



5 Tips for Success at the Dugoni School of Dentistry

**A Personalized Instruction Project:
Teaching Material Creation Category**

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Revised and Edited for consideration of

OKU-Sutro Excellence Day 2020



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PIP Project Self-Reflection Paper

(Edited and revised in consideration of OKU-Sutro Excellence Day 2020)

“5 Tips for Success at the Dugoni School of Dentistry”

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I. Purpose

The purpose of this PIP project was to:

- 1) Create a detailed, evidence-based outline of the most successful study tips, advice, and organization habits to succeed as a student at the Arthur A. Dugoni School of Dentistry.
- 2) Discover new, state-of-the-art study innovations and organizational habits that are successful and applicable to dental school.
- 3) Create a well thought-out, engaging, and interactive presentation for future first year students that highlights purposes 1) and 2), and
- 4) Open the topic of discussion of exploring new trends in study and organizational skills in the 21st century.

II. Methods

A total of 40 hours was committed to prepare this Personalized Instruction Program (PIP) project. Publications were researched that yielded proven study strategies that were successful in the past and applied to the fast-paced program at the Arthur A. Dugoni School of Dentistry¹⁻⁸. The unique, accelerated student environment required careful consideration of which study strategies to employ in the video.

Many meetings occurred between my mentor, Dr. Wood, and myself to discuss my findings and which learning strategies would be best to showcase. We also discussed tried and true school-life balance strategies to be included in the outline. We finalized our outline and consulted with Dr. Sinky Zheng and Mike Interrante for video production and analysis. To ensure the first-year students received this information as early as possible, we created a target deadline to present this video to the first-year class during their Matriculation Retreat on Friday, July 12, 2019. After a brief introduction, the video in its entirety was debuted to the first-year class. The entire duration of the video was 4 minutes and 51 seconds.

After presenting this video, the students were sent a Google Forms survey via email. The email also contained a link to the Mediasite video so that students could review the video before answering the survey. The survey requested a rating on the video production, the video content, and feedback for future areas of improvement. This information was then collected for this PIP reflection.

In addition, Mediasite analytics that tracked the video's usage by student and faculty users were collected to illustrate the impact of the learning video. The findings from both data sources can better inform faculty on the benefits of creating future learning experiences like these which are applicable to the Dugoni School of Dentistry.

III. Results

Google Forms Survey

The survey was sent via email to all students in the IDS Class of 2021 (n = 26) and DDS Class of 2022 (n = 143) for a total of 169 possible responses. 43 responses were recorded for a rate of 25.44%.

The video was well received by the class. A total of 95.1% of respondents either strongly agreed or agreed to the statement “I feel that the tips presented in the video will help me get prepared for my First quarter at the Dugoni School of Dentistry (Figure 1). A total 100% of all respondents either strongly agreed or agreed with the statement that “The video was engaging, concise, and professional” (n=41) (Figure 2). Student comments indicated positive feedback in the video being “straight and to the point”, had good “production value”, and “the tips were clear and easy to understand”. Some areas of suggested improvement included “similar videos mainly for IDS”, “time management”, and “tips and tricks for studying for boards”. When respondents were asked how they would improve future videos, some comments included “more pictures, animations other than talking”, changing the background and adding more effects, and adding a summary of the tips as an attached file.

Mediasite Analytics

The presentation analytics were collected from July 15, 2019 to May 18, 2020. The video was viewed a total of 110 times through Mediasite, with the highest peak on August 1, 2020, where a total of 60 views were recorded. The presentation views showed a trend that users were engaged in the video content until about 4 minutes and 30 seconds, which is approximately 93.1% of the its entirety (Figure 3).

The top operating system utilized to view the video was Mac OS X, which was used by 70% of the viewers (Figure 4). This was followed by Windows 10 at 25%, iPhone at 4%, and iPad and Other for a combined 2%.

IV. Discussion

This project has exposed to me how much time, critical thinking, and planning is necessary to deliver important information to students in the most engaging way possible while making it entertaining and relatable. Students in this fast-paced, technological age demand information in a fast, easily digestible format, and the amount of research I produced with Dr. Wood and Dr. Zheng's help has most certainly proven that. It was interesting to note from our research that many students rely on *outdated* study strategies for success instead of evidence-based strategies⁸. While many students rely on underlining and re-reading notes for their primary study strategies, active study techniques like self-testing and flashcards are a more scientifically proven approach for student success⁹. This point was included in the video.

This project provided extremely valuable data for anyone interested in creating multimedia instruction content for a presentation, a course module, or student event. Multimedia instruction combines words and pictures to help people learn rather than from word alone, a strategy often employed in textbooks and a majority of live lectures¹⁰. In a video interview, Mayer stated that when creating multimedia instruction, it is also important to employ the personalization principle. This occurs when using a conversational style of communication rather than a formal, regimented mode of discussion that is also commonly used in live lectures¹¹. The personalized style of verbal communication utilized in this multimedia video could explain the high number of engaged views that were shown in Figure 3.

The high viewer engagement could also be explained by learner attention span. The average learner attention has been reported to be between 10-15 minutes, while some have even claimed it to be as little as 8 seconds¹². Video content was condensed to less than 5 minutes, all

which were evaluated to be practical and applicable to the Dugoni dental school experience and within the theoretical 10 to 15-minute window of the average learner attention span.

Although only a small percentage of viewers used an iPhone or iPad system to view the video, this highlights an important feature of mobile learning. Mobile learning can be defined as the use of portable electronic devices to achieve flexibility and interactivity¹³. With the increasing access of smartphones and tablets to the average student, creating material that is accessible on a mobile device creates flexible opportunities for learning on their own time rather than in the traditional lecture environment and should be considered when course planning.

Actual engagement of the video may be skewed for a number of reasons. For one thing, viewers can play the video and passively play it in the background. This could confound the data with false positives and show that the viewer was seemingly engaged in the video the entire time. In addition, only Mediasite analytics were used in this PIP reflection. This video was also shared on social media, but data from those platforms was not included. Had they been used, more information about the video's effectiveness could be investigated.

Conclusion:

From the positive ratings and engagement, it can be concluded that this video's application of multimedia instruction was very effective. The condensed, personalized approach could be suggested to be prime motivators in the learner's engagement in the content. Faculty and staff should consider creation of multimedia content that is concise, interactive, and flexible in their coursework and instructional videos to promote active engagement in the student learning.

Reflection/Acknowledgements:

This PIP Experience was an extremely supportive and dynamic one, to say the least. Looking back, I would like to have made more video content for the students to view on several more areas (i.e. How to create high quality flashcards, how to perform active reading, etc.). I would also like to take more time in creating fun animations that the viewer would enjoy viewing.

I have always been interested in returning to the school to teach, and this project was the perfect introduction to what I can expect when working alongside my faculty in a professional environment. What I truly enjoyed about this project was the collaboration I experienced with my faculty mentor, Dr. Wood, the help of Dr. Sinky Zheng, and the supportive staff, most notably Mr. Mike Interrante, all whom really helped make my PIP come to fruition. I would like to thank them all for this meaningful learning opportunity.

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V. Survey Results

I feel that the tips presented in the video will help me get prepared for my first Quarter at the Dugoni School of Dentistry.

41 responses

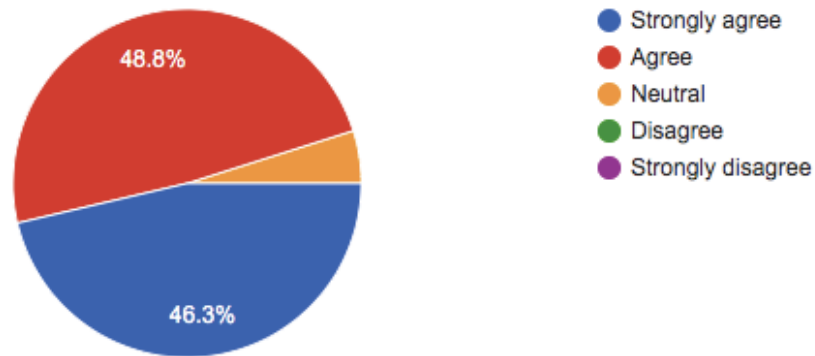


Figure 1 – Respondent answers to “I feel the tips presented in the video will help me get prepared for my first Quarter at the Dugoni School of Dentistry”.

The video was engaging, concise, and professional.

41 responses

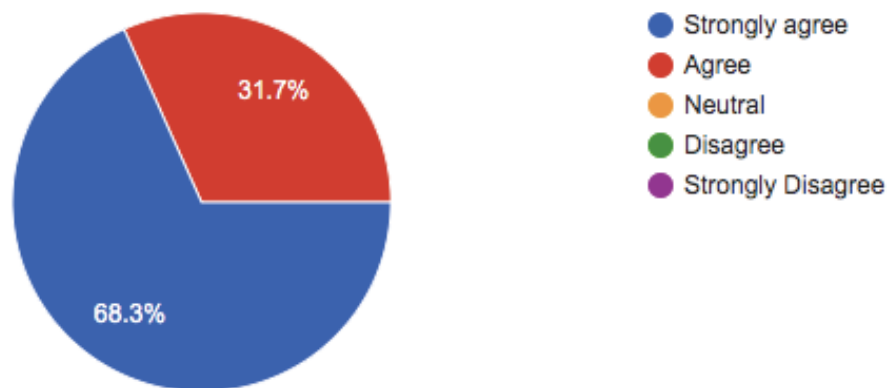


Figure 2 – Respondent answers to “The video was engaging, concise, and professional”.

Live Views	On Demand Views	Date of First View	Date of Last View	Total Time Watched	Average Time Watched
0	110	July 15, 2019	May 18, 2020	3:55:34	0:02:08

Trends

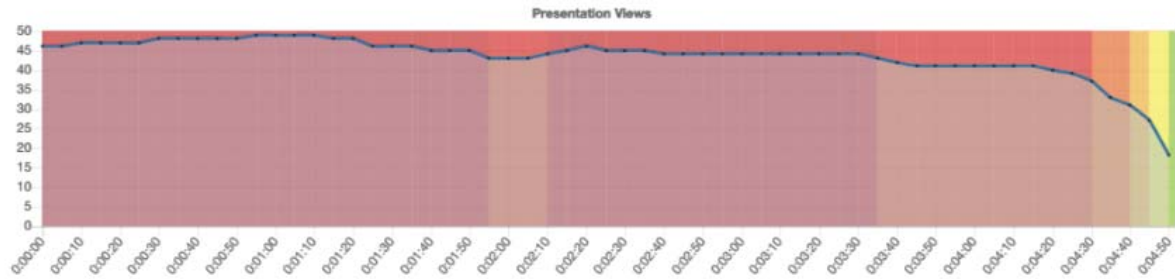


Figure 3 – Mediasite analytics showing the number of views and average viewer engagement.

Top Operating Systems

- Mac OS X, 70%
- Windows 10, 25%
- iPhone, 4%
- iPad, 1%
- Other, 1%

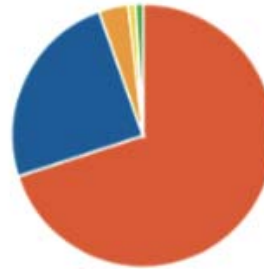


Figure 4 – Mediasite analytics showing the top operating systems used for viewing the video.