thinking skills necessary for the ethical use and production of information.

This paper will report on and discuss the results of data analysis of survey questions regarding teaching faculty perceptions of libraries’ and librarians’ roles in addressing fake news. Our analysis demonstrates that teaching faculty’s use of both the library and services provided by academic librarians was far less common than assumed. Many teaching faculty remain unaware of how the library and librarians could help their students with the issue of fake news. Additionally, analysis has determined that there is a weak relationship between participants’ self-reported demographic characteristics, questions about fake news, and the roles of academic libraries and librarians. Moreover, analysis determined significant relationships among the various questions regarding the utilization of academic librarians and libraries when faculty teach students about fake news. This finding suggests that teaching faculty tend to view the library and librarians as providing minimal and limited support for counteracting the effects of fake news.

Literature Review

Fake News, Education, and Critical Thinking

Most definitions of fake news conceptualize it as a variation of a false news story spread for the sake of misinforming targeted audiences, a definition bound by format (i.e., the news story) and its intended purpose (Golbeck, et al., 2018; McNair, 2018). While this is true to a limited extent, it is not the definitive way to understand the phenomenon. Indeed, fake news touches upon more than misinformation, disinformation, or propaganda; it also includes parodic news stories, conspiracy theories, and so-called “alternative facts,” making it extremely difficult to identify.

Weiss, et al. (2020) provided a thorough conceptualization of fake news that shall be adopted for this paper. They examined the root causes of fake news as well as the important distinctions and types that people may encounter. They argued that the most fundamental aspect of fake news is the act of delegitimizing information itself. This more complex but comprehensive definition of the concept is defined as the “phenomenon of information exchange between an actor and acted upon that primarily attempts to invalidate generally-accepted conceptions of truth for the purpose of altering established power structures” (Weiss et al., 2020, p. 12). What is unique about this definition of fake news is that it attempts to reconcile the large number of perspectives on and causes of the phenomenon, boiling them down to an essential exchange of information. Such exchanges used to be primarily human-to-human, subject to individuals’ social pathologies, but they are now mediated and often altered or distorted by information and AI technologies in the form of bots, algorithms, and massive data-tracking scripts. The changing impact of technology at a scale beyond human capacity to manage it has made conditions ripe for the spread of fake news. In the wider context of a “post-truth” society, fake news also arises when the tethers to truth and factual information become lost or severed, often when the information technology platforms do not moderate content, are unable to identify modified digital content (e.g., deep fake videos), or cannot prevent false or falsified ideas from spreading through their information systems.

Along with such technological conditions, fake news is also propagated through specific psychological and environmental conditions that drive its spread. Fake news stems from issues of information overload (Blair, 2010; Eppler & Mengis, 2004), satisficing (Good, 2019), and the long-documented principle of least effort (Zipf, 1949), in which human cognitive and physical limits force users to stop seeking out or vetting reliable information. It also stems from the use and manipulation of logical fallacies, in which people are tricked by those implementing malicious rhetoric (Blassnig et al., 2018). It also stems from information poverty, a condition in which certain people, due to their race, gender, or socio-economic status, are less likely to have sufficient access to enough information resources to make informed decisions (Chatman, 1996); this is, incidentally, tied to the well-documented Kruger-Dunning effect, which concludes that people who are the most confident in their knowledge of a matter are often the least informed about it (Fernbach et al., 2019). Finally, fake news is also a product of political theater, in which politicians attempt to use lies, propaganda, and other false information

to carry out vengeance against political opponents, thus producing a kind of catharsis in followers of an ideology (Stodden & Hansen, n.d.).

As Weiss et al. (2020) found in their research, little consensus appears to exist among faculty in higher education regarding their own definitions of fake news. The authors speculated that this lack of consensus may contribute to how difficult it is to prevent the spread of fake news. They wrote,

what binds both sides of the fake news phenomenon—"the actors" and "the acted-upon" as we have defined them—is the suspension of disbelief coupled with the spread of false information. The two threads are indelibly intertwined, needing both sides to complete and perpetuate the cycle. However, it is important to note that the suspension of disbelief along with the spread of false information can be both willing and unwilling as well as intended and unintended. This adds to the general confusion and lack of clear understanding of what fake news really is. (p. 7)

What differs in their conceptualization of fake news is the acknowledgement that there are shifting, as well as confusing and contradictory, perspectives about what constitutes the idea of "fakeness" or "falseness" and both the social- and power-based structures involved in determining this. If truth is sometimes made malleable by the powers that be, then the motivations for creating and spreading fake news must be intertwined with who the players are within this exchange of information. In other words, the actors, who instigate fake news, and the acted upon, who receive it, cannot be ignored in the exchanges of information taking place. Indeed, one can argue that such variable and changing relationships are often central to the concept of what is fake and what is not, rendering the concept that much harder to define. Indeed, as Schoenfield (2020) suggested, personal beliefs are often socially influenced, making it even more difficult to refute erroneous thinking, even when someone recognizes this influence.

Despite the variable conception of fake news among faculty, Weiss et al. (2020) nevertheless teased out a few important patterns, arriving at useful conclusions regarding faculty teaching. First, the part-time and adjunct instructors most likely to teach lower-level classes—the ones most likely, one could argue, to directly encounter the problems associated with fake news in their classes—demonstrated the most holistic and comprehensive understanding of what comprises fake news. What this suggests is that studying lower-level college students' behavior could give us better insight into how fake news might take root. By examining faculty observations of students who typically grapple with or use fake or illegitimate news sources in their assignments, educators might get a better sense of how to counteract it through effective classroom teaching methods.

Second, because there is a notably wide conceptualization of the term among the surveyed faculty members of all ranks, Weiss et al. (2020) suggested that "students may graduate with wildly differing ideas about what constitutes fake news," (p. 25) depending entirely on whether they had professors that adequately dealt with it. Indeed, students may be fooled more easily if they are left with too incomplete an understanding

of the concept. Education, therefore, must provide a much more thorough methodology for dealing with the complex phenomena comprising fake news. There are higher stakes than individual students reaching graduation in a timely manner; these involve their life-long abilities to remain engaged and critical citizens, capable of discerning between what is true or false. Combatting the effects of fake news will be much more difficult without a more widespread comprehensive definition. Students must be encouraged by all faculty members, regardless of their rank or discipline, to “be more vigilant in their use of information” (Weiss et al., 2020, p. 25) and be wary of fake news.

Critical Thinking in Higher Education

Universities have adopted critical thinking as an essential goal for their students' education. Renaud and Murray (2008), for example, asserted that in an increasingly complex information-based society, citizens must learn to base judgments and decisions upon credible evidence. The benefits of focusing on critical thinking are numerous, including improved regulatory judgment (Behar-Horenstein & Niu, 2011); the ability to evaluate arguments and resolve conflicts in order to make rational determinations on difficult and sometimes intractable problems (Allegretti & Frederick, 1995); and greater awareness of social forces that may marginalize and restrict humans' lives and their freedom (Davies & Barnett, 2015). Critical thinking can also neutralize the negative effects of fake news. Cooke (2017) and Giroux (2018) argued that critical thinking would allow information users to maintain the necessary level of skepticism to render fake news impotent; Giroux, especially, made the case for educators to advocate critical thinking over skills training in universities in order “to recognize the power of education in creating the formative cultures necessary to both challenge the various threats being mobilized against the ideas of justice and democracy” (p. 206). Such threats include a “culture of commercialization, commodification, and narrow market-driven values” (Giroux, 2018, p. 205) that, we would argue, extends into online cultures and the monetization of information, leading in turn to misinformation, fraud, and the proliferation of fake news. Yet, as in the case of fake news, the definition and implementation of critical thinking is hardly uniform (Egan, 2019). Some doubt its overall effectiveness on students (Tsui, 2002); some believe it is overly bound by disciplinary borders (Behar-Horenstein & Niu, 2011); others consider it an ad-hoc grouping of disparate but general skills that can only be taught separately (Ennis, 1989). Despite these criticisms of the concept, it is clear that critical thinking can nonetheless be employed in reasonable and effective ways against the negative effects of fake news.

Information Literacy and Libraries: The ACRL *Framework*

Librarians have traditionally championed information literacy as a way to help users find and use library resources, especially in teaching one-shot sessions (one-time instruction sessions for students, usually the length of one classroom session) or short library courses. One of the main pedagogical lenses used in library and information science is the Association of College and Research Libraries (ACRL) *Framework for Information Literacy for Higher Education*. The advantage of the ACRL *Framework* is its provision of a pedagogical shorthand that introduces “new mental models to novice learners in a

short period of time” (Gofman, 2019, p. 12). The *Framework* itself comprises the following six assertions about information that help librarian-instructors impart information literacy to their students: 1) scholarship is a conversation; 2) authority is constructed and contextual; 3) research is inquiry; 4) information creation is a process; 5) information has value; and 6) searching is strategic exploration (Miller, 2018). The *Framework* has been generally adopted in libraries with a fair amount of acceptance, though some disciplines such as health sciences initially held lower adoption rates than others (Schulte & Knapp, 2017). The wide adoption of this *Framework*, however, has made criticism of it within certain library circles somewhat difficult, especially because it has been adopted as a foundational text for many reference and instruction services. Yet as Burkholder (2019) suggested, librarians “may be unprepared to teach research in the ways described by the *Framework*” (p. 296). As we dig deeper into the assertions in the *Framework*, several concerns arise. The first is that the *Framework* does not seem to account for the reality of most librarian teaching, which is primarily done in one-shot lessons, which are considered by librarians to be the “quintessential component of library instruction” (Wang, 2016, p. 620). The ACRL (2016) has suggested, however, that “the *Framework* is not designed to be implemented in a single information literacy session in a student’s academic career; it is intended to be developmentally and systematically integrated into the student’s academic program at a variety of levels” (para. 5). This calls into question the usefulness of the *Framework* if it is unable to meet the basic needs of its primary users. Indeed, as Wengler and Wolff-Eisenberg (2020) showed, despite librarians’ generally favorable impression of the *Framework*, it has effected little change in how they conduct their instruction sessions. Gross et al. (2018) provided an in-depth look at the positive and negative attitudes held by librarians regarding the *Framework*, suggesting that “full implementation of the *Framework* may require a restructuring of how information literacy education is approached” (p. 262), especially within the one-shot lesson environment.

Furthermore, the *Framework*’s focus on the value of information is not as clear-cut as it seems. As Beatty (2014) suggested, information in a marketplace “has value only to the point that the owner and the purchaser agree it does; moreover, that value is constantly compared to the value of other pieces of information” (Marketplace Rhetoric section, para. 2). Allowing money to be the ultimate decider of information’s value becomes an arbitrary assignation of importance. In an era of widespread surveillance capitalism (Zuboff, 2015), to focus on the financial value of information, yet ignore the role that libraries potentially play in supporting a surveillance-capitalist system, is egregious. The reality of libraries directly supporting surveillance capitalism is not as far-fetched as it seems on the surface. Major library database vendor Elsevier, for example, has been collecting and selling user data even as it markets its database products to libraries and other educational organizations (Lamdan, 2019). The information marketplace within which libraries operate is exploitative, capable of compromising personal privacy, distorting facts, fostering fake news, and suppressing truth for financial gain. Libraries have yet to fully reckon with their roles in this system.

They also have yet to reckon sufficiently with fake news. Several authors have looked to the ACRL *Framework* in the context of fake news (Becker, 2016; Lowrie & Truslow, 2017; Musgrove et al., 2018; Neely-Sardon & Tignor, 2018). Additionally, Faix & Fyn

(2020) proposed a holistic approach to the problem of misinformation that suggests looking to the ACRL *Framework*

for guidance on teaching students to question and think critically about sources. ... Although the *Framework* is not an ideal fit for evaluating all nonacademic content, it has many of the pieces needed to effectively evaluate sources regardless of the situation. (p. 506)

Therefore, despite some of the inherent issues with the *Framework* identified by researchers and librarians alike, it will remain a potentially flexible tool once it is reworked to be more effective within the realm of misinformation and fake news.

The Role of Librarians in Academia

In US higher education institutions (HEI), academic librarians tend to play a peripheral role in relation to instruction, typically providing basic bibliographic instruction that focuses on accessing resources and citation conventions, rather than instruction in the form of credit-bearing courses. Currently, academic librarians do not teach credit-bearing courses at most HEI, including CSUN. Rather, as with most HEI in the US, librarians are relegated to teaching one-shot library instructional sessions on an on-demand basis (Wang, 2016). These types of sessions are significantly less impactful than credit-bearing courses (Badke, 2005; Hollister & Coe, 2003). Moreover, library instructional sessions are largely dependent on the preferences of the teaching faculty who request them. The content to be covered and the amount of time allotted for the session is dependent on the faculty member soliciting the session. This dynamic can set librarians apart from teaching faculty and means that librarians may not function as fully professional and autonomous educators able to make independent and theoretically founded choices in teaching (Torrás & Sætre, 2009). Additionally, the dynamic results in academic librarianship being viewed as a largely service-oriented and, at times, subordinate profession (Torrás & Sætre, 2009).

Recent figures from the American Library Association (ALA, 2018) demonstrate that academic librarians currently hold faculty status at approximately 50% of HEI in the United States. The vast majority of the academic librarians who hold this status work at state universities, and rarely at R1 institutions (Torrás & Sætre, 2009). Werrell and Sullivan (1987) asserted that faculty status for academic librarians has never truly paralleled the privileges afforded to teaching faculty, specifically in the areas of pay, flexible schedules, and release times. This lack of parity with teaching faculty is further complicated by the negative image and ambiguity surrounding librarians' roles in academia. The situation is further deteriorated by the fact that librarians are not viewed as authentic scholars, and librarianship is viewed by many within academia as a largely service-oriented profession (Freedman, 2014; Galbraith et al., 2016). Scholarly articles written by non-librarians often emphasize that librarians are not genuine educators and thus are not qualified to hold faculty status (Polger & Okamoto, 2010). A common motif among such articles is the idea that librarians only inform students rather than teach them. Teaching faculty are viewed as content experts who both generate and disseminate information. Conversely, librarians are envisioned as generalists who

primarily react to information (Peele, 1984; Wilson, 1979). In short, academic librarians are viewed as reacting to content, rather than creating and disseminating it. This perspective has had a profound impact on the profession of librarianship in relation to instruction. Christiansen et al.'s (2004) work illustrates that this type of perspective results in teaching faculty viewing academic librarians as subordinate. The assertion is supported by Alwan et al. (2019), who demonstrated that this perspective can result in status-based microaggression perpetrated by teaching faculty against academic librarians.

As subordinates, academic librarians are often perceived as para-academics, who are unable to independently define their educational role. This assertion is supported by the fact that most teaching faculty and university administrators continue to have little understanding of the skills and qualifications of academic librarians. Indeed, Badke (2005) demonstrated that faculty often fail to distinguish between professionals and non-professionals in academic libraries at their own institutions and often have little understanding of academic librarians' roles, skills, and qualifications. The lack of understanding of librarians' roles and functions has inevitably impacted the status of librarians in higher education and has resulted in their functioning as a subordinate or misunderstood group (Alwan et al., 2019; Christiansen et al., 2004; Torras & Sætre, 2009).

The status of librarians in academia is also heavily influenced by the historical progression of the profession. Until the early 20th century, academic libraries within the United States drew upon members of the faculty body when seeking custodians for their manuscript collections (Walters, 2016). Academic libraries were typically operated by individuals who considered themselves scholars, but not necessarily librarians. However, as time progressed the role of librarians became more distinct, and by the post-war era it had transformed completely into a low-status clerical position largely dominated by women (Hill & Hauptman, 1986). The women who typically filled these positions had little formal training in librarianship (McAnally, 1975) and were viewed as exemplars of servility and service (Ettarh, 2018). With the evolution of the pedagogical underpinnings of academia, the roles of academic librarians started to transform, becoming clearer and more distinguished. This was due in large part to the increased emphasis on the use of the library's resources in courses, which necessitated formally trained and knowledgeable staff (McAnally, 1975). The profession remains highly impacted by its historical context. In popular culture, librarians are still portrayed as stereotypical submissive women. This characterization, in addition to the ambiguity about their roles, leaves librarians in a precarious position in relation to instruction.

Differences in Pedagogy Between Academic Librarians and Teaching Faculty

In higher education, the primary example of disseminating information has traditionally been the one-way communication style of the lecture. Pedagogy within higher education appears to stem from a long-standing notion that "anyone who could read and write could show others how to do it" (Cohen, 1998, p. 13). The long-used "banking model," as Freire (2000) described it, suggests the teacher's role is to "deposit" information into the minds of students. These general approaches to education suggest that students

are still expected and required to read, memorize, and recite in order to demonstrate that learning has occurred.

Over the years, however, educators have become more open to accepting alternate methods to help students learn. This transition has influenced the way teaching faculty structure and deliver their course content (Pamuk, 2012). As Lane (2013) suggested, “the current trend is shifting away from more instructivist methods, such as lecture and presentation, to more constructivist approaches, where students participate actively in creating their own learning through experiences” (p. 5). Through this newer understanding of students’ learning capabilities, faculty have been able to better achieve their desired goals and objectives for their courses (Ascough, 2002). As Shulman (1986) presaged back in the 1980s, the days in which a faculty member’s teaching abilities are based on whether students can consume and recite subject matter are numbered. The new understanding of student success has become a driving force behind this pedagogical shift. Freire (2000), for example, asserted that the educator and the student can learn through a more democratic process within the classroom. Within this environment, participatory and relational learning allow both student and educator to benefit from each other through the cross-dissemination of knowledge. Belenky et al. (1986) proposed that providing the space for students to flourish within the framework of connected teaching would allow students to voice their thoughts and beliefs within an education setting that would be supported by the community.

While faculty members’ pedagogical conceptions often emerge from their perceived positions of authority within the university, academic librarians’ conceptions, in contrast, often stem from their perceptions as members of a service group. This difference comes from well-established library school pedagogy, which stresses the balance between striving to meet patron information needs and the need to respect privacy and neutrality (Maack, 1997). Additionally, Buttlar and Du Mont (1989) have argued that whereas faculty may potentially keep students at a distance through the traditional lecture model, academic librarians strive to foster brief but coequal relationships with patrons in order to better assist them in information-seeking behaviors. Furthermore, when comparing the positions of teaching faculty to academic librarians on the issue of pedagogical training, teaching faculty appear to be more exposed to various educational theories than academic librarians. Despite information literacy being integrated—albeit slowly—into library school course curriculums, many reference and instructional librarians still appear to lack sufficient pedagogical knowledge and instructional training compared to teaching faculty (Hall, 2013).

The differences in pedagogical preparation and knowledge between teaching faculty and academic librarians can place them at odds with each other. Equipped with an awareness and understanding of a variety of pedagogies to employ within the classroom, teaching faculty may perceive academic librarians as one-dimensional because they are grounded in a narrower, service-oriented approach. As pedagogy has evolved over the years, and as educators have become more student-centered, academic librarians need to become more familiar with the various educational theories that now exist (Walter, 2006; Wheeler & McKinney, 2015). However, as long as many academic librarians continue to believe they are primarily academic support staff rather

than teachers, the disconnect between teaching faculty and academic librarians will likely persist. This may ultimately cause problems for combating information's grey areas, such as misinformation, disinformation, and fake news, which together greatly test the trusted bonds within the information lifecycle and serve to weaken ties to the truth. Without tighter bonds between librarians and teaching faculty developed through shared pedagogical approaches, problems with fake news may persist among students and graduates ill-equipped to deal with them (Weiss et al., 2020).

Methodology

To further investigate how teaching faculty address the issue of fake news in their research and with their students in the classroom, we developed a study in the form of a survey (see Appendix). An institutional review exemption was provided for the study by the CSUN Office of Research and Sponsored Programs in October 2017. We deployed a mixed-methods survey containing both quantitative- and qualitative-style questions, using an online survey tool. The target population was identified as tenured and tenure-track teaching faculty as well as faculty on term contracts, such as lecturers and adjunct faculty, currently employed at CSUN. The population was selected based on the hypothesis that educators, especially in higher education institutions, function as an educational front line with respect to fake news by teaching students the critical thinking skills needed for being ethical consumers and creators of information (Giroux, 2018).

Although fake news has been a topic of significant discussion and has received a great amount of attention since the 2016 US presidential election, there has been limited research on how faculty address the issue within their classrooms. Therefore, when designing the survey instrument, we were forced to rely on both the literature and our own professional experience of how students interact with information resources in the classroom. We implemented a "purposeful-random" sampling methodology (Palinkas et al., 2015) in order to ensure information-rich responses related to fake news in academia. This sampling method involves randomly choosing participants from a predetermined smaller pool of the population, which in this case is the limited number of CSUN faculty members (approximately 2023, with 840 full-time and either tenured or tenure-track). The methodology was selected for its ability to ensure the identification and selection of prospective participants who were particularly knowledgeable about or experienced with the phenomenon of fake news. This method would be most appropriate in a study with a clearly identified target population, and it allowed us to maximize efficiency and validity in the process. Although several purposeful sampling designs are available, we determined that similarity between participants and overall homogeneity of the target population would suit this study best. However, despite the emphasis on homogeneity, we were confident that our strategy would facilitate analysis of variation within the target population. We achieved this by identifying commonalities and variances in the way teaching faculty with particular demographics (e.g., discipline, college, department, rank, age, and gender) dealt with the issue of fake news in their own research and as educators.

The survey comprised a variety of question types including yes and no, Likert scale, closed-ended, and open-ended questions. In Likert-scale questions, we provided

participants with a six-point scale ranging from either “very frequently” to “never” or “strongly disagree” to “strongly agree,” with both types including an “N/A” (not applicable) option. The survey included a total of 28 questions divided into four sections: Demographics, Personal Views, In the Classroom, and Role of the Library:

1. Demographics: Questions regarding age, gender, college, department, and academic rank.
2. Personal Views: Questions regarding participants’ definitions of fake news, how they interacted with fake news in their personal lives and research, whether they felt susceptible to the phenomenon, how they vetted information, and where fake news was most commonly encountered.
3. In the Classroom: Questions regarding how participants addressed fake news in the classroom, whether their students interacted with fake news, whether their students encountered fake news, whether certain students were more vulnerable, how instructors taught about vetting information, and the tools and resources provided to students.
4. Role of the Library: Questions regarding how participants interacted with the university’s library and librarians to help inform or teach students about fake news, whether the library offered reliable resources, whether the library and librarians provided adequate support in relation to fake news, and how the library could improve its services, tools, or resources.

We initially intended to send the survey tool to all teaching faculty at CSUN, in an effort to address the issue of range of variation in the sample population, a real concern when using purposeful sampling. We were notified by the director of the CSUN Office of Institutional Research (IR) that blanket dissemination to all faculty would not be feasible due to the university’s current policies on campus-wide surveys. Instead, IR graciously provided a randomized subsample of 400 teaching faculty (i.e., 18.88% of CSUN faculty), with an equal number of tenure-track faculty and adjuncts and lecturers drawn from all 10 colleges at CSUN. The survey was formally launched by campus IT with the release of a formal email to all 400 faculty on January 19, 2018. Entitled “Fake News Faculty Survey,” the survey remained available to participants for four weeks and received a total of 69 responses from faculty in various colleges and departments across CSUN.

For this paper, we have selected five questions from the survey (See Appendix for full list of survey questions):

23. “Do you use the Oviatt Library’s resources/services to teach or inform your students about fake news?” (herein: “Use of the library’s resources”)
24. “Do you collaborate with librarians to teach or inform your students about fake news?”; (herein: “Collaborate with librarians”)
25. “Do you feel the Oviatt library has reputable and trustworthy sources?”; (herein: “Reputable and trustworthy sources”)

26. “Do you feel librarians offer sufficient support related to fake news?”; (herein: “Librarians’ support”)

27. “Do you feel the Oviatt Library offers sufficient support related to fake news?” (herein: “Library support”)

These five questions are taken from the survey section entitled “Role of the Library.” We selected them in order to determine the relationships between these questions and select demographic data of discipline, college, department, rank, age, and gender. We used SPSS software to run the cross-tabulations for these questions. These five questions provide us with an invaluable perspective on how faculty at CSUN interact with the library when attempting to address the topic of fake news with their students.

Results

Quantitative Analyses

Cross-tabulations and correlations were used to determine whether associations existed between questions 23 through 27 and the demographic variables. For the cross-tabulations, graphs were only included if the chi-square test revealed a significant association. The results of all chi-square tests are reported in Table 1. Because the department variable was too granular, it was not included for further analysis.

Cross-tabulations

Questions 23 (Use of library’s resources), 24 (Collaboration with librarians), 25 (Reputable and trustworthy sources), 26 (Librarians’ support), and 27 (Library support) were analyzed using a cross-tab and chi-square analysis, to determine whether there was a relationship between these questions and the demographic data (i.e., age range, gender, college, and rank).

- **Q 23 (Use of library’s resources)** The cross-tab analyses for age range, gender identity, and rank as they relate to question 23 determined that these variables were not significantly associated with question 23. The cross-tab analysis for college and question 23 determined that college and response-type to question 23 were significantly associated, $\chi^2(32, n = 55) = 48.79, p = .03$.
- **Q 24 (Collaboration with librarians)** The cross-tab analyses for age range, gender identity, college, and rank as they relate to question 24 were not significantly associated.
- **Q 25 (Reputable and trustworthy resources)** The cross-tab analyses for age range, gender identity, college, and rank as they relate to question 25 were not significantly associated.
- **Q 26 (Librarian’s support)** The cross-tab analyses for age range, gender identity, college, and rank as they relate to question 26 were not significantly associated.

- **Q 27 (Library support)** The cross-tab analyses for age range, gender identity, college, and rank as they relate to question 27 were not significantly associated.

Table 1

Chi-square Values Between Demographic Variables and Questions 23 to 27

<u>Survey Question</u>	<u>Demographic Variable</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Q23 (n = 55)	<i>Age range</i>	15.07	20	0.77
Q23	<i>Gender</i>	5.40	4	0.25
Q23	<i>College</i>	48.79	32	0.03
Q23	<i>Rank</i>	9.39	12	0.67
Q24 (n = 54)	<i>Age range</i>	24.07	20	0.24
Q24	<i>Gender</i>	2.17	4	0.70
Q24	<i>College</i>	40.89	32	0.14
Q24	<i>Rank</i>	7.27	12	0.84
Q25 (n = 53)	<i>Age range</i>	12.59	20	0.89
Q25	<i>Gender</i>	3.58	4	0.47
Q25	<i>College</i>	31.87	32	0.47
Q25	<i>Rank</i>	7.23	12	0.84
Q26 (n = 41)	<i>Age range</i>	13.23	16	0.66
Q26	<i>Gender</i>	3.72	4	0.45
Q26	<i>College</i>	38.98	32	0.19
Q26	<i>Rank</i>	12.09	12	0.44
Q27 (n = 42)	<i>Age range</i>	15.54	16	0.49
Q27	<i>Gender</i>	3.70	4	0.45
Q27	<i>College</i>	35.86	32	0.29
Q27	<i>Rank</i>	10.76	12	0.55

Correlations

Initially, questions 23 through 27 used a continuous Likert scale. Based on the frequencies in response type for questions 23 through 27, the data reflected an ordinal scale (because there is a lack of range in response type), and ordinal-scale data were analyzed using Spearman correlations. If the data were continuous, then a Pearson correlation would have been used instead.

Therefore, Spearman correlations were used to determine whether relations existed among the demographic variables and questions 23 through 27 (see Table 2). Most of the correlations between the demographic variables and questions 23 through 27 were not significant. College was correlated with age, gender, and academic rank ($r_s = -.29$, $p = .02$; $r_s = -.26$, $p = .03$; and $r_s = .45$, $p < .001$, respectively). Academic rank and question 26 (Librarians' support) had a moderate correlation, $r_s = .39$, $p = .01$. College and question 26 also had a moderate correlation, $r_s = .36$, $p = .02$.

Table 2*Spearman Correlations (n = 69)*

<u>Variables</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
1. Age	-								
2. Gender	-.02	-							
3. Academic Rank	-.23	-.001	-						
4. College	-.29*	-.26*	.45**	-					
5. Q23 ¹	.03	-.16	-.12	.19	-				
6. Q24	-.05	-.04	-.16	.07	.66**	-			
7. Q25	-.14	.01	.05	.04	.09	.01	-		
8. Q26	.04	-.15	.39*	.36*	.22	.24	.30	-	
9. Q27	.09	-.15	.29	.22	.16	.16	.32*	.85**	-

Three pairs of questions had significant correlations and the rest did not. Question 23 (“Do you use the Oviatt Library’s resources/services to teach or inform your students about fake news?”) and question 24 (“Do you collaborate with librarians to teach or inform your students about fake news?”) were significantly correlated, $r_s = .66$, $p < .001$. Question 25 (“Do you feel the Oviatt Library has reputable trustworthy sources?”) and question 27 (“Do you feel that the Oviatt Library offers sufficient support related to fake news?”) were weakly correlated, $r_s = .32$, $p = .041$. Lastly, question 26 (“Do you feel librarians offer sufficient support related to fake news?”) and question 27 (“Do you feel that the Oviatt Library offers sufficient support related to fake news?”) were significantly correlated, $r_s = .85$, $p < .001$.

Discussion

Relevant Cross Tabulations

In the following section, we will discuss cross-tabulations between questions 23 through 27 and select demographics. The discussion will focus on questions that demonstrate statistical significance.

The cross-tabulation for question 23 (Use of library resources) only showed a statistical significance in relation to the demographic question of respondent’s home college (see

¹ Note. Question 23: “Do you use the Oviatt Library’s resources/services to teach or inform your students about fake new?” Question 24: “Do you collaborate with librarians to teach or inform your students about fake news?” Question 25: “Do you feel the Oviatt Library has reputable trustworthy sources?” Question 26: “Do you feel librarians offer sufficient support related to fake news?” Question 27: “Do you feel that the Oviatt Library offer sufficient support related to fake news?”

* $p < .05$,

** $p < .01$.

Figure 1). The analysis determined that many teaching faculty do not perceive the library as the primary entity that can assist their students with the issue of fake news. Faculty from two of the nine colleges on campus reported never using the library. In the remaining colleges, half of the faculty surveyed reported never using the library, while the other half reported a spectrum of usage rates between rarely and very frequently.

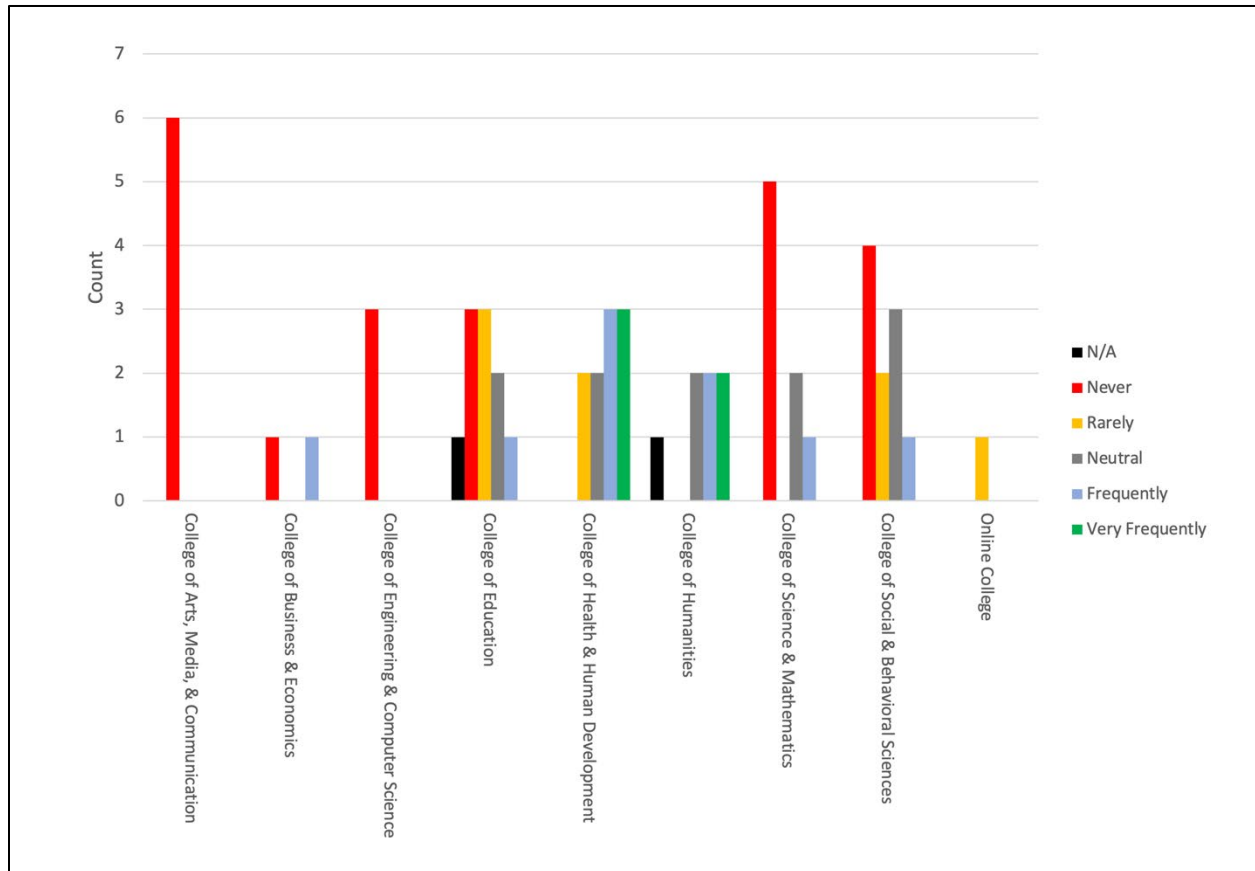


Figure 1. Library usage rate to help teach students about fake news based on CSUN's colleges.

This is disconcerting because librarians generally view the library as a provider and mediator of information meant to establish a firm foundation for the sharing of knowledge (Christiansen et al., 2004). However, if reality and knowledge are socially constructed, as Berger and Luckman (1966) asserted, then libraries' roles within society may be marginalized by fake news' delegitimization of information, especially if faculty and other stakeholders on campus perceive the library as irrelevant to combating the problem of false information.

The issue is further compounded by the fact that a clear disconnect exists between the views of teaching faculty on the role of the academic library, and the views of academic librarians. The ALA, the premier library professional association in North America, makes it clear that libraries must evolve from institutions perceived primarily as repositories of books to entities that users perceive as providing pathways to high-quality information (Neal, 2014). Moreover, librarians and library staff must move

beyond a mindset of ownership and control to one that attempts to provide service and guidance in more productive ways, helping students and faculty find and use information that may be available through a range of resource types (ACRL, 2007). Although academic libraries are quickly moving in this direction, teaching faculty may still view academic libraries—and librarians by extension—as nothing more than storehouses for information, not as organizations actively contributing to shared knowledge and socially constructed realities.

Relevant Correlations

Participants with higher academic ranks were more likely to disagree or strongly disagree when answering question 26, which asked, “Do you feel librarians offer sufficient support related to fake news?”. The analysis determined that lecturers were more likely to state that academic librarians provided them with sufficient support related to fake news. We speculate that the favorable view of lecturers towards academic librarians may result from the fact that lecturers teach the bulk of lower-level undergraduate courses at CSUN. Lecturers may more frequently encounter students dealing directly with the issue of fake news and, as a result, discuss it in their classes (Weiss et al., 2020). Moreover, because many students taught by lecturers are likely in their first or second year of study, they may be more susceptible to inadvertently using questionable sources. Encountering such questionable sources in their students’ assignments would also potentially compel lecturers to develop assignments that require students to learn how to vet the information they encounter. The difference in responses between lecturers and tenure-track teaching faculty may also be the result of lecturers focusing on teaching when responding to this question, while tenure-track faculty may have been thinking of their own research.

Additionally, the lack of collaboration between higher ranking faculty and academic librarians could arguably result from overconfidence (Simms & Johnson, 2016). Faculty may come to believe librarians are not as qualified as they are to address fake news, especially if the topic falls within their own discipline. However, to be fair, Perez-Stable et al., (2020) found that “collaboration may depend on the relationship that teaching faculty and subject librarians have developed over time, particularly if it has been a long-standing alliance” (p. 65). Finally, although correlations between college and the demographic variables and between college and question 26 (Librarian support) were shown to be significant, given the variation in response type based on college, it can be concluded that these are spurious relationships.

The correlation analysis revealed a significant correlation between question 23 (Use of library resources) and 24 (Collaboration with librarians). It appears that when respondents selected “Never” in response to question 23, they were more likely to select “Never” in response to question 24. According to Gonzales (2001), these results are not unusual: other studies on library usage have reported that the frequency with which a teaching-faculty member uses a library is positively related to the decision to collaborate with a librarian to offer library instruction in their classes. It is therefore possible that local conditions on campus, rather than specific previous experiences, can influence a faculty member's attitude towards the library. Furthermore, librarian

identities are frequently conflated with the organizations they work within (Hicks, 2016). If librarians construct their identities by conflating “library” with “librarian” via metonymic slippage, it stands to reason that those working in academia but outside libraries might do the same. There is, of course, a double-edged sword to this kind of identity construction and metonymic slippage that librarians have undoubtedly encouraged over the decades. While the conflation creates and hones their professional image by associating the librarian with the building and its services, it also shoehorns librarians into being seen as the library, and the library into being seen as librarians. This can be especially problematic if some librarians hope to be seen as coequal educators on a university campus rather than just the representatives of a library’s service desks or the inhabitants of its building.

The correlation analysis for question 25 (Reputable and trustworthy resources) demonstrated a weak correlation to question 27 (Library support). The more strongly participants agreed about the Oviatt Library having reputable trustworthy sources, the more likely participants were to select “Strongly Agree,” “Agree,” or “Neutral” about the Oviatt Library offering sufficient support related to fake news. It is clear, then, that these specific respondents believed the quality of resources was connected to the level of service provided in relation to fake news. However, it is difficult to speculate why this relationship exists, because the neutral option cannot be parsed definitively.

The correlation analysis for question 26 (Librarians’ support) determined that the more participants selected “Agree” or “Neutral” about librarians offering sufficient support related to fake news, the more likely they were to select “Agree” or “Neutral” for question 27 about the Oviatt Library offering sufficient support. The statistical relationship between these two questions further supports the assertions we make about the conflation of library and librarian identities. Teaching faculty appear to be consistent in their conflated perceptions of the services provided by the library and the services provided by librarians.

On a final note, upon reviewing the data for this correlation, we noticed that a significant number of participants selected “Neutral.” This was somewhat surprising, given the assumption of many librarians that the library is perceived as being generally supportive in providing vetted and reliable information and combating false information. One possibility is that the neutral respondents did not know exactly what academic librarians do or what services the library offers either regarding fake news or in general. Yet if this were the case, we assumed that an increase of negative responses should have been selected. Another possibility is that librarians are not properly engaging in outreach efforts to faculty members regarding fake news. The faculty members who selected “Neutral” might not have known about the availability of the librarians and resources to combat fake news.

Limitations

This study has several limitations. First, we surveyed only one institution (a master’s degree-granting university [M1] in California), which could affect how representative the sample would be for other higher education institutions. Second, because of the limited

number of respondents, the study may not have completely captured the range of ideas and interpretations of fake news among teaching faculty. Third, the study was impacted by the university's mandate regarding surveys, and its policy to restrict the number of faculty to which the survey could be sent. As a result, only 400 faculty members received an invitation to participate in this study. Fourth, we must acknowledge that survey participants were self-reporting their perceptions about fake news. Fifth, researcher bias may have impacted the development of the survey and decisions about how to organize the questions.

Future Directions

This paper has examined solely the questions focusing on how faculty at CSUN interact with the library when attempting to address the topic of fake news with their students. While this has been a promising start, future directions for this research would need to include an examination of specific disciplines in more detail. A wider sample, perhaps at other higher education institutions, would also provide more fruitful results. Direct observations, focus groups, and other primary evidence-gathering techniques would also help to supplement our original data. The authors intend to examine other disciplines in detail with larger populations to determine whether discipline-specific norms impact how fake news is perceived.

Conclusion

The results suggest that faculty members at CSUN have divergent views of how the library and librarians can help them address fake news. Across disciplines, ages, and gender, faculty members' views seem to show little belief in the use of the library or librarians to help them combat fake news. Among the faculty ranks, only lecturers seem to have a strong view of libraries and librarians as able to play a helpful role in the fake news phenomenon. This may have future implications for librarians who attempt to address fake news with either their faculty or their students. Therefore, it may be necessary to develop broader outreach and awareness programs to help change some traditional conceptions of the oft-conflated library and librarian roles in institutions of higher education.

References

- Allegretti, C. L., & Frederick, J. N. (1995). [A model for thinking critically about ethical issues](#). *Teaching of Psychology*, 22(1), 46–48.
- Alwan, A., Doan, J. M., & Garcia, E. P. (2019). Librarians at the forefront of IL efforts with international students in higher education. In Y. Luckert & L. I. Carpenter (Eds.), *The globalized library: American academic libraries and international students, collections, and practices* (pp. 3–18). ACRL.

- American Library Association. (2018). [*ACRL releases 2017 Academic Library Trends and Statistics.*](#)
- Ascough, R. S. (2002). [*Designing for online distance education: Putting pedagogy before technology.*](#) *Teaching Theology & Religion*, 5(1), 17–29.
- Association of College and Research Libraries. (2007, February 13). [*Changing roles of academic and research libraries.*](#)
- Association of College and Research Libraries. (2016). [*Framework for Information Literacy appendices.*](#)
- Badke, W. B. (2005). [*Can't get no respect: Helping faculty to understand the educational power of information literacy.*](#) *The Reference Librarian*, 43(89–90), 63–80.
- Beatty, J. (2014, September 24). [*Locating information literacy within institutional oppression.*](#) *In the Library With the Lead Pipe*.
- Becker, B. W. (2016). [*The librarian's information war.*](#) *Behavioral & Social Sciences Librarian*, 35(4), 188–191.
- Behar-Horenstein, L. S., & Niu, L. (2011). [*Teaching critical thinking skills in higher education: A review of the literature.*](#) *Journal of College Teaching & Learning*, 8(2), 25–42.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). *Women's ways of knowing: The development of self, voice, and mind* (Vol. 15). Basic Books.
- Bennett, S., Maton, K., & Kervin, L. (2008). [*The "digital natives" debate: A critical review of the evidence.*](#) *British Journal of Educational Technology*, 39(5), 775–786.
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Double and Company.
- Blair A. M. (2010). *Too much to know: Managing scholarly information before the modern age*. Yale University Press.
- Blassnig, S., Büchel, F., Ernst, N., & Engesser, S. (2018). [*Populism and informal fallacies: An analysis of right-wing populist rhetoric in election campaigns.*](#) *Argumentation*, 33(1), 107–136.
- Burkholder, J. M. (2019). [*Interpreting the conventions of scholarship: Rhetorical implications of the ACRL Framework.*](#) *portal: Libraries and the Academy*, 19(2), 295–314.

- Buttlar, L., & Du Mont, R. R. (1989). [Assessing library science competencies: Soliciting practitioner input for curriculum design](#). *Journal of Education for Library and Information Science*, 30(1), 3–18.
- Chatman, E. A. (1996). [The impoverished life-world of outsiders](#). *Journal of the American Society for Information Science*, 47(3), 193–206.
- Christiansen, L., Stomble, M., & Thaxton, L. (2004). [A report on librarian-faculty relations from a sociological perspective](#). *The Journal of Academic Librarianship*, 30(2), 116–121.
- Cohen, A. M. (1998). *The shaping of American higher education: Emergence and growth of the contemporary system*. Jossey-Bass.
- Cooke, N. A. (2017). [Posttruth, truthiness, and alternative facts: Information behavior and critical information consumption for a new age](#). *The Library Quarterly*, 87(3), 211–221.
- Davies, M., & Barnett, R. (Eds.). (2015). [The Palgrave handbook of critical thinking in higher education](#). Springer.
- Dilevko, J. (2009). *The politics of professionalism: A retro-progressive proposal for librarianship*. Library Juice Press.
- Egan, A. (2019). [Confidence in critical thinking: Developing learners in higher education](#). Routledge.
- Ennis, R. H. (1989). [Critical thinking and subject specificity: Clarification and needed research](#). *Educational Researcher*, 18(3), 4–10.
- Eppler, M. J., & Mengis, J. (2004). [The concept of information overload: A review of literature from organization science, accounting, marketing, MIS, and related disciplines](#). *The Information Society*, 20(5), 325–344.
- Ettarh, F. (2018, January 10). [Vocational awe and librarianship: The lies we tell ourselves](#). *In the Library With the Lead Pipe*.
- Faix, A., & Fyn, A. (2020). [Framing fake news: Misinformation and the ACRL Framework](#). *portal: Libraries and the Academy*, 20(3), 495–508.
- Fernbach, P. M., Light, N., Scott, S. E., Inbar, Y., & Rozin, P. (2019). [Extreme opponents of genetically modified foods know the least but think they know the most](#). *Nature Human Behaviour*, 3(3), 251–256.
- Filbert, N. W., & Ryan, M. (2016). [Framing the Framework: The rigorous responsibilities of library and information science](#). *Reference and User Services Quarterly*, 55(3), 199–202.

- Freedman, S. (2014). [Faculty status, tenure, and professional identity: A pilot study of academic librarians in New England](#). *portal: Libraries and the Academy*, 14(4), 533–565.
- Freire, P. (2000). *Pedagogy of the oppressed*. Continuum. (Originally published in 1968)
- Galbraith, Q., Garrison, M., & Hales, W. (2016). [Perceptions of faculty status among academic librarians](#). *College & Research Libraries*, 77(5), 582–594.
- Giroux, H. A. (2018). [What is the role of higher education in the age of fake news?](#) In M. A. Peters, S. Rider, M. Hyvönen, & T. Besley (Eds.), *In post-truth, fake news: Viral modernity and higher education* (pp. 197–215). Springer.
- Gofman, A. (2019). [A Carpentries approach to ACRL Framework instruction](#). *Journal of eScience Librarianship*, 8(2).
- Golbeck, J. A., Mauriello, M. L., Mauriello, M., Auxier, B. E., Bhanushali, K. H., Bonk, C., Bouzaghrane, M. A., Buntain, C., Chanduka, R., Cheakalos, P., Everett, J. B., Falak, W., Gieringer, C., Graney, J., Hoffman, K. M., Huth, L., Ma, Z., Jha, M., Khan, M., ... Visnansky, G. (2018). [Fake news vs satire: A dataset and analysis](#). In *Proceedings of the 10th ACM Conference on Web Science* (pp. 17–21). Association for Computing Machinery.
- Gonzales, R. (2001). [Opinions and experiences of university faculty regarding library research instruction: Results of a web-based survey at the University of Southern Colorado](#). *Research Strategies*, 18(3), 191–201.
- Good, A. (2019, December 24). [The rising tide of educated aliteracy](#). *The Walrus*.
- Gross, M., Latham, D., & Julien, H. (2018). [What the Framework means to me: Attitudes of academic librarians toward the ACRL Framework for Information Literacy for Higher Education](#). *Library & Information Science Research*, 40(3-4), 262–268.
- Hall, R. A. (2013). [Beyond the job ad: Employers and library instruction](#). *College & Research Libraries*, 74(1), 24–38.
- Hicks, D. (2016). [Person or place: Rhetorical construction of librarian and library by the information profession community](#). *Canadian Journal of Information and Library Science*, 40(4), 318–331.
- Hill, F. E., & Hauptman, R. (1986). [A new perspective on faculty status](#). *College & Research Libraries*, 47(2), 156–159.
- Hollister, C. V., & Coe, J. (2003). [Current trends vs. traditional models: Librarians' views on the methods of library instruction](#). *College & Undergraduate Libraries*, 10(2), 49–63.

- Lamdan, S. (2019, November 13). [Librarianship at the crossroads of ICE surveillance. In the Library With the Lead Pipe.](#)
- Lane, L. (2013). [An open, online class to prepare faculty to teach online.](#) *Journal of Educators Online*, 10(1).
- Lowrie, R., & Truslow, H. (2017). *Caught in the maelstrom: How two academic librarians were pulled into the dangerous undercurrents of disinformation*. Paper presented at Media in the Post-Truth World: The New Marketplace of (Dis)information, November 2–4, Prague.
- Maack, M. N. (1997). [Toward a new model of the information professions: Embracing empowerment.](#) *Journal of Education for Library and Information Science*, 38(4), 283–302.
- McAnally, M. A. (1975). Status of the university librarian in the academic community. In ACRL Committee on Academic Status (Ed.), *Faculty status for academic librarians: A history and policy statements* (pp. 1-30). American Library Association.
- McNair, B. (2018). [Fake news: Falsehood, fabrication and fantasy in journalism.](#) Routledge.
- Miller, S. D. (2018). [Diving deep: Reflective questions for identifying tacit disciplinary information literacy knowledge practices, dispositions, and values through the ACRL Framework for Information Literacy.](#) *The Journal of Academic Librarianship*, 44(3), 412–418.
- Musgrove, A. T., Powers, J. R., Rebar, L. C., & Musgrove, G. J. (2018). Real or fake? Resources for teaching college students how to identify fake news. *College & Undergraduate Libraries*, 25(3), 243–260.
<https://doi.org/10.1080/10691316.2018.1480444>
- Neal, J. G. (2014). [A new age of reason for academic libraries.](#) *College & Research Libraries*, 75(5), 612–615.
- Neely-Sardon, A., & Tignor, M. (2018). [Focus on the facts: A news and information literacy instructional program.](#) *The Reference Librarian*, 59(3), 108–121.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). [Purposeful sampling for qualitative data collection and analysis in mixed method implementation research.](#) *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544.
- Pamuk, S. (2012). [Understanding preservice teachers' technology use through TPACK framework.](#) *Journal of Computer Assisted Learning*, 28(5), 425–439.

- Peele, D. (1984). [Librarians as teachers: Some reality, mostly myth](#). *Journal of Academic Librarianship*, 10(5), 267–270.
- Perez-Stable, M. A., Arnold, J. M., Guth, L. F., & Meer, P. F. V. (2020). [From service role to partnership: Faculty voices on collaboration with librarians](#). *portal: Libraries and the Academy* 20(1), 49–72.
- Polger, M. A., & Okamoto, K. (2010, March). ["Can't anyone be a teacher anyway?" Student perceptions of academic librarians as teachers](#). *Library Philosophy and Practice*, 1–16.
- Renaud, R. D., & Murray, H. G. (2008). [A comparison of a subject-specific and a general measure of critical thinking](#). *Thinking Skills and Creativity*, 3(2), 85–93.
- Schoenfield, M. (2020, April 22). [Why do you believe what you do? Run some diagnostics on it](#). Aeon.
- Schulte, S. J., & Knapp, M. (2017). [Awareness, adoption, and application of the Association of College & Research Libraries \(ACRL\) Framework for Information Literacy in health sciences libraries](#). *Journal of the Medical Library Association*, 105(4), 347–354.
- Shulman, L. S. (1986). [Those who understand: Knowledge growth in teaching](#). *Educational researcher*, 15(2), 4–14.
- Simms, S., & Johnson, H. (2016). [Concept, conversion, cultivation, and consequence: The four Cs of successful collaboration](#). In B. Doherty (Ed.), *Space and organizational considerations in academic library partnerships and collaborations* (pp. 280–297). IGI Global.
- Soll, J. (2016, December 18). [The long and brutal history of fake news](#). *Politico*.
- Stodden, W. P., & Hansen, J. S. (n.d.). [Politics by Kayfabe: Professional wrestling and the creation of public opinion](#).
- Tapscott, D. (1999). Educating the net generation. *Educational Leadership*, 56(5), 6–11.
- Torras, M.-C., & Sætre, T. P. (2009). [Information literacy education: A process approach](#). Chandos.
- Tsui, L. (2002). [Fostering critical thinking through effective pedagogy: Evidence from four institutional case studies](#). *Journal of Higher Education*, 73(6), 740–763.
- Vargo, C. J., Guo, L., & Amazeen, M. A. (2018). [The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016](#). *New Media & Society*, 20(5), 2028–2049.

- Walter, S. (2006). [Instructional improvement: Building capacity for the professional development of librarians as teachers](#). *Reference & User Services Quarterly*, 45(3), 213–218.
- Walters, W. H. (2016). [Faculty status of librarians at U.S. research universities](#). *The Journal of Academic Librarianship*, 42(2), 161–171.
- Wang, R. (2016). [Assessment for one-shot library instruction: A conceptual approach](#). *portal: Libraries and the Academy*, 16(3), 619–648.
- Weiss, A. P., Alwan, A., Garcia, E. P., & Garcia, J. (2020). [Surveying fake news: Assessing university faculty's fragmented definition of fake news and its impact on teaching critical thinking](#). *International Journal for Educational Integrity*, 16(1), 1–30.
- Wengler, S., & Wolff-Eisenberg, C. (2020). [Community college librarians and the ACRL Framework: Findings from a national study](#). *College & Research Libraries*, 81(1), 66–95.
- Werrell, E., & Sullivan, L. (1987). [Faculty status for academic librarians: A review of the literature](#). *College & Research Libraries*, 48(2), 95–103.
- Wheeler, E., & McKinney, P. (2015). [Are librarians teachers? Investigating academic librarians' perceptions of their own teaching skills](#). *Journal of Information Literacy*, 9(2), 111–128.
- Wilson, P. (1979). [Librarians as teachers: The study of an organization fiction](#). *The Library Quarterly*, 49(2), 146–162.
- Zipf, G. K. (1949). *Human behavior and the principle of least effort: An introduction to human ecology*. Addison-Wesley.
- Zuboff, S. (2015). [Big other: Surveillance capitalism and the prospects of an information civilization](#). *Journal of Information Technology*, 30(1), 75–89.

Appendix

Text of administered survey

Fake News Faculty Survey

Greetings,

You are being invited to participate in a research study conducted by members of CSUN Oviatt Library Faculty: Ahmed Alwan, Reference Librarian; Eric Garcia, Psychology & Educational Psychology Librarian; and Andrew Weiss, Digital Services Librarian.

The project team is conducting an assessment of CSUN faculty attitudes, focusing on the problem and persistence of fake news within scholarly disciplines and higher education classrooms. The survey will ask respondents to define fake news, comment on the extent of its impact upon the discipline you research in, and the ways in which you address it in your classes and teach it to your students.

The results of the study may be published in professional journals. They may also be used for educational purposes, professional presentations, or the development of university library initiatives.

All CSUN faculty members (tenured, tenure-track, lecturers) are eligible to participate. We are seeking a wide range of participants from every college and department, and respondents need only take the survey once.

Your participation in this study is voluntary and your responses will remain anonymous. Your answers cannot be matched to your identity or location and will be aggregated with other people's responses. Information about the computer and Internet Service Provider you are using will not be collected. Personal data will be kept in a password protected file on a secure server, and will be deleted once the findings have been communicated.

1. Please tell us your age.

- ☐ 25-34 years old
- ☐ 35-44 years old
- ☐ 45-54 years old
- ☐ 55-64 years old
- ☐ 65-74 years old
- ☐ 75 years or older

2. What is your gender identity?

- ☐ Female
- ☐ Male
- ☐ Transgender Female
- ☐ Transgender Male
- ☐ Gender Variant/Non-conforming
- ☐ Not Listed
- ☐ Prefer Not To Answer

3. Please select your college.

- ☐ Mike Curb College of Arts, Media, & Communication
- ☐ David Nazarian College of Business and Economics
- ☐ Engineering & Computer Science
- ☐ Michael D. Eisner College of Education
- ☐ Health & Human Development
- ☐ Humanities
- ☐ Oviatt Library
- ☐ Science & Mathematics
- ☐ Social & Behavioral Sciences
- ☐ The Tseng College

4. Please select your department.

- [drop down menu of all CSUN departments]

5. Please select your academic rank.

- ☐ Professor
- ☐ Associate Professor
- ☐ Assistant Professor
- ☐ Lecturer

6. The issue of fake news is important to me.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

7. What is your definition of the term 'fake news'?

- [free text box]

8. How do you determine that something is fake news?

- [free text box]

9. Do you consider yourself susceptible to fake news as an academic/scholar?

- ☐ Yes
- ☐ No

10. How do you go about vetting information to determine its credibility?

- [free text box]

11. Where do you typically encounter fake news?

- ☐ Newspapers
- ☐ Social Media
- ☐ Magazines
- ☐ Television
- ☐ Oral Communication
- ☐ Video-Sharing or Streaming Websites (e.g. YouTube, Hulu, Netflix)

12. Where do your students typically encounter fake news?

- ☐ Newspapers
- ☐ Social Media
- ☐ Magazines
- ☐ Television
- ☐ Oral Communication
- ☐ Video-Sharing or Streaming Websites (e.g. YouTube, Hulu, Netflix)

13. How often do you encounter fake news in your work?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

14. Is the topic of fake news important to students?

- ☐ Yes
- ☐ No

15. Do you address the topic of fake news in your classes?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

16. How do you address the topic of fake news in your classes?

- [free text box]

17. How often do you think your students encounter fake news?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

18. How often are students using fake news in your classes?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

19. Are certain students more susceptible to fake news and why?

- [free text box]

20. Where do think your students typically encounter fake news?

- [free text box]

21. Do you teach students to vet information to determine credibility?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

22. What tools and resources do you use to teach your students about fake news?

- [free text box]

23. Do you use the Oviatt Library's resources/services to teach or inform your students about fake news?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never
- Please provide example(s)
- [free text box]

24. Do you collaborate with librarians to teach or inform your students about fake news?

- ☐ Very Frequently
- ☐ Frequently
- ☐ Neutral
- ☐ Rarely
- ☐ Never

25. Do you feel the Oviatt Library has reputable trustworthy sources?

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

26. Do you feel librarians offer sufficient support related to fake news?

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

27. Do you feel the Oviatt Library offers sufficient support related to fake news?

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

28. Please share any suggestions about how the library could improve and or expand services, tools or resources on fake news.

- [free text box]