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ANALYZING SOCIAL MEDIA AND STUDENTS' ACADEMIC PERFORMANCE

By

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A capstone project submitted for
Graduation with University Honors

June 1st 2020

University Honors
University of California, Riverside

APPROVED

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Abstract

This study is designed to investigate the question: does social media platforms play a vital role in a students' academic performance? Students' academic performance is analyzed through a series of survey-based questions given to students. These questions help indicate if students prefer a social media platform integrated into their curriculum, don not desire social media integration, or are indifferent regarding this topic. Some survey questions are ranked from 0 to 5, 0 representing "strongly disagree", and 5 representing "strongly agree". In addition, there are questions that require students to either circle or identify specific words. These data are analyzed and ultimately used to answer the primary research question of this project. The study conducted indicates social media can be viewed as both beneficial and detrimental in light of certain topical issues previously not studied, such as students' attitude towards governmental regulation of social media. Moreover, the results of the study are compared to previous studies that determined social media as more exclusively helpful or harmful for society. These responses can help shape the future of pedagogy for educators by understanding social media through the student-oriented perspective, leading to the creation of more dynamic and engaging classrooms.

Acknowledgments

I would like to thank Dr. Jerome Winter for being my faculty mentor and helping me create this project. I really appreciate him taking time out of his busy schedule to give me advice, guidance and countless support during the positives and negatives of this research process.

I would like to thank the University Honors Program and Staff for being an important resource and allowing me this amazing opportunity to contribute to a field of my interest.

I would like to thank my father, Narinder, who has taught me to always produce the highest quality product in any field.

I would like to thank my mother, Sonu, who inspired me to create a project aimed at bettering students' lives.

I would like to thank my older brother, Kevin, who taught me to preserve during any troubling times.

I would like to thank my little brother, Rocky, who is a great motivational support and always stayed up late with me when I was working on this project.

Critical Literature Review

There seems to be an overall trend from my literature review about why my project would be relevant to current research in the learning field. My project's subject pool is primarily of students and this perspective is not well-explored, nor well analyzed since most research looks at the implications in the educator's eyes. In addition, these studies have been conducted over 9 years ago with students and their opinions, thoughts solely on Facebook. Attitudes and perspectives have changed throughout the years; the data collected in the past may be irrelevant to today's opinions. In addition, my literature review revealed that there have been connections of formal learning (such as traditional classroom format) and informal learning (such as Facebook, social media, etc.), which produces longer lasting learning in students. This learning was demonstrated with ESL (English as a Second Language) students utilizing Facebook in the classroom as a way to bridge formal and informal learning. At the end of the study, 55% of participants agreed Facebook enhanced their learning, and many students still remembered hard English concepts months after the course was over. In addition, multiple studies revealed blogging and the use of interacting with other peers help students grasp concepts quickly and put less strain on educators and professors. These findings give new light to my study and can help the success of both the student and educator.

Research Methods

The only way to collect the data involving attitudes and opinions of individuals regarding a topic can be exemplified through a survey. I utilized a numeric 1-5 scale representing strongly disagree to strongly agree which allowed me to quantify the data. This helped me quantify student's opinions to determine what the overall consciousness is based on what the majority chose. In addition, I utilized word association and determined which word/words were chosen by the majority. I conducted the survey via two methods: firstly, I began in-person with students given printed handouts for them to complete. Secondly, I conducted an online survey to get a larger scope and sample size of the target demographic, college age students. I posted these online surveys in college Facebook groups to help reach my target demographic. In addition, it was easier to transfer the online data to analyze via graphs and excel plots versus paper handouts. For the online survey, I had to ensure there are not multiple surveys per individual. I controlled for this by allowing only one survey per email address. I know this won't guarantee discrepancies in the ratio of surveys to participants, but it will deter many individuals from skewing the data.

The IRB (Institutional Review Board) determined that I do not need to give consent forms to participants in the survey since the surveys are minimal risk and no identifiable data was collected. The reason I kept age is due to the fact I am looking at a particular subset of individuals thought this survey. Specifically, undergraduate students from the age range of 18-21 years old. This age range helped organize the data into age cohorts and ensure that those out of the target cohort range do not affect the overall analysis of the data. After all data was collected, I analyzed it via tables and graphs to help determine the overall consensus of the participants.

Results:

N=132

Figure 1

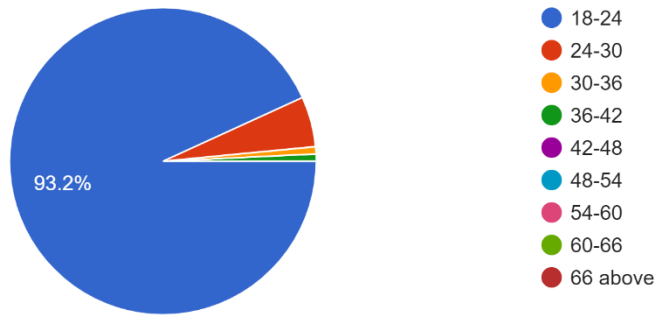Which age cohort do you fall under?
132 responses

93.2%

- 18-24
- 24-30
- 30-36
- 36-42
- 42-48
- 48-54
- 54-60
- 60-66
- 66 above

Figure 2

1. Social media enhances learning and allows for academic exploration:
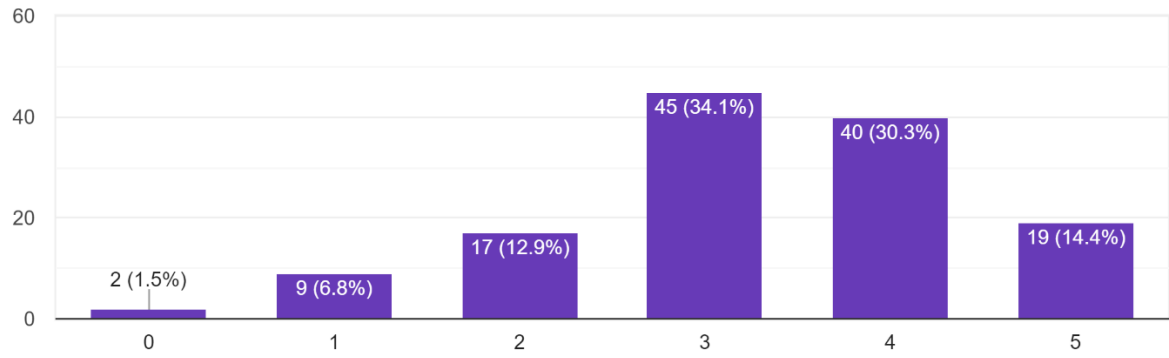
132 responses

Figure 3

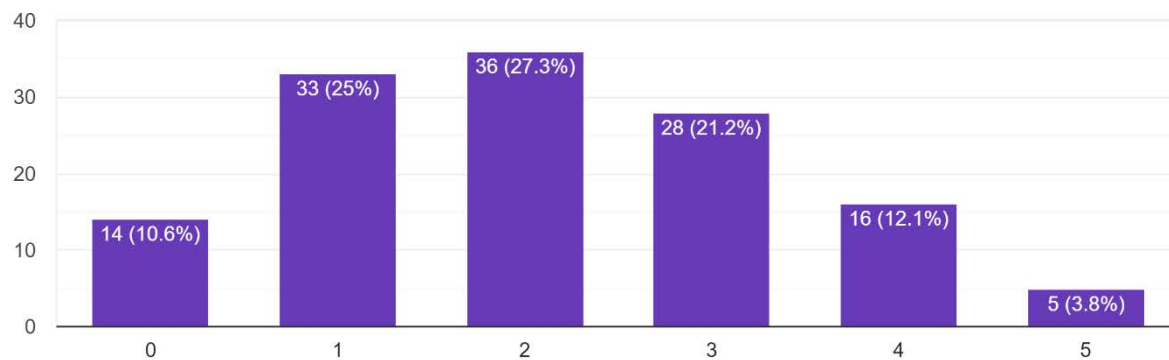### 2. I feel secure about the privacy of your data on social media.

132 responses

Figure 4

3. I like the integration of social media into my current curriculum.
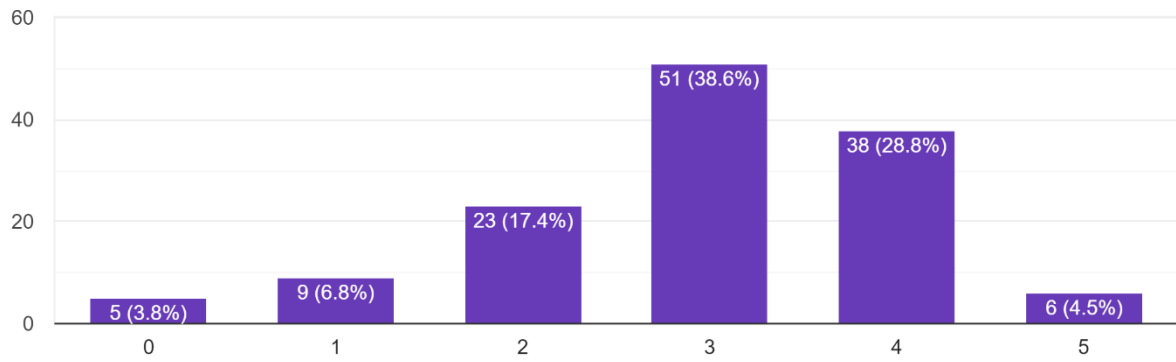132 responses

Figure 5

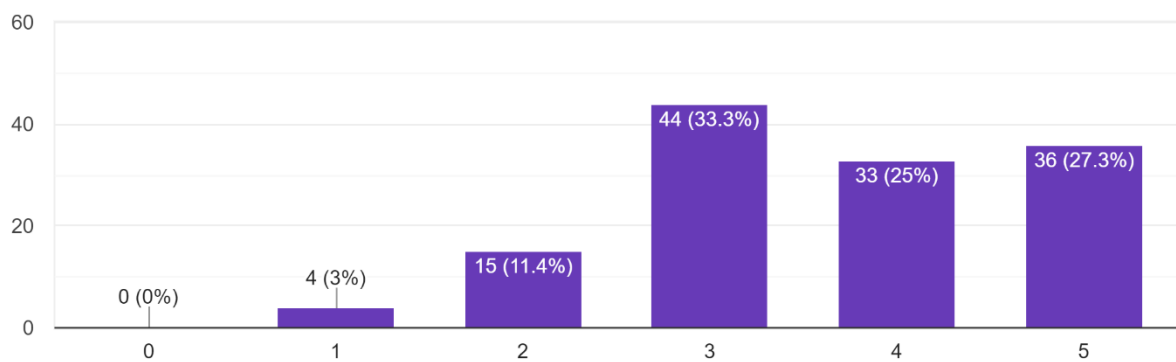4. I believe social media becomes largely a distraction instead of an aid.
132 responses

Figure 6

5. Social media can be customizable to suit each my academic needs.
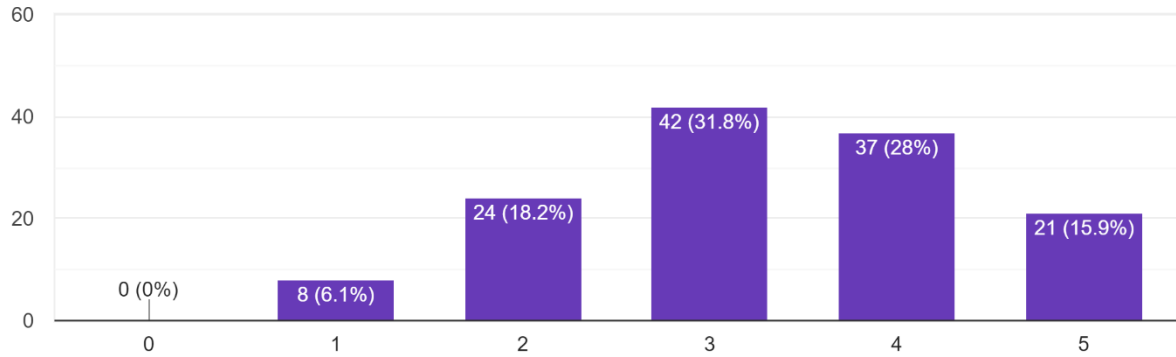132 responses

Figure 7

6. I believe in the importance of face-to-face teacher-student interaction in learning.
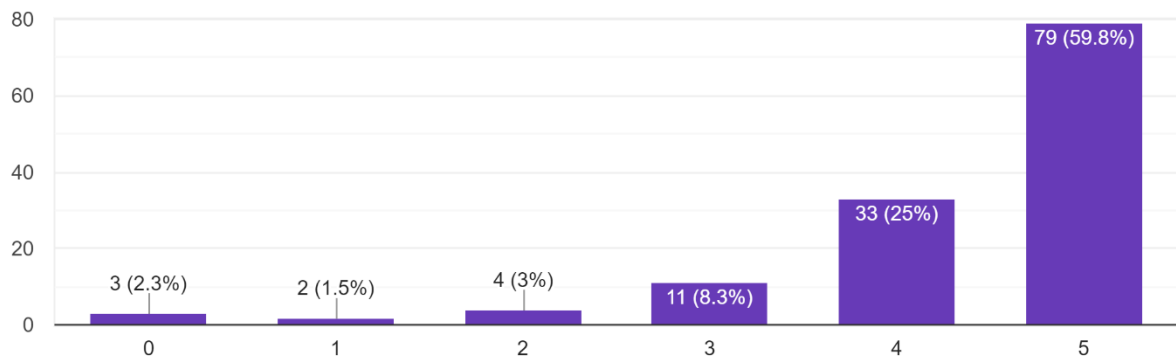132 responses

Figure 8

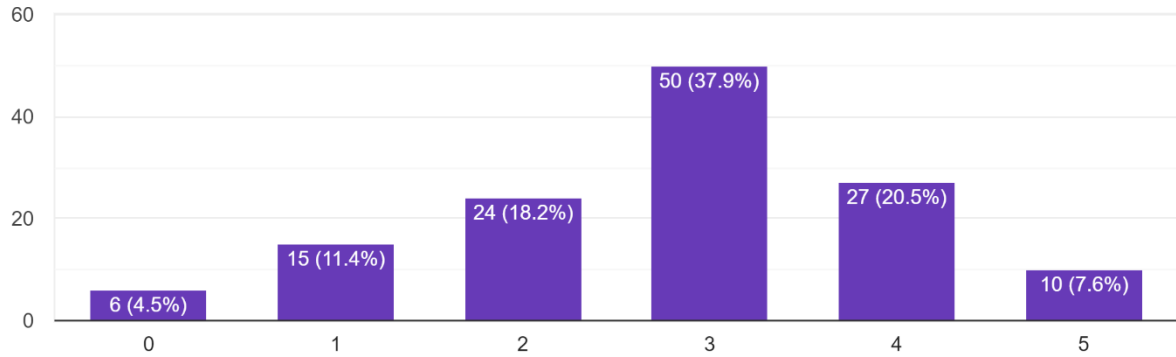7. I believe conversations online are increasingly narrow-minded and biased.
132 responses

Figure 9

8. I believe information online is increasingly false or misleading
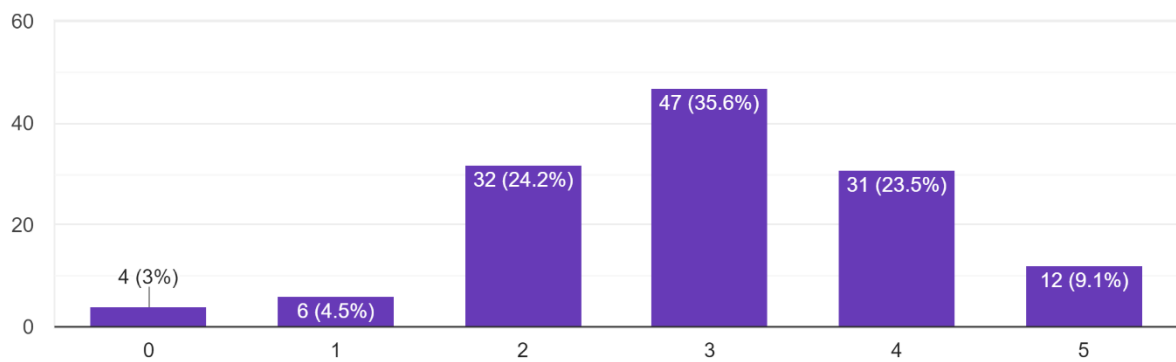132 responses

Figure 10

9. I believe social media companies need to self-regulate to prevent abuses.

132 responses
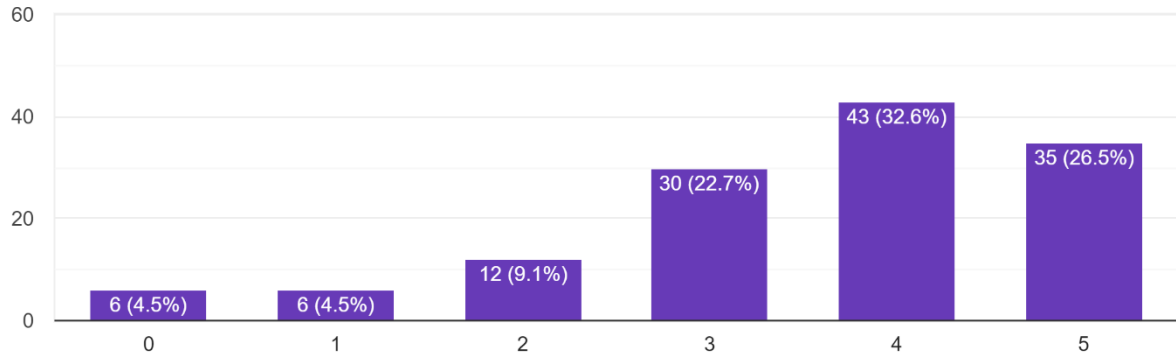

Figure 11

10. I believe social media companies should be regulated by the government.

132 responses
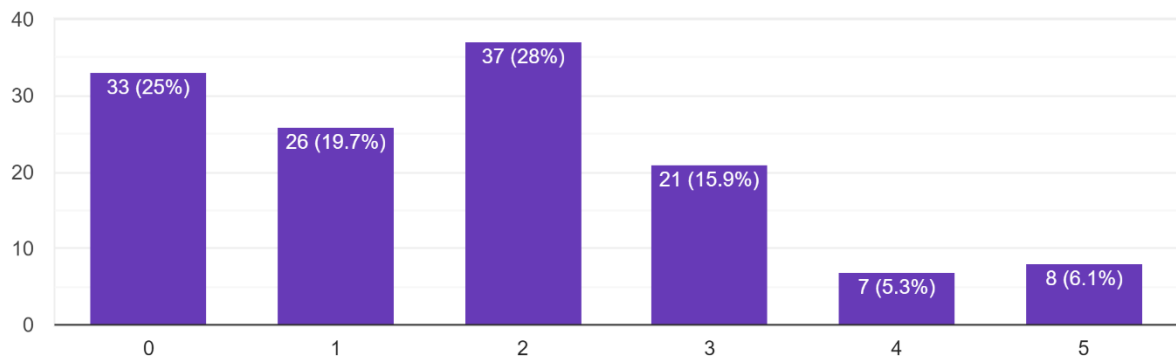
Figure 12

1. I feel I have control of my personal data on social media platforms
132 responses

●	True
●	False
●	Not Sure
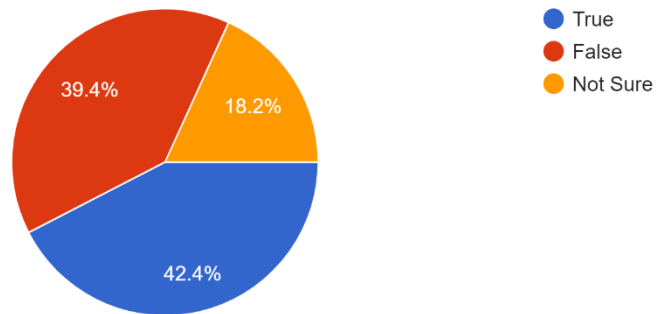
Figure 13

2. I trust technology as a whole
132 responses

●	True
●	False
●	Not Sure
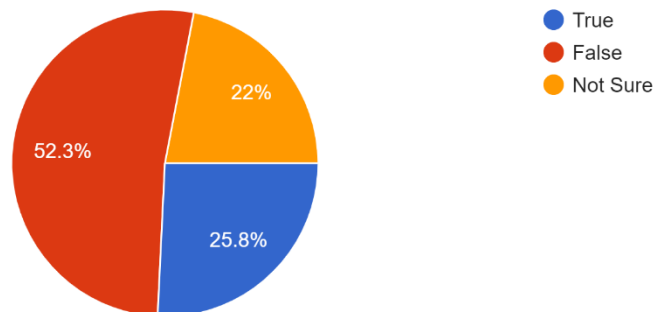
Figure 14

3. My Professors (educators) are currently using web-based programs in their classroom.
132 responses

Legend:
- True
- False
- Not Sure

8.3%
88.6%
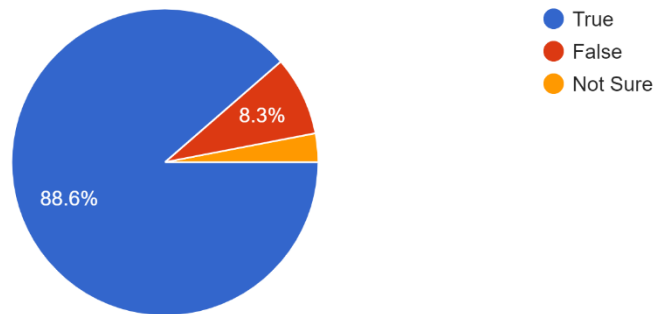
Figure 15

4. Web based programs are important in the learning process for me as a student.
132 responses

Legend:
- True
- False
- Not Sure

15.2%
25.8%
59.1%
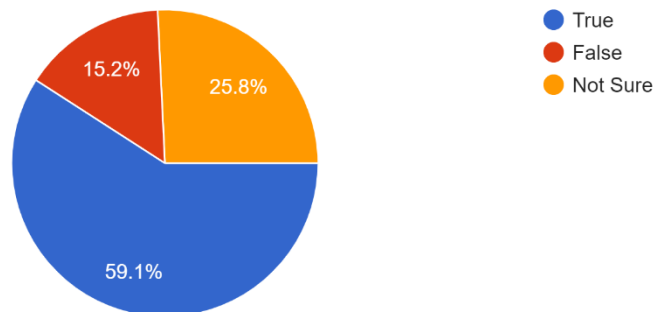
Figure 16

1. What is your current usage of social media and online per day?
132 responses

- 0 hours
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6+ hours

13.6%
16.7%
21.2%
25%
16.7%
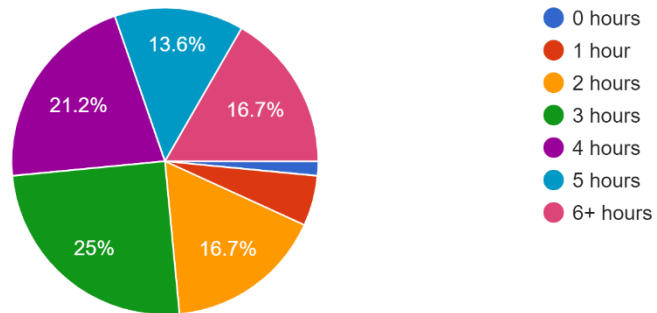
Figure 17

2. What technology do you utilize the most during the day?
132 responses

- Smartphone
- Laptop (tablet)
- Television

18.9%
81.1%
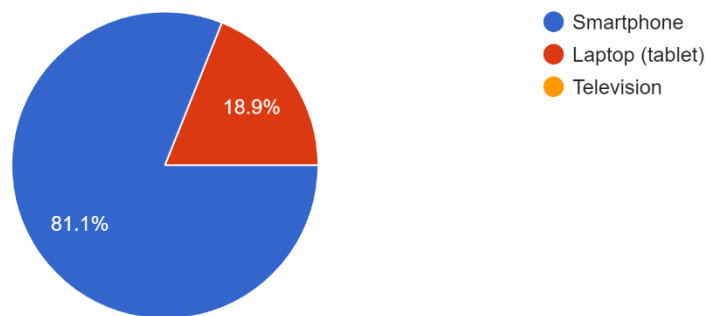
Figure 18

3. What do you associate with social media?
132 responses

Legend:
- Networking
- Identity
- Leisure Time
- Distraction
- Bullying
- Other

45.5% — 17.4% — 25%
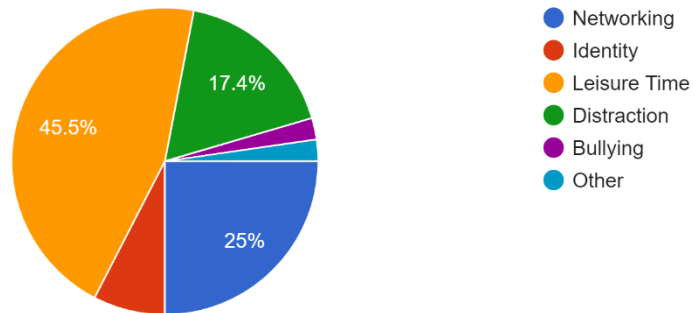
Figure 19

4. If your circled other, what do you associate with social media instead?
7 responses

Evangelization	Leisure time	Motivation, goals	N/A	Translation, study, vid…
1 (14.3%)	1 (14.3%)	1 (14.3%)	3 (42.9%)	1 (14.3%)
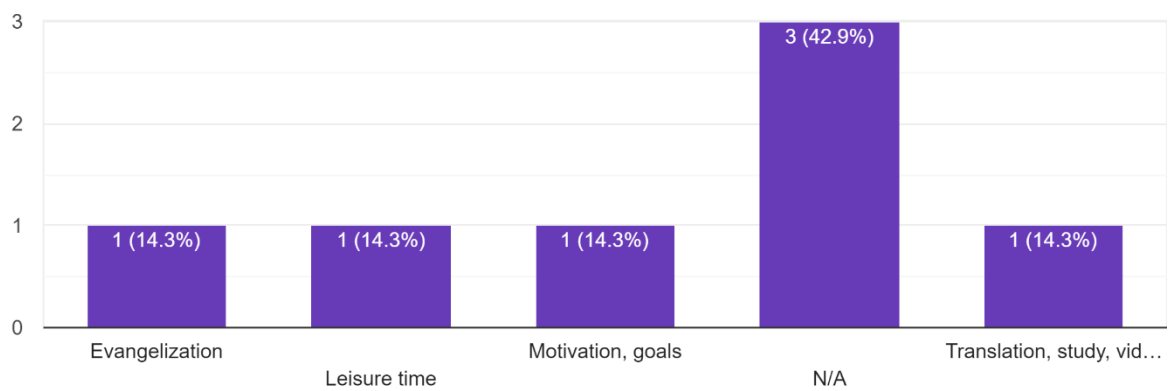
<u>Discussion of Results</u>

The results of this study reveal an interesting dichotomy about students' opinions regarding

social media's benefits or detriments in the classroom.

<u>Note</u>: Majority= Strongly agree to slightly agree

Figures 3(privacy), Figure 12 (control over personal data), Figure 6 (customizable)

Figure 3 reveals majority (62%) of students don't feel secure about the privacy of their data on

social media platforms. *Figure 12* reveals an even split (39% vs 42%) between students who feel

they do or do not have control over personal data on social media platforms. Lastly, *Figure 6*

reveals a strong preference (76%) that social media can be customizable to meet the needs of the

students. This means the results imply that students value control and customizability. In

addition, they believe the current social media platforms don't provide them security in terms of

their privacy.

<u>Control</u>

It is vital that students have a sense of control over their content, both the way content is

presented and the spread of their content.

This control allows students to role-play and develop their professional profiles to better

their careers. This control also makes social media a malleable tool that can be changed to meet

the students' desires. Such control allows individuals to essentially to "create avatars online [so]

individuals can customize to their wants and desires." (Boyd, 42) This concept can be utilized to social media accounts as well. Social media accounts can be customized by adjusting the home profiles of the students. This can include adding interest of the students such as sports or medicine or engineering. In addition, students can have future goals listed on their home page profile. This will help motivate the students and encourage themselves to achieve these goals and increase effort in classes. This will help decrease the professor work-load since each student can better manage themselves. In addition, this gives students control of their learning and the way the content is present to them. This can help make education more interactive and more enjoyable for students than the traditional classroom environment.

The negative experience of social media occurs when there is context collapse that interferes with one's learning. This is best pointed out in *It's Complicated* when a college admissions committee saw an applicant on Facebook with gang signs. (29) A major issue is that the admissions committee was not the applicant's target audience. This context collapse means on social media there is no limitation of target audience and individuals can be taken out of context. This is a major reason why students feel they have no privacy online since there is no control of who sees the content. A major distraction can occur when both professor and peers are viewing your personal account. This visibility can hurt a students' academic success and career since their audience can control their fate. For example, a professor viewing a student's social media account and deciding if the student should get a scholarship or join their research team. This can add an extra burden and create unnecessary stress on an already busy student. Figure 18 provides the evidence that students see social media as a distraction and leisure time rather than a productive use of time.

Figure 16 (time spent on social media). Figure 17 (device use)

Figure 16 reveals that majority (77%) of students use 3 hours and more on social media per day. *Figure 17* reveals that majority (81%) of students use smartphones the most throughout the day rather than television or laptop.

Figure 2 (academic exploration), Figure 4 (integration)

Figure 2 reveals that majority (78%) of students believe that social media can help the learning experience and academic exploration. *Figure 4* reveals that majority (70%) of students want the integration of social media into the classroom.

Opportunities

Students want academic exploration through social media and be able to utilize social media as a tool.

A prime example of the benefits of social media was when teens "started learning enough code to modify their profiles. Some teens became quite sophisticated technically as they sought to build extensive, creative profiles. Others simply copied and pasted code that they found online. But this technical glitch—combined with teens' passion for personalizing their MySpace profiles—ended up creating an opportunity for teens to develop some technical competency." (182). This initiative allowed for students to explore for themselves the world of the computers at

their own pace and incentive. The whole system was very fluid in terms of coding abilities ranging from beginner to advance level. This meant every student can start at their own understanding level and grow from there. The whole process involved a heavy emphasize on informal learning and self-directed learning for students. This manipulation of coding helped foster student's passion into something viable and a potential career path. This technical expertise can help integrate students into an automated future with technology playing a larger role in our lives. Other courses such as philosophy can adapt this approach by allowing students to research and create social media accounts of these philosophers. This can allow students to learn the various philosophers in a more innovate and interactive way. The current survey results want the integration and future academic exploration for students. In order to help students, achieve their highest potential and prepare them for a new technology age, we need to consider the implementation of social media for academic exploration.

Oppositely, social media can hinder the future success of underprivileged students with lack of resources. The main concern is the access to social media platforms. This can be a tremendous barrier for learning across socioeconomic backgrounds. Most students possess a laptop (97%) however the reliability of the laptop varies depending on socioeconomic background. For example, in one survey study "students of Color had more problems with breakdown and functionality than Whites, whereas females and freshman had fewer problems than males or more senior students." (Gonzales,18) If a student can't access the internet reliably, it could result in a sub-par education and re-solidification of a class system in America. In addition, a new type of discrimination can be implemented that is based on the social media platforms. These are all extra pressures for a student and could hurt the future generation's success and social mobility simply based on their current tools.

Figure 5 reveals that majority (85%) of students believe social media becomes a distraction than an aid. *Figure 7 reveals* that majority (93%) of students believe face-face teacher student interaction is important. *Figure 15* reveals that majority (59%) of students believe web-based learning is important in the classroom. *Figure 14* reveals that majority (89%) of students state their professor are currently using web-based programs. This is a surprising dip that 89% of students are using web-based learning but only 59% say it is important. I believe this can mean that approximately 40% of students who are currently using web-based learning don't believe it is useful or helpful in their education.

Web-learning

Students feel web-based learning is important however social media can be a distraction and face to face encounters can be more effective.

Web learning is already an ability students have grown accustomed to. "our students today are all 'native speakers' of the digital language of computers, video games and the Internet." (Prensky,1) This means the integration of web learning in the classroom is already easier for this generation than the older generations. The current students are natives of technology and grasp the new concepts with relatively little new education. "We now have communications tools-and increasingly, social patterns that make use of those tools-that are a better fit for our native desires and talents for group effort." (Shirky,48) This makes group

collaboration easier than ever and group collaboration is a major part of real-world careers. Future employments utilize online platforms for group collaboration. Allowing students to be acclimated with these online platforms early on will help them in the long term. Figure 14 and 15 reveal an important discrepancy in student's opinions on the web-learning. That is students do not think web-based learning is important because it is not being well-implemented yet. Perhaps "web-based" academics needs to take advantage of "social media", which students do generally attest to using by and large. Current students are already using new forms of communication tools and by adapting these tools with educational platforms we can help them. This helps students feel prepared for the future careers and be better working in groups through online platforms.

Web learning can become a distraction which leads to face to face encounters being more effective. "One study asked college students with Facebook pages to complete surveys …. The more they'd used Facebook, the unhappier they later felt." (Twenge,78-79) 'This leads to social media being a distraction and students losing focus. The student will feel more depressed and less motivated to complete coursework. This issue will be amplified if social media is combined with the classroom. In addition, the content on social media can influence the perspective of the student. For example, the students can view the world in a more negative light and can lead to greater depression among the students. The students' mental health will be negatively affected and could lead to more depression cases and more suicides. Lastly, social media can cause self-confidence issues and insecurities with the student since their personal lives can be magnified as well. This means social media in the classroom can be a larger distraction and by having face to face encounters these distractions can be dispelled.

Figure 18 reveals that majority (45.5%) of students associate social media with leisure time. *Figure 13* reveals that majority (52.3%) of students don't trust technology. *Figure 20* reveals that students associate future of technology and academics as (43.2%) convenience and (46.2%) beneficial/harmful.

<u>*Association*</u>

Students' association of social media and technology as a whole can be problematic in the integration of social media and the classroom.

The main issue with social media is it is **"**hard to ensure truth and verifying information is accurate on the platform. They see no reason to provide accurate information, in part because they know that most people who are reading what they post already know who they are" (Boyd,46). The information available online can be inaccurate and this can result in issues trusting technology. This platform was originally designed for leisure time, so it makes sense why there isn't secure ways of providing accurate information. The bias leads to the biggest hurdle which is changing social media platforms to provide accurate and truthful information. If this cannot be done then there is no point of integrating social media and the classroom. In addition, this explains why students viewed technology as both beneficial/harmful since they have more information at their fingertips but it's harder to find the truth.

Figure 1 (age demographic), Figure 8 (conversations are narrow-minded), Figure 9 (online conversations are false or misleading), Figure 19 (extra-associations)

Figure 1 reveals that Age Cohort of students is mainly 18-24 (93.2%). This is the majority of the target demographic which are undergraduate and graduate college age students. This study is important since it is looking at the student's perspectives that normally are not considered in existing research. In addition, the existing research is that a more mixed and tempered attitude toward social media is called for than in the existing literature. *Figure 8* reveals that majority (65%) of students believe conversations online are increasingly narrow-minded and biased. *Figure 9* reveals that majority (69%) of students believe information online is increasingly false or misleading. *Figure 19* reveals the extra associations of social media, NA being the majority.

Conclusion/ Final Thoughts

The premise of social media in the classroom can provide tremendous benefits to students. This includes academic exploration, enhanced web learning, and the facilitation of their professional careers. On the other hand, social media can be a detriment to students and cause new problematic issues to develop. These problems include context collapse, equal access to resources, distracting information on the platform and students' negative association of social media and technology. The survey results encourage that students believe web-based learning is important, and they want social media in the classroom for academic exploration. However, students believe social media can be distracting and that face-to-face encounters will be more effective. In addition, students are worried about their privacy on the platform. I would recommend that the integration of social media in the classroom be tested on a small scale. This

should be done with willing participants and that certain barriers be established to ensure their privacy. For example, content the professor can view and what content students view during their scheduled class and study time, helping ensure students privacy and limit the distractions/leisure normally associated with social media. The students want face to face interactions and this can be maintained in the new system. For example, having a once a week in-person encounter for professor and students. After this test experiment, students can provide feedback to improve the system and make social media integration easier. In addition, to create a larger scale integration there needs to be governmental subsidies for technology access for students. This implementation will have to be done through a policy level decision to help underprivileged students. This implementation can also help assist many students currently struggling in the education system and provide professors more tools to teach effectively. At the end of the day, integration depends on the students' opinions and thoughts. I believe based on all the survey results that students desire more integration in the classroom.

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