Audience, Usability, and Reliability

QUALITIES TO INCREASE READER ENGAGEMENT FOR THE STATE PRESS

An Applied Project by

Cody Martin Begaye

Submitted for the
Master of Science degree in Technical Communication
ARIZONA STATE UNIVERSITY

Executive Summary

The following report provides data analyses and recommendations for *The State Press* to increase its reader base and improve the level of engagement with their readers.

Overview

The State Press has lasted since its inception in 1906 and thrived in an online age. But as news becomes more scrutinized and technologies evolve, what can an independent publication do to grab the attention of a reader base and retain it?

Solutions

In addition to the diversity in published content, the organization can adapt new search technologies, optimize content for viewing on many platforms, or alter the timing of published content to increase the size of their audience as well as the time that readers spent on *The State Press* website reading articles or talking with other readers and the staff.

Recommendations are given based on analyses of reader data for the following categories:

- Content output
- User demographics
- Operating systems and service providers
- User behavior
- User flow through search engines

The data analyzed and discussed within this report was retrieved through Google Analytics and Parse.ly. I was given access to both sources by *The State Press* editor, Sydney Maki.

Implications for Future Work

The recommendations are intended to be both feasible and ethical to implement. In addition to Google Analytics and Parse.ly, external articles from academic journals and professional newsgroups were consulted for additional information.

The information within this report can be implemented by members of *The State Press* or serve as a foundation for future studies.

Table of Figures

Introduction

In an age where content can be produced and shared with thousands of users an instant, it becomes more evident than ever that there is a need for credibility and reliability.

"Fake news" can dominate the airwaves and discussion boards simply because some people are susceptible to believe what looks and sounds professional. Many users may think the research has been done for them and thus will trust these sources at face value.

Sharing information instantaneously has become a foundation for modern communication. Newsgroups must be able to convey information not only as fast as possible, but accurately as possible. An average user will want to follow sites that meet these qualities. Those sites could then see an increase in their reader base and the level of engagement with their readers.

As an independent publication, *The State Press* could employ several techniques that can produce those results.

At the time of writing, the United States is recovering from a mass shooting in Parkland, Florida. The news channels pour in reports of the teenage victims and how the rest of the community is refusing to quietly take the responses from government officials. In the days following the tragedy, the popular video website YouTube was flooded with videos about the victims. But they were not the type of video that highlighted their resolve, these were videos that sparked discussion as to whether the Parkland shooting was a hoax.

During normal times, these kinds of videos and ideas may be dismissed as ravings against the political or economic climate. But these are clearly not normal times, judging by the emotional response by the people affected by this event and the country at large. These articles and videos were spread across social media platforms and readers began to speculate about the events with this new "information" in hand.

Social sites like Facebook, Twitter, and YouTube have algorithms that influence the spread of news, which can lead to further reach of these malicious stories. Each site presents users with a list of content that they have deemed the most worthy of discussion and relevant to the most users. If utilized correctly, readers will be informed about their community and the nation, as well as their own personal interests.

But even these systems can be exploited or misused. A story does not have to be true or even appropriate for all audiences to find its way to users through these algorithms. Further, these stories by can shared freely and cause potential misinformation to spread.

NBC News Head of Social, Micah Grimes, took to Twitter on February 20, 2018 and said the following about this tactic: "This is how absurd, gaslighting "crisis actor" theories go viral. One @facebook post from this person has 111,000+ shares. Another has 23,000. This is one person, two posts. Imagine the millions and millions of people crackpot theories like this are reaching and influencing."

Grimes spoke of two posts on Facebook that detailed how Parkland survivor David Hogg was not a student but instead a "crisis actor", young people who were hired to visit these locations in the aftermath of a tragedy and appear sympathetic to further either a personal or political cause.

The fallout of the Parkland shooting and the fervor that has emerged online, not for change but instead for "exposing" the truth, demonstrates the business model that the internet has found itself in today. When any person in the world can go online and publish whatever they want, this is what can result from it.

As a publication based out of Arizona State University, *The State Press* has a unique avenue to present stories that pertain to the community that surrounds it. They can comment on larger-scale events with the perspective of ASU students and faculty. They can reach a unique audience and influence what they learn about the community.

I was a member of the arts desk for *The State Press* in the fall of 2017. Knowing that *The State Press* is an independent organization comprised mostly primarily of students led to the idea that they are continually looking for ways to expand their audience and get readers to return to the site and interact with the staff and with the rest of the reader base.

But the first question to be asked is, how many students and faculty are aware of *The State Press* and what it does? Do those groups know how the staff writers are held accountable and treat this group like a professional news organization?

Once the users are aware of *The State Press* and visit the site, how many of them return? How much does the presentation matter to them? What story genre draws them to the site most often? Are there lulls in the number of visitors, and if so why is that?

These questions were on my mind and established the goal of the research, which was to look for ways that *The State Press* can increase their readership and the overall engagement with users.

Literature Review

In conducting research for this report, I considered what aspects a reliable news organization like *The State Press* would need the most.

Researching the audience demographics was a key part of this project because knowing who the content is being produced for is a solid foundation for finding new ideas for future content. Once a target audience has been identified, the writers can look for connections between their own interests, in this case the various desks at *The State Press*, and what the readers will expect.

The State Press presents itself as an independent news group with content that is produced by students. By covering events that happen near each of the four ASU campuses, they show that they are aware of their target audience of students and faculty at those campuses. The site layout and article structure show that they tailor the content so that it can be presented in a variety of manners and that a pleasant user experience is part of their goal.

The State Press staff are treated like professional writers and are held to the same standards as formal practitioners. Each writer is responsible for ensuring that information is accurate and that they have permission to quote and cite sources where appropriate. They must be reliable and trustworthy to be part of the staff.

From personal experience, I know that each article that is written and published on the website must be fact-checked by the writer and editor. Each article must contain external links that will support what is being reported, which usually are official sites from the parties that are involved or are an otherwise credible source.

In addition to being credible, the site must be easy to navigate. The users must also be able and willing to navigate the site. One main takeaway from my graduate program is that while a site or article should be understandable by the target audience, it will be better for them if they can benefit from what is presented to them. Articles about subjects relevant to the students is what can get their attention but providing a welcome user experience is also key to holding onto their attention.

These qualities formed the basis for the research I conducted for this report:

Usability

Per reader data that was provided by *The State Press* staff, one of the most prominent avenues for attracting readers to the site is social media, sites such as Twitter, Facebook, and Instagram. At face value, these sites are intended for users to connect with people they know personally or document their experiences and voice their opinions on a variety of manners.

In recent years however, these sites have now been viewed as marketing tools for every type of business and product imaginable. If social media is used correctly, it is theorized that it can allow the content creators to boost their competitive advantage and improve the overall quality of their communication channels (Löfstedt, Holmberg, 2016).

Readers of a publication can be seen as too passive because while they are receiving information, there may not be a way for them to respond to the producers of that information. Certain sites can avert this issue by allowing readers to sign up for those sites and contribute through a dedicated account, but there could be a few security or personal reasons that could deter a reader from frequenting these sites.

With social media outlets like the previous examples, users can post on article links or share them through their personal accounts as quickly as they post the rest of their own content. The people who follow them will then see it and can then decide if they are curious enough to pursue the issue further on their own.

For users who may be less prone to use social media or may be looking for more information past the social media posts, they may search for the information on their own. They can go to the search engine of their choice like Google or Yahoo and enter in the keywords or phrases that they have heard about.

This leads into another aspect of producing content for *The State Press*: selecting the right keywords because they define what the content is about. It is keywords that are utilized in a website's algorithm and allow the content to be seen by users. Any user can input words that they have heard before and have a large variety of results returned to them, and those results can continue to rise if they continue to search for those keywords. The process of integrating keywords so that the articles that contain them can be found has grown in popularity and usefulness as the internet has evolved and is dubbed search engine optimization or SEO.

Research suggests that three concepts contribute to search rankings: the companies and programmers of search engines, the practitioners of SEO, and the users of search engines. (Killoran, 2013). There are three key lessons that professional communicators can learn to make

it so that their content is easier to find: consider the content's audience; insert keywords to the page; and network with other content creators.

1. **Consider their web content's audiences and website's competitors when selecting keywords**: As stated earlier, knowing what the audience is looking for and providing content that is beneficial to them is the ideal outcome in technical communication. But before the content can benefit the audience, the communicator should know how their audience is and what they expect to find.

   In regard to a publication like *The State Press*, the producers can look to other student-run or independent publications to see what their respective readers are looking for. *The State Press* covers a variety of topics from sports to campus life to politics. Each desk has a dedicated number of editors and the reporters who are hired by each desk have an inherent interest in that topic and want to research a story relevant to that topic.

   By looking at what is being done by other news organizations, the staff can determine what they are doing that is like the other publications and what they are doing differently. If multiple outlets are covering the same events or ideas, each outlet can give their own unique perspective to each article. In the case of *The State Press*, they can have their articles include the viewpoints of ASU students and faculty who are involved with or affected by those events and how they feel about them. Then the readers, who may consist primarily of other students and faculty, can see how this issue is relevant to them and could then conduct further research.

2. **Insert keywords into web text that will appear on search engine results pages**: SEO is essential because it allows content to be found. Whether that content is in line with what the user wants can be a different matter, however.

   Recall the earlier examples wherein people commented on the search results for people and matters related to the Parkland school shooting. The less ideal results that were not as informative contained the same key information that the actual news articles did. Each section of the results contained the same terms but presented them in wildly different manners. Each content producer has different intentions, but they share the same goal of wanting their content to be found.

   Once a user finds content that they are searching for, the algorithms in play will suggest additional relevant content that the user may be interested in. They could be even more pieces that deviate from the truth, but they will still contain the topics and information that the user was searching for.

Content producers should be considerate with the SEO terms that they decide to use. It can be frustrating for a user to search for terms different to what a certain producer is providing but still find their content showing up in search results. Further, the user will want to know as soon as possible that a link could contain the information that they are looking for and will not have to linger on a page longer than they desire. The rise of clickbait, or purposely using words or phrases to get a reader to click on a link by leaving out key information, and the sites that use them are tactics that a news organization should avoid as much as possible.

3. **Network with other web content creators**: Competition means that there will be several outlets all competing for the attention of a select audience. A reader's time is a premium and they will want to spend it wisely, which will lead into them likely searching for news about an event on any site they may frequent.

   At *The State Press*, it is more than the writer and editor who produce the articles for the group. There are dedicated photographers and staff who run the social media channels and share the produced content with their followers. These additional staff can also have their own sources and connections with likeminded people and other avenues for sharing the content. When all these players are involved, each of them can then share the content because they have contributed to it and want credit.

   Whether they are all working for one entity or if they are part of several groups who are collaborating, teams are important because they help to organize work in professional and personal settings. Yet if there are issues with teamwork, there could be poor performance, lowered motivation for further tasks, and feelings could be hurt. While some of these issues could sound minor, they can drastically affect the output of content.

   And if nothing else, most people just do not want to be talked down to because it could make them feel inferior when that may not have been the communicator's intent. Most people just want a basic level of respect and attention that will come with any standard team role. Those people will ideally be presenting their best work to show that they belong on the team and that they can contribute their own unique perspective. If they feel it is being dismissed, that can lead to those troubles in communication that can cripple a team and decrease their output level.

The end goal of following these three lessons is to produce content that can be found by the target audience, who should able to find and use the online content regardless of their knowledge of the technologies involved. Just like the people in the team, the audience may have a base understanding of the content being covered and is seeking additional information. The audience

will likely not appreciate content that is presented in a manner that patronizes them, or they may seek unbiased sources for their information.

Other researchers have supported the three lessons by Killoran as well:

- Researching the audience and collecting data on them can result in information that lets the communicator move forward and connect effectively with their users. (DeMeyers, 2014)
- In any field, competition is useful because it helps to stimulate advances in technology or research, such as what was done with broadband Internet access technologies in Japan. Communications was a major contributor to that rapid growth as it pioneered technologies for ADSL and could then observe the results of the advanced in technology stimulated by competition. (Long, Kamali, Fazlollahi, Rao, 2005)
- Research suggests that the videos and articles that reinforce the claim that the truth is being hidden shows that there is an ecosystem for these types of content. (Timberg and Harwell, 2018)
- Miscommunications can be caused by how people involved with the team interpret words and phrases. Team Building exercises held regularly can help the members of the team remain aware of what is expected of them and how they should go about fulfilling their role on the team. The core of these exercises should be about how to maintain and improve the avenues of communication between the people in the group. These exercises should serve as reminders instead of full-blown lessons. (Brewer, Holmes, 2016)
- Knowing your audience and what they expect can also apply to the team. Each of the team members should know what they are expected to do, and any communication exercises should be informative and respectful. Some communicators will want to go into as much detail as possible while others will want to get to the point as soon as possible. Being aware of how each person consumes information is another part of working effectively as a team. (Murphy, 2017)

This can play into striking a balance of the information that is contained within a story. Background information should be provided in a produced article to inform the reader of the foundation of the article story. In terms of *The State Press*'s output, the external links can serve the purpose of providing extra information, but the audience should not necessarily have to follow those links. They may just want the most relevant or crucial parts of the story, and so finding ways to be concise and informative will be helpful.

As said earlier, each user's time is a premium and they want to use it wisely. If the content they find can inform them quickly and effectively, they could be more likely to return in the future.

Reliability

In a time where users are given a vast number of sources that may not all be correct, it becomes increasingly difficult to tell what is sincere and what is not. Some key figures in higher levels of government dismiss the press because they feel that the press lies to keep their reader numbers and ratings from plummeting. Whether these reports are true or not, there will be a part of the audience that can be influenced by key figures.

In addition to being part of a good user experience, the use of plain language can demonstrate to a reader that the communicator is aware of how the audience operates and what they know. Plain language is not unprofessional or condescending to the reader; it helps the reader by providing text that takes less time to read and understand. It tells the reader exactly what they need to know in as short a time as possible.

By 2015, plain language had gained momentum in fields including business, government, medicine, and education. This use of plain language in the 21st century has changed from asking if the user can read and understand the content to include asking if the reader will believe the content and then trust the message.

Before a reader can trust a source, they must be able to understand what that source is trying to say. In the past, the use of complicated terms and theories may have meant that audiences were more selective and that certain communications were less likely to make sense to users outside of that audience.

But now that the average user can likely access the Internet and have a bevy of information right on their phone, content creators could feel that their potential audience has grown at an accelerated rate. The advances in technology have led to advances in both technical communication and usability. These can both play into the effectiveness of a publication such as *The State Press*.

In any magazine rack across the country, a person can spot a variety of publications with different audiences. But most of them likely employ a similar tactic: exciting headlines in a bold font that are designed to grab the user's attention. This has extended online with the aforementioned clickbait with the use of peculiar images or headlines to grab the user's attention.

But each of those groups can have a different intent. Some of them may be wanting to entertain the reader with some strange detail or humorous story or account. Others may be wanting to spur the reader to believe something that may or may not be true. These publications also compete for the attention of a reader, whether they view standard news groups as competition or not.

It is important that a publication be as transparent as possible about their intent and level of credibility. By providing sources that are legitimate and accurate, they will show to the reader that they can be trusted. And if they can be trusted, the reader will have a reason to return in the future because they could assume that the publication is reliable.

As mentioned earlier, some organizations can put electronic algorithms into play and then determine what their readers are looking for and then provide additional content that plays into those interests. These systems can be exploited or prove faulty without some form of human moderation. The previously mentioned YouTube searches regarding the Parkland shooting became as cluttered as it did for these reasons. (D'Onfro, 2018)

It may not be the intent of YouTube and owner Google for promoting these types of content. It comes down to the technologies that are used because they are seen as reliable and help to show what could be most relevant and useful to a user. But again, these can be exploited with or without some form of human moderation.

In the aftermath of the Las Vegas shooting in October 2017, searching on YouTube for content related to that event led to several similar videos. While the country was set on mourning another tragedy and being spurred to action, there were groups intended to play down the event and convince the world that it was staged. Videos that detail how these events are "fake" garner large view counts through the site's technologies. (Levin, 2017)

Conspiracy stories and fake accounts have existed for decades, but they have not seen the widespread attention that the Internet has created. The algorithms in play seek out relevant content and present them to the user. But without human moderation, these systems can suggest videos that perpetuate these conspiracies and not content from reputable sources that provides credible information.

While reputable sources may be drowned out at times by fictitious or exaggerated reports, they should remain undeterred in their mission to present accurate information to their audience. They should remember that they do have readers who are seeking information from them and remain dedicated to providing it.

With that in mind, reliable and effective communicators will adhere to four laws: (Doumont, 2002)

1. **Adapt to your audience**: Just as the content should be created with the audience's interests in mind, it should also follow the technologies that they utilize. Google Analytics data provided by *The State Press* shows that they keep track of what hardware that readers use to access the site, be it a computer, tablet, or phone. The sheer volume of

people with social media accounts on mobile devices means that implementing mobile design philosophies could help retain readers.

Per information provided by Google, up to 94% of people with smartphones use them to search for local information and up to 77% use their phone even when they have a computer nearby. (Google, 2018) A site that is not mobile friendly will require the user to pinch their screens to zoom and scroll, a process that increasingly more users find irritating and thus will not bother with.

At the time of writing, *The State Press* has a functioning mobile site that is easy to read and navigate, so this step has been fulfilled.

2. **Maximize the signal-to-noise ratio:** Information that is sent out to an audience is prone to interferences, perturbations, or atmospherics. These factors have been dubbed noise. (Doumont, 2002)

   Noise extends beyond unwanted sounds. Just about anything that can bother the reader and distract from the information being relayed is considered noise. From the environment that the reader and communicator are in to the formatting and style of the delivery of the information. Some of these issues cannot be controlled by the communicator, but those that can should be moderated as much as possible.

   In an online environment, an excess of visuals or differently formatted text can be distracting to a reader. Even if they are part of the article and meant to convey information, they can confuse the reader if they are used improperly. If the page has become so cluttered that the main purpose of that page is not immediately apparent, a user will likely leave and not return.

   When looking at a story or news article, the writer and editor should strive to condense rather than to add. Aim to make each word count rather than trying to pad the amount of prose. If each word serves a purpose, then the reader can quickly identify the reason for the article and decide if they want to continue reading.

3. **Use effective redundancy:** Try as some communicators might, there will be instances wherein noise cannot be avoided. In these instances, it will be a wise move to reiterate the key points that were communicated.

   This goes beyond simply repeating information, which in and of itself could be considered noise, rather it seeks to reiterate what has been stated in different channels.

This information can be through text or visuals and in different mediums, which can then bridge audiences who are prone to understand those different mediums more quickly.

Further examples cite the shapes of traffic signs and how each one has a distinct color and text that makes it identifiable by multiple audiences. (Doumont, 2002) In a large written report, the key points of certain sections can be outlined in a table of contents and tell the reader where to turn if they desire to learn more about those points. The information is being repeated, but in different manners that allow the reader to recall what has been stated.

At the end of a story or article, there can be a review of what has been discussed and tell the reader of additional avenues for information if they desire more. This can lead to the reader being told what they have already heard in a different manner and thus reinforce what they have learned. Effective redundancy can help a reader understand what they hear because of multiple outlets and mediums converging to give them the information they were seeking.

4. **Have a purpose:** There will be instances wherein some of these rules will intersect and even cancel each other out. Redundancy could ultimately be considered noise and the audience may not be so easy or quick to adapt to. Research can be done by a variety of parties to ensure that the audience and the writer connect, which leads to the overall foundation of what *The State Press* strives for.

The writer should have a motivation to conjure and pitch story ideas, and then be motivated to research the parties involved with that story idea, and ultimately write and edit an article that summarizes what they have learned and why an audience should care. *The State Press* staff wants to inform fellow students and faculty about news that is relevant to them. Whether the writer is at the desk for sports, politics, or student life, they should remember that readers will want to hear about what is happening near the university that they should investigate on their own. The staff will have joined because they share that interest and should aim to present their best work because it can be read by a vast number of users.

More, if the writers demonstrate a genuine interest in what they are covering and adhere to the policies that the publication upholds then they will show that they are dedicated and trustworthy. Most people will want to do the best they can if they are invested in what they are doing, which is a trait that most people will gravitate towards.

Finding that motivation and then recalling it will help each member of the staff to

remember why they are with *The State Press* in the first place. And that in turn will project an image of authenticity that can help the audience connect with them.

Try as any journalist or writer might, there will always be that corner of the industry that perpetuates wrong or false information. Journalism relies on facts, reality, and trust. Information that is incorrect for any number of reasons will have consequences. (Borel, 2017)

This has led to the idea that this spread of false information has less to do with informing readers and more about a balance of power. The amount and style of news that is shared can determine how people will start to see the world. Some will share it because they believe what is being written while others may be trying to spark discussion with their peers.

And it is this sway of power that can determine what the public considers to be reliable and what is not. This in turn will influence what sources they continue to follow and what they share and speak about with other people in person or online. And these online discussions and searches will work into the algorithms that are used by various online outlets and return even more relevant information to them.

The information that was consulted while writing this section came from a desire to learn about how users find their information and how it can spread. This can lead to an increase of viewers on a given site and spark discussions between those viewers and the producers of the discussed content. While not wholly of the nature I find appropriate for an organization like *The State Press*, I bring them up because it shows how any group can get information out in an online age.

Data Collection

There are a variety of tactics and algorithms that can help to influence the exposure of a selected piece of news. Searching for ideas to increase viewership online can lead to advice that may be practical for bloggers or smaller-scale content producers, but I wanted to look beyond those bits of information and find solutions suitable for an independent student organization.

Each member of *The State Press* has access to the Internet and the wealth of resources that come with it. Any person who has this access becomes a potential communicator because they can share what they know about any topic with a variety of readers. And those readers can then learn something new and decide how to incorporate that information into their lives. (Kimball, 2016)

So rather than just provide short-term answers, this project aimed to provide solutions that both current and future staff members of *The State Press* will find effective. In addition to online research, readership data was provided by *The State Press* staff. The goal was to look for trends and patterns in the readership and determine what was produced in that given span. The style and content as well as the relevancy to the readers were examined.

The following resources were utilized:

Google Analytics

Access was granted to me by Sydney Maki of *The State Press*. As a freelance contributor, I continue to receive feedback about the desk from the editors, including the number of readers and how information was shared. From a glimpse at the group's Google Analytics page, a user can see the:

- The number of users, unique sessions, bounce rate, and session duration on *The State Press* site over the course of a specific day or time span lasting several weeks.
- An indicator of the number of visitors that visit at each time of the day. This can also be tailored for a specific day or time span.
- The current number of active users and the number of page views.
- How users are acquired, from the traffic channel (organic search, social, direct, referral, etc.) to the source or medium to the number of referrals.
- Where users are located in the world.
- What pages are the most visited in a given span.
- How active the users are on a daily, weekly, or monthly basis.
- The top devices, whether it is a desktop, mobile device, or tablet.
- How well users are retained on a weekly basis.

From there, a user can look at data of real-time visitors, the audience demographics, and the behavior of site visitors. All the information is presented in both numerals and a combination of line and bar graphs and pie charts.

Like the data mentioned above, the user demographics can be viewed on a daily, weekly, or monthly basis. The audience data can be broken down further by showing the visitors' age, gender, interests, geography, device, network, and operating system.

Tailoring the content to the audience is a key part in producing content that will grab users' attention and engage them. Providing a welcoming and beneficial user experience in addition to information that backs up the stories being reported are part of pulling in readers, but this can be increased by sharing the content on several channels by the publication staff and their associated accounts.

Excerpts from the analytics page will be provided in the following section with further analyses and descriptions to provide context.

Parse.ly

The weekly Parse.ly reports are generated and sent to members of *The State Press* staff with feedback from the editors. They provide detailed breakdowns of the number of:

- Pageviews
- Visitors
- Engaged minutes
- Social interactions
- New posts

The reports then detail how the content was found:

- Social outlets including Facebook, Twitter, and Reddit
- Search engines including Google, Bing, and Yahoo
- Other news outlets like Google News
- Internal links from *The State Press* site
- The number of direct views

Like Google Analytics, Parse.ly also details the device breakdown between desktop, mobile, and tablets. They also detail the number of new visitors to returning visitors. The report then has lists

of the top 10 authors, tags, posts, and new stories that are ranked by the number of average visitors on those new posts.

Each author worked for a different desk and utilized different tags that were relevant to their story. These are the keywords that were mentioned previously and play into how a story is categorized and eventually found by a reader. Posts that were published before the specified window could have appeared in the visitor ranking if the content has continued to be relevant or discussed past its original publication date.

Stories around short-term events such as sports or certain events usually experience brief spikes of interaction. But stories about large events garnered a greater deal of attention. These larger events are more uncommon than regular events like sporting games, and so finding unusual accounts or developments may play into pulling in readers.

The qualities just described are in line with what I have detailed earlier in this report, albeit in a much more positive light than some random rumor spreader. The people involved with *The State Press* want to uphold the values and goals that have kept the organization running since 1890.

To that end, the recommendations detailed in the next section will be in line with professional journalism and the positive qualities that readers expect from it. The information provided will be unbiased and ethical, so that current and future members of *The State Press* can adopt them if they choose.

Analysis and Recommendations

The information provided by Sydney Maki was consulted on both a weekly and monthly basis for February 2018. I focused on categories pertaining to page views, visitors, and the number of minutes spent on *The State Press* site. These selections were then used to determine the recommendations in the next section.

Analysis of Content Output

From a Parse.ly report, the week of February 18 - February 24, 2018 recorded the following:

- 29,000 views, 17.4 percent ahead of the average
- 20,000 visitors, 22.2 percent ahead of the average
- 20,000 engaged minutes, 11.1 percent ahead of the average
- 3,319 social interactions, 14 percent ahead of the average
- 80 new posts

The following sources contributed to view counts above:

- Social media accounted for 20.1 percent
- Search engines accounted for 47.4 percent
- Other news outlets led to 1.8 percent
- Direct links lead to 19.7 percent

Table 1 shows the "Top" news sections on *The State Press* site. The tables listed the number of new stories that were posted between Feb. 18 and 24, 2018, the total views each section got, and the average number of views on new posts. As the table shows, three areas had the greatest average number of views, Politics, Arts, and Campus Life:

	New Posts	Views	Average Views
Politics	10	2,525	252
Arts	5	1,253	250
Campus Life	7	1,656	236
Science & Tech	5	720	144
Magazine Columns	16	1,518	94
Sports	25	1,338	53
Multimedia	12	447	37

Table 1 - The Top sections on The State Press site.

Table 2 depicts the Top 10 tags on *The State Press* site. The table lists the tags that were used in new posts, how often they were used, how many views stories with those tags got, and the average number views on new posts. As the table shows, four areas had the greatest average number of views, breaking, Music, Politics, and politics-carousel.

	New Posts	Views	Average Views
breaking	1	536	536
Music	2	848	424
Politics	10	2,525	252
politics-carousel	10	2,525	252
news	8	1,879	234
Arts and Entertainment	6	1,365	227
topstory	6	1,345	224
features	6	1,226	204
campus-life	10	1,849	184
campus-life-carousel	10	1,849	184

Table 2 - The top tags used on The State Press site.

As Fig. 1 shows, each week, there appears to be a downward slope that starts on Friday and continues through Sunday when it begins to rise back up.
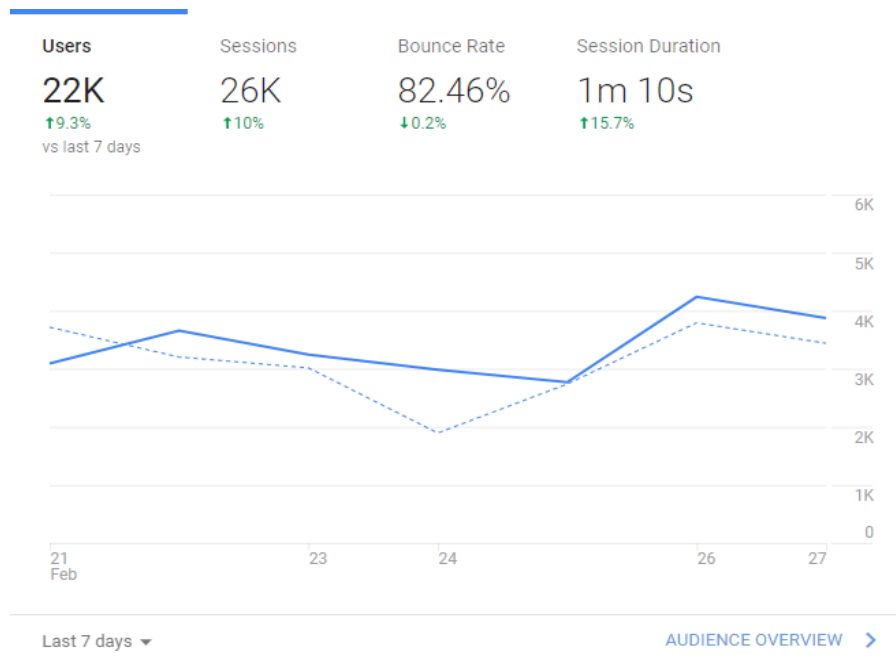
Fig. 1 - The homepage of Google Analytics data for The State Press readers on a weekly basis.

February 22 was a Thursday, the usual last publication day of the work week. The volume of stories published on Thursday explains the spike in users, which then declines as the weekend approaches.

February 26 was a Monday, the first work day when stories are published aside from several stories on Sunday. Users may be logging back in after a weekend off to view *The State Press* site in addition to their ASU messages in email and social media. This trend has been consistent weekly over one month, as seen in Fig. 2.

Fig. 2 - The homepage Google Analytics data for The State Press readers on a monthly basis.

January 31 and February 7 were Wednesdays. The peak readership was attained around February 12, a Monday. This can support the theory that a flood of new content can draw readers to the site.

Recommendations Regarding Content Output

The State Press is an independent organization where there are likely only a handful of editors per desk that must oversee and plan dozens of article ideas from a multitude of reporters. So, having the output stacked through the weekdays may be more a matter of where the editors are available to coordinate with the writer to finalize and then publish their article.

Having been part of the staff for *The State Press*, I credit the trends in Figures 1 and 2 to stories generally being published on Mondays through Thursdays and users will see the new posts on various channels and decide if they want to read the stories. If there are stories that do not meet the first deadline, they are likely held until the next available editing sessions. I missed the Thursday appointment on several occasions, and the story was not picked up until the following Sunday.

The drop off in readership during the weekends is most likely due to the decrease in output over the weekend. Less new material means less of an incentive for students to visit *The State Press* site. Most student users could also be out at social events that might also be covered in future stories. However, content could still be produced for the students to see when they return.

Given that *The State Press* is a mostly online publication with periodical print issues, the audience may desire and expect continuous information and updates. So perhaps finding an outlet to produce some manner of content on a continuous basis throughout the week, including over the weekend, can be discussed. For example, rather than aiming to edit and publish every available piece on Mondays through Thursdays, the staff can meet and decide if they would be fine with select stories being held for publication on certain days.

Alternatively, if reporters are unable to meet on a weekday, then the editors should inquire as to which reporters are available to meet at least briefly before or during the weekend. Pitch meetings happen on Sunday afternoons, so having the staff come in beforehand for edits is a possibility.

More pressing or recent news can be published immediately, but reflections, profiles, and opinions can be spread through the week and published on or before these "slow" periods so that readers can be given more opportunities to view the site throughout the week. The staff can also consult the analytics data and decide which stories are garnering the most discussion, and post reminders of those stories to social media.

Analysis of User Demographics

The State Press audience can be summarized as people affiliated with Arizona State University. They may use a variety of hardware and software, and come from a variety of geographic backgrounds, and have any number of gender and sexual identities, but they likely all have the university in common. The work of the publication should be in line with what the university strives for, including diversity and innovation.

The pie chart in Fig. 3 shows that the split between male and female readers is almost even, which shows that the articles published by *The State Press* are intriguing to both of those genders. Being inclusive with the type of content produced goes with the idea of ASU being an open, safe, and supportive zone for students of many gender identities and sexual orientations. This can in turn show readers that content and users are treated with respect.

The bar graph in Fig. 3 shows that there is a noticeable discrepancy in the age groups of readers. While content that is covered could ostensibly be aimed at one of these demographics, this could also lead to researching and suggesting stories available for the less covered age groups or are of interest to each of those age groups.
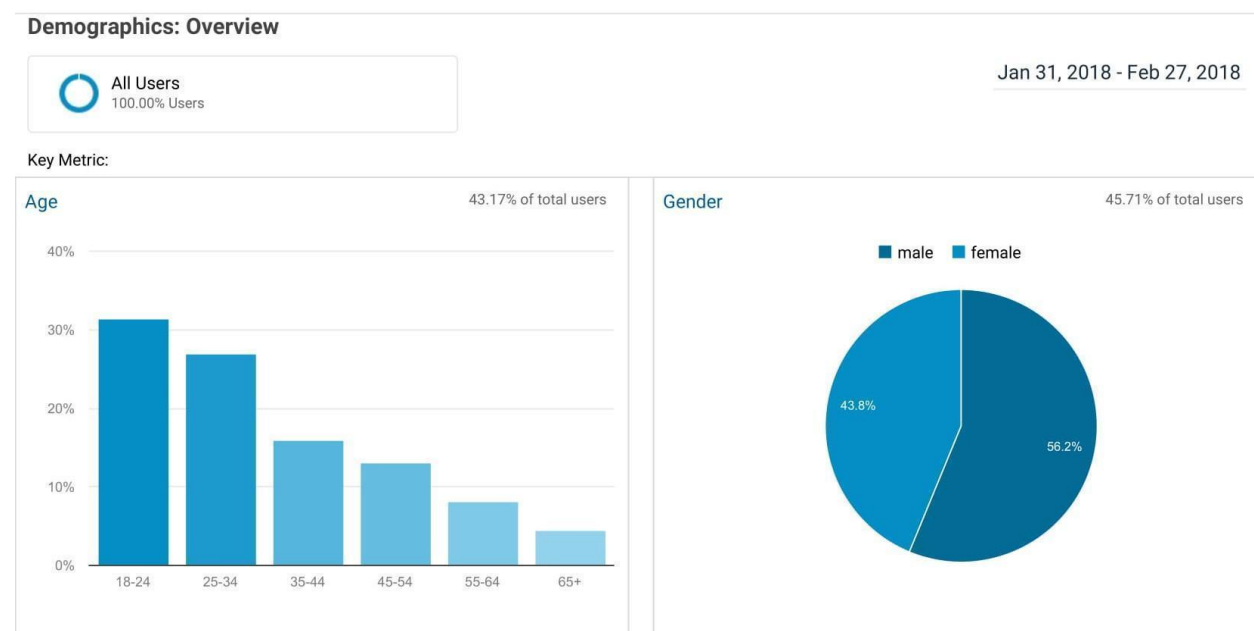
Fig. 3 - The age and gender demographics of users throughout February.

Recommendations involving User Demographics

The State Press can show users that there is a positive and inclusive atmosphere at the university through the diversity of their output. It would be efficient to keep that level of diversity in content. Certain stories and desks will receive more attention at certain times as noted before, but the availability of other published works can help users with processing or coping with the news that is covered elsewhere.

As for demonstrating innovation, the upcoming sets of recommendations can help to fulfill that quality.

Analysis of User Operating Systems and Service Providers

Arizona State University prides itself on being a leader of innovation, whether it is new technologies or knowledge that can reshape current ones. So, it is fitting that a variety of devices and software is used to access the various websites, including for *The State Press*.

As seen in Fig. 4, the number of Mac computers available in each of the computing commons and classrooms on each campus contribute to the large number of users who access *The State Press* site through the iOS operating system. Then Windows and Android users account for a large portion of the remaining users. The desktop site functions as necessary and is intuitive to navigate on a standard Windows OS.

Operating System	Users	% Users
1. iOS	29,696	39.74%
2. Windows	20,518	27.46%
3. Android	11,178	14.96%
4. Macintosh	10,850	14.52%
5. Chrome OS	1,716	2.30%
6. Linux	562	0.75%
7. (not set)	142	0.19%
8. Windows Phone	32	0.04%
9. BlackBerry	17	0.02%
10. FreeBSD	5	0.01%

Fig. 4 - The operating systems used to access The State Press site.

Fig. 5 illustrates the large number of users who connect using the university connection and reinforce the strong campus user base.

Service Provider	Users	% Users
1. (not set)	23,882	30.55%
2. arizona state university	6,743	8.62%
3. cox communications	4,355	5.57%
4. qwest communications company llc	3,264	4.17%
5. cox communications inc.	2,767	3.54%
6. time warner cable internet llc	2,135	2.73%
7. mci communications services inc. d/b/a verizon business	1,645	2.10%
8. amazon technologies inc.	1,156	1.48%
9. charter communications	1,122	1.44%
10. at&t mobility llc	1,089	1.39%

Fig. 5 - The services providers that users have to access The State Press site.

Recommendations Regarding Operating Systems and Service Providers

If the readership of *The State Press* has a diverse number of means for accessing the site, then the staff should have as many of those options on hand as well. Even if they are not being used full time or as often, ensuring that less frequently used operating systems or devices can access the site can show the reader that the staff have the users in mind.

Whenever a new firmware update for any of these operating systems or new hardware is issued, the appropriate *The State Press* staff should be willing to procure these updated versions and ensure that the site not only functions but is still able to be navigated with a similar level of ease as the previous versions.

Additionally, keeping track of the most popular operating systems and hardware can show the staff what types of technology design and knowledge would be ideal for future employees. As new information and programs come to fruition, those future staff could be able to implement them and create a smoother and more engaging viewing experience for the reader.

As stated earlier, the mobile interface for *The State Press* site worked well on an iPhone 7 Plus running the most recent iOS firmware, the most popular option as seen in Fig. 6.

Operating System	Users	% Users
1. iOS	29,696	72.18%
2. Android	11,178	27.17%
3. Windows	163	0.40%
4. (not set)	43	0.10%
5. Windows Phone	32	0.08%
6. BlackBerry	17	0.04%
7. Firefox OS	3	0.01%
8. Samsung	3	0.01%
9. Tizen	3	0.01%
10. Playstation Vita	2	0.00%

Fig. 6 - The operating systems used by mobile devices to access The State Press site.

Analysis of User Behavior on *The State Press* Site

Fig. 7 shows tables of percentages in user interests that goes with the variety of desks and topics *The State Press* publishes. Story ideas that can cover a variety of these interests could get those audiences to intersect and read other related articles that go with those interests.

Interests: Overview

○ All Users
100.00% Users

Jan 31, 2018 - Feb 27, 2018

Key Metric:

Affinity Category (reach)	49.03% of total users
3.51%	News & Politics/News Junkies/Entertainment & Celebrity News Junkies
3.03%	Media & Entertainment/Movie Lovers
2.90%	Media & Entertainment/Music Lovers
2.80%	Sports & Fitness/Health & Fitness Buffs
2.64%	Lifestyles & Hobbies/Shutterbugs
2.57%	Shoppers/Value Shoppers
2.38%	Food & Dining/Fast Food Cravers
2.35%	Lifestyles & Hobbies/Art & Theater Aficionados
2.27%	Sports & Fitness/Sports Fans
2.21%	Banking & Finance/Avid Investors

In-Market Segment	41.89% of total users
4.13%	Education/Post-Secondary Education
3.18%	Employment
3.01%	Employment/Career Consulting Services
2.79%	Financial Services/Investment Services
2.37%	Travel/Hotels & Accommodations
2.30%	Education/Primary & Secondary Schools (K-12)
2.13%	Real Estate/Residential Properties/Residential Properties (For Sale)
1.92%	Dating Services
1.79%	Home & Garden/Home Decor
1.77%	Travel/Air Travel

Other Category	48.78% of total users
4.10%	Arts & Entertainment/Celebrities & Entertainment News
2.61%	Sports/Team Sports/American Football
2.46%	Jobs & Education/Education/Colleges & Universities
2.31%	Arts & Entertainment/TV & Video/Online Video
2.29%	News/Sports News
2.02%	News/Politics
1.85%	Reference/General Reference/Dictionaries & Encyclopedias
1.54%	News/Weather
1.34%	Food & Drink/Cooking & Recipes
1.22%	Sports/Team Sports/Basketball

Fig. 7 - The interests of users who access The State Press site.

As seen in Fig. 8, the average number of sessions per user being 1.28 throughout February 2018 shows that retaining readers could be an issue. Just over 15 percent of users in that time frame were returning readers, meaning the rest of those users may have just glimpsed at one or two articles before not returning to the site.

Fig. 8 - An overview of the audience data for The State Press site.

The reader data in Fig. 9 shows the diversity of *The State Press* output. Science, arts and culture, and campus events proved most popular in the week indicated in the first graph.
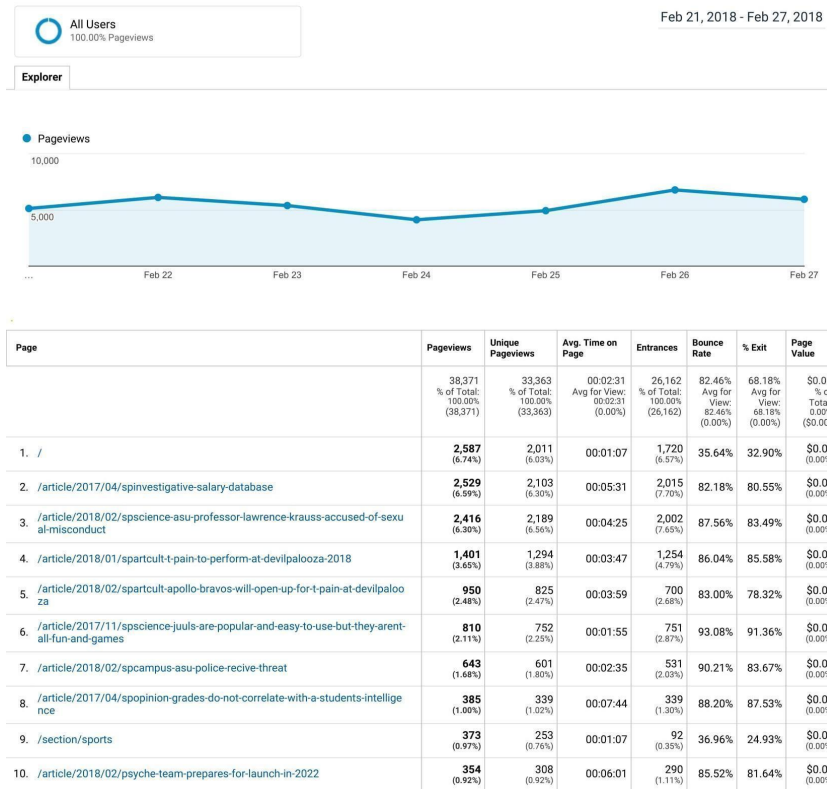

| | All Users | | | Feb 21, 2018 - Feb 27, 2018 |
| 100.00% Pageviews | | | | |

Page	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	38,371 % of Total: 100.00% (38,371)	33,363 % of Total: 100.00% (33,363)	00:02:31 Avg for View: 00:02:31 (0.00%)	26,162 % of Total: 100.00% (26,162)	82.46% Avg for View: 82.46% (0.00%)	68.18% Avg for View: 68.18% (0.00%)	$0.00 % of Total: 0.00% ($0.00)
1. /	2,587 (6.74%)	2,011 (6.03%)	00:01:07	1,720 (6.57%)	35.64%	32.90%	$0.00 (0.00%)
2. /article/2017/04/spinvestigative-salary-database	2,529 (6.59%)	2,103 (6.30%)	00:05:31	2,015 (7.70%)	82.18%	80.55%	$0.00 (0.00%)
3. /article/2018/02/spscience-asu-professor-lawrence-krauss-accused-of-sexual-misconduct	2,416 (6.30%)	2,189 (6.56%)	00:04:25	2,002 (7.65%)	87.56%	83.49%	$0.00 (0.00%)
4. /article/2018/01/spartcult-t-pain-to-perform-at-devilpalooza-2018	1,401 (3.65%)	1,294 (3.88%)	00:03:47	1,254 (4.79%)	86.04%	85.58%	$0.00 (0.00%)
5. /article/2018/02/spartcult-apollo-bravos-will-open-up-for-t-pain-at-devilpalooza	950 (2.48%)	825 (2.47%)	00:03:59	700 (2.68%)	83.00%	78.32%	$0.00 (0.00%)
6. /article/2017/11/spscience-juuls-are-popular-and-easy-to-use-but-they-arent-all-fun-and-games	810 (2.11%)	752 (2.25%)	00:01:55	751 (2.87%)	93.08%	91.36%	$0.00 (0.00%)
7. /article/2018/02/spcampus-asu-police-recive-threat	643 (1.68%)	601 (1.80%)	00:02:35	531 (2.03%)	90.21%	83.67%	$0.00 (0.00%)
8. /article/2017/04/spopinion-grades-do-not-correlate-with-a-students-intelligence	385 (1.00%)	339 (1.02%)	00:07:44	339 (1.30%)	88.20%	87.53%	$0.00 (0.00%)
9. /section/sports	373 (0.97%)	253 (0.76%)	00:01:07	92 (0.35%)	36.96%	24.93%	$0.00 (0.00%)
10. /article/2018/02/psyche-team-prepares-for-launch-in-2022	354 (0.92%)	308 (0.92%)	00:06:01	290 (1.11%)	85.52%	81.64%	$0.00 (0.00%)

Fig. 9 - Details of page behavior on The State Press site on a weekly basis.

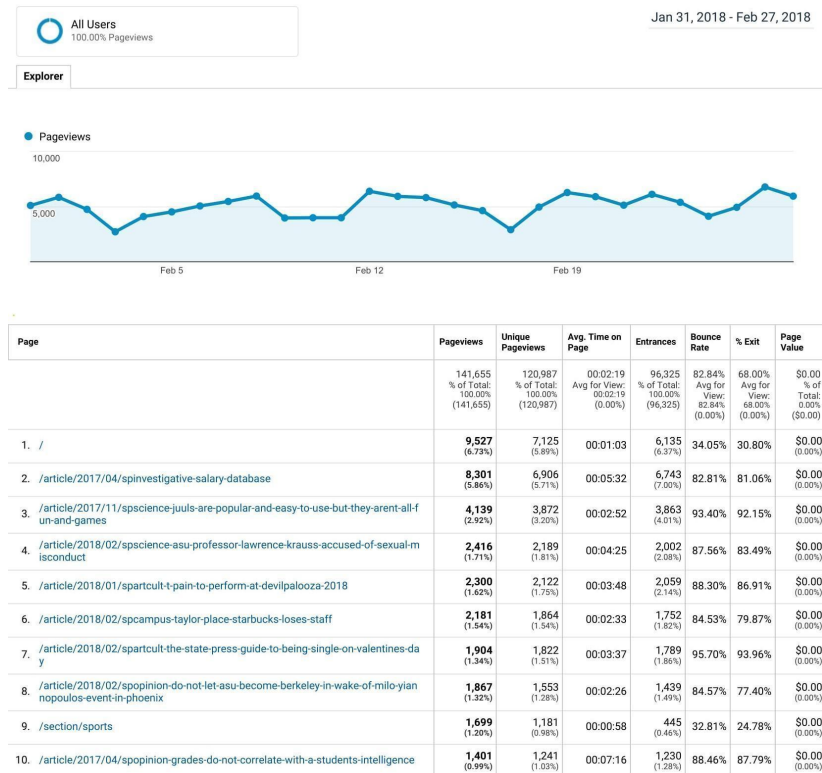The data in Fig. 10 shows how large stories can pull in more readers over a prolonged period.

Fig. 10 - Details of page behavior on The State Press site on a monthly basis.

The article about ASU professor Krauss published in February 2018 likely received as much attention as it did because it could be a story that has ramifications beyond the university. This could be a case that is discussed across the country, and *The State Press* is able to offer unique viewpoints of students who have some level of knowledge or a notable reaction to the story. While boundaries should be respected as needed, those who are willing to come forward can give the readers a face to attach to this fallout.

But it appears that the story that has been viewed and discussed the most is a database about employee salaries at ASU. This can be viewed as another pressing issue, evaluating the worth of educators and the debate if they deserve higher wages. Some readers might take note of the vast difference between athletic salaries and academic salaries, which will add to the discussion potential. If this database is updated as necessary and is accurate, it could continue to be a source of information that readers will want to peruse.

Recommendations for Influencing User Behavior

An average of 1.47 pageviews per session shows that readers who navigate elsewhere on the site after reading that first article are willing to do extra research or read other articles. The layout could be edited through the related articles at the bottom of each page. The site focuses on pushing the most recent stories instead of stories relevant to the article being read. A change to these suggested stories could spur the reader to continue viewing the site.

Some desks will have more output at certain times of the year, like how the sports articles may get more attention in the middle of busy seasons. But ensuring that each desk has a steady output would be a way to keep the readers returning. Whether there is a dedicated day for publication for each desk or the stories are dispersed throughout the week can be tested and then applied.

Whenever it is possible to cover an event that could leave an impact beyond the local community, looking to students and faculty involved and getting a quote from them can show readers that *The State Press* offers unique viewpoints while still being forthcoming with information. Reporters on the staff are held to the same level of credibility as professional journalists, so having them be upfront with this information teaches them those skills as well as increasing their reliability.

The audience of *The State Press* wants to hear how these stories pertain to the university and local community, so demonstrating this level of credibility can get them to continue coming back to the site for future stories.

Analysis of User Flow from Search Engines

As seen in Fig. 11, Google is how most readers get to *The State Press* site. Keywords are considered when publishing an article and these are what help users on search engines find these articles. Searching for "ASU softball" had a recent *The State Press* article appear in the "Top Stories" category, suggesting that the use of keywords is effective.

Fig. 11 - The most common sources that get users to The State Press site.

While users have a variety of means to access *The State Press* site, it appears that most of them leave as quickly as they arrive. The bounce rate is noticeably high; of the 96,000 users documented over this monthly scan, nearly 88,000 of them closed the site after viewing just one page as seen in Fig. 12.
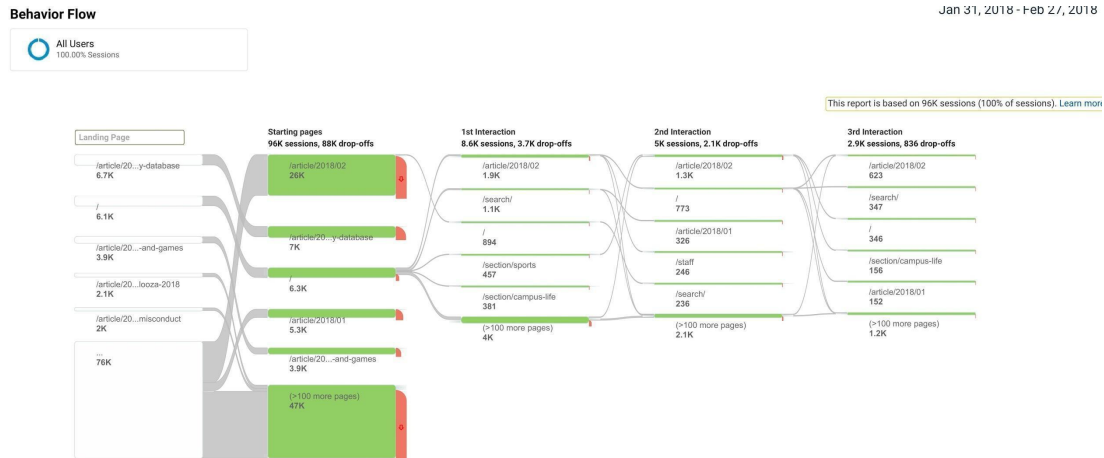
Fig. 12 - The most frequent landing pages of visitors to The State Press site, and where they follow up.

It is likely that they came to the site with the sole intention of reading that one article and then resuming what they were doing before clicking on the link. The less ideal outcome is that they were dissatisfied with what was being reported or displayed that they decided to look elsewhere for information about the article content.

Searching for ASU softball posts on Facebook also has posts from *The State Press* as well as the official team page appear near the top of the results. Then searching for ASU softball on Twitter or other social media sites listed in Fig. 13 has posts from the official account appear first. This option could allow news posts to be seen in the "Top" category so long as they are not quickly overshadowed by posts from the official team accounts.

Fig. 13 - The social media sites used most often to access The State Press site.

Recommendations Regarding Search Engines

Earlier in this report I spoke about algorithms used by Google to direct users to content. The results may not have been what the user was seeking, but if the resulting content contained relevant terms then it would appear regardless. Therefore, *The State Press* staff should continue to implement the most relevant keywords in each article. The keywords should be specific when discussing names and teams, but broader terms can be used for larger topics such as sports or campus life or any of the other desks that *The State Press* has.

Articles with similar keywords or tags could be inserted into the related articles tab near the bottom of each page. These suggestions can rotate depending on what keywords the user typed in to access the article. Each reporter could also look through the archives and suggest any related articles that a new reader may be interested in after reading the first article.

If a new user sees the volume of output and related articles that *The State Press* has published in prior months, then they may be curious to investigate the rest of the site and find the variety of topics that are covered on a regular basis. A full tab of recently published articles and an indicator of what desk they fall under can also help users see new developments and articles that they could be interested in and are related to what they just read.

One note that was sent out in a recent Slack report, which I receive due to freelance status, is that viewer numbers decrease if the stories are not shared by the reporters. There could be occasional readers or readers who only view the site when someone they know was involved in the published content. Articles on *The State Press* site have contact info for each reporter, which can include their social media handle.

While some staff may not be on a particular social site, those who are should be reminded regularly to share their work so that their respective friends and followers can see them. Even if they only give the article a quick glimpse, they may be tempted to continue perusing the site if they find it intuitive to navigate or if they are presented with several articles that have similar topics to the article they clicked on.

Conclusion

Every content creator with an online presence shares a desire to increase or maintain their readership. While there is a group of users that wants to entertain, there will be a group that wishes to inform and educate their readers.

The State Press is an organization that can do both with its location and staff consisting of ASU students. For each article that informs readers of developments that are relevant to the university, there are lighter stories that can stimulate the readers' creative and personal sides.

As mentioned before, the readership age skews younger, and being founded and centered at ASU establishes a geographic location to tailor to. ASU is a university that prides itself on innovation and pushing forward on new technologies and knowledge, so *The State Press* seeking out new ways to maintain its presence on campus can go in hand with this mission.

The recommendations laid out in this report are practical and ethical means by which the staff could increase their readership. Ensuring that the site is continually compatible with new technologies will allow users with many levels of experience with those technologies to access the site and feel like they are accounted for.

Spacing out story editing and publishing sessions can allow for a steady flow of content through a given week as opposed to most of the content going online on two or three specific days. If the audience realizes that there is a steady output throughout the week, then they may be more likely to return during the current slow days. There are multiple desks and story genres covered by *The State Press*, so having an output level that is consistent and varied just like the article topics could get the readers to return to the site on multiple days instead of on a weekly basis.

Research into the recent search trends and algorithms can also prove effective if they are implemented well into each article. The keywords can help the articles be found to a degree, but additional information in the code of a webpage could cause those pages to appear higher in top results and garner more discussion, which will bolster its return results further.

The staff should format the site so that story suggestions are based on story genre and keywords rather than other recently published pieces. *The State Press* may be interested in pushing the latest content, but the user may be interested in a certain topic and might want to know right away what else has been written and published. These suggestions do not have to be intrusive, but they should show the user that the site can be easy to navigate on any device or browser. Each article requires several external sources so that the reader can see that information has been verified. And the multimedia that is displayed within each article can give further credence to the

story being written about. These elements may be a given commodity by the reporters, but their impact should not be understated.

As stated in the beginning of this report, we are in an age where there are a bevy of sources all competing for the attention of a general audience. Sources that rely on exaggerations or false information appear convincing to that audience and thus continue to spread even if the opposite reports have been confirmed. These are outlets that have learned how to tap into the search technologies used by companies like Google to grow their reader bases.

The search algorithms mentioned previously can present new information to a user based on their reactions and discussion. Sometimes they may not be looking for entirely accurate information, they just want an explanation. Some of those users may be willing to accept outrageous claims if they continue to appear in online searches.

And ultimately, each reporter involved with *The State Press* should recall that purpose that brought them there in the first place. They want to research stories and topics that interest them and write about it for an audience with similar interests. The reporters would likely appreciate accurate information from reliable sources that can be proven correct. Then each the staff can pursue their stories with their purpose in mind.

Search technologies and the associated knowledge can have their place with keywords and the code of a webpage, but they should still be used responsibly. The staff could try any combination of the information suggested in this report with what they have learned in addition or have used in the past.

The recommendations outlined with this report coupled with the journalistic standards held by *The State Press* will at best lead to more users visiting the site, and those who do visit will return and be more willing to engage with the staff and other readers. As the reader base grows and evolves, the content output could see similar growth as well.

References

Brewer, E. C. and Holmes, T. L. (2016, Sept.). Better communication = better teams: A communication exercise to improve team performance. *IEEE Transactions on Professional Communication*. 59(3). 288-298. http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7547269&isnumber=7552615

Broel, B. (2017, Jan. 4). Fact-checking won't save us from fake news. *FiveThirtyEight*. Retrieved April 09, 2018 from http://fivethirtyeight.com/features/fact-checking-wont-save-us-from-fake-news/

Chmielewski, D. (2018, Feb. 21). YouTube removes conspiracy video smearing Parkland student as paid actor. *Deadline*. Retrieved April 09, 2018, from http://deadline.com/2018/02/youtube-removes-conspiracy-video-parkland-shooting-1202298020/

_cingraham. (2018, Feb. 21) "First page of @YouTube search results for David Hogg:" Retrieved April 09, 2018 from https://twitter.com/_cingraham/status/966331897457426434

DeMers, J. (2014, Sept. 3). Why knowing your audience is the key to success. *Forbes*. Retrieved April 09, 2018 from www.forbes.com/sites/jaysondemers/2014/09/03/why-knowing-your-audience-is-the-key-to-success/#1ceaed7d3fb7

D'Onfro, J. (2018, Feb. 22). YouTube made an 'absurd excuse' for why it can't have humans moderate trending videos, says expert. *CNBC*. Retrieved April 09, 2018 from www.cnbc.com/2018/02/22/youtube-trending-algorithm-needs-reform.html

Doumont, J. L. (2002, Dec.). The three laws of professional communication. *IEEE Transactions on Professional Communication*. 45(4). 291-296. Retrieved April 09, 2018 from http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1097811&isnumber=24072

Google. Retrieved April 09, 2018 from http://developers.google.com/search/mobile-sites/

Killoran, J. B. (2013, March). How to use search engine optimization techniques to increase website visibility. *IEEE Transactions on Professional Communication*. 56(1). 50-66. Retrieved April 09, 2018 from http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6463486&isnumber=6466539

Kimball, M.A. (2016) Tactical technical communication. *Technical Communication Quarterly*, 26(1), 1-7, DOI: 10.1080/10572252.2017.1259428 Retrieved April 09, 2018 from https://www-tandfonline-com.ezproxy1.lib.asu.edu/doi/full/10.1080/10572252.2017.1259428?scroll=top&needAccess=true

Lapowsky, I. (2018, February 22). Parkland conspiracies overwhelm the internet's broken trending tools. *Wired*. Retrieved April 09, 2018, from http://www.wired.com/story/youtube-facebook-trending-tools-parkland-conspiracy/

Levin, S. (2017, Oct. 4). Las Vegas survivors furious as YouTube promotes clips calling shooting a hoax. *The Guardian*. Retrieved April 09, 2018 from www.theguardian.com/us-news/2017/oct/04/las-vegas-shooting-youtube-hoax-conspiracy-theories

Löfstedt, U. & Holmberg, S.C. (2016, August). Social media as a mean for improved technical communication. *Systemic Action and Practice Approach*. 29(4). 297-312. Retrieved April 09, 2018 from https://doi-org.ezproxy1.lib.asu.edu/10.1007/s11213-016-9373-8

Long, G., Kamali, M., Fazlollahi, A. H., and Rao, V. R. (2005, Sept.). Competition stimulates technology advances: experiences from ADSL development in Japan. *IEEE Communications Magazine*. 43(9). 110-115. Retrieved April 09, 2018 from http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1509975&isnumber=32334

MicahGrimes. (2018, Feb. 20). "This is how absurd, gaslighting "crisis actor" theories go viral." Retrieved April 09, 2018, from https://twitter.com/MicahGrimes/status/966077901127979008

MicahGrimes. (2018, Feb. 21). "Conspiracy theories generate much reaction on social media." Retrieved April 09, 2018 from https://twitter.com/MicahGrimes/status/966335459789066240

Murphy, M. (2017, Apr. 10). How to talk to people that don't get right to the point. *Forbes*. Retrieved April 09, 2018 from www.forbes.com/sites/markmurphy/2017/04/09/how-to-talk-to-people-that-dont-get-right-to-the-point/#44779c97ec28

Plain language. National Institutes of Health. Retrieved April 09, 2018 from www.nih.gov/institutes-nih/nih-office-director/office-communications-public-liaison/clear-communication/plain-language

Redish, J. (2010, Sept.) Technical communication and usability: Intertwined strands and mutual influences. *IEEE Transactions on Professional Communication*. 53(3). 191-201. Retrieved April 09, 2018 from http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5556477&isnumber=5556396

Schriver, K. A. (2017, Dec.) Plain language in the US gains momentum: 1940–2015. *IEEE Transactions on Professional Communication*. 60(4). 343-383. Retrieved April 09, 2018 from http://ieeexplore.ieee.org.ezproxy1.lib.asu.edu/stamp/stamp.jsp?tp=&arnumber=8115322&isnumber=8118320

Timberg, C, and Harwell, D. (2018, Feb. 25). Parkland shooting 'crisis actor' videos lead users to a 'conspiracy ecosystem' on YouTube, new research shows. *The Washington Post*. Retrieved April 09, 2018 from www.washingtonpost.com/news/the-switch/wp/2018/02/25/parkland-shooting-crisis-actor-videos-lead-users-to-a-conspiracy-ecosystem-on-youtube-new-research-shows/?utm_term=.a8b6a0a40278

What Are Keywords? Retrieved April 09, 2018 from http://moz.com/learn/seo/what-are-keywords