Creative Marketing Strategy Plan for the Paleontological Research Institution

For Cornell University's Media Communication Class (COMM 3070)

Nicole Hu

Table of Contents

Background, Purpose, Focus

1.1 Background

The Paleontological Research Institution is an organization that aims to increase widespread awareness and appreciation of the environment ("About PRI," n.d.). Among several other social media platforms, they run a YouTube channel with varying content, from discussions to descriptions of biodiversity. PRI's YouTube channel has far less engagement than their other platforms. For example, PRI's Instagram page (as of May 9, 2022) has 2,856 followers. On Facebook, the organization has 8,362 followers. Their YouTube channel, conversely, has about 1,000 subscribers, and low engagement.

1.2 Organization Sponsoring

The Paleontological Research Institution (PRI), located in Ithaca, NY

1.3 Purpose

The purpose of the campaign is to increase awareness of environmental issues such as climate change, educating the future.

1.4 Focus

Our focus will be on the use of cohesive thumbnails and branding, marketing the YouTube channel in newsletters, and suggesting that PRI choose which of their videos to market to teachers. Additionally, we may suggest the incorporation of a part-time, for-credit intern on PRI's marketing team.

Situational Analysis and Research Findings

2.1: Organizational Strengths to Maximize

- Credible, long-established science research institution with a university connection

- Credentials provide ability to share scientifically proven information or share information responsibly

- Access to prominent scholars and experts in different fields can be leveraged

2.2 Organizational Weaknesses to Minimize

- Social media primarily handled by one person- with various other undertakings- video content requires visible effort

- Videos lack high-quality visual elements and imagery

- Videos do not engage with unique or timely topics or emphasize storytelling

- Branding of videos lacks cohesion- e.g., thumbnails, and title format

2.3 Opportunities to Leverage

- Partnerships with Ithaca and Cornell sustainability community networks/clubs as a gateway to a larger and more engaged digital audience

- Integrate video content promotion on other marketing and social channels, such as Instagram and email lists

- QR codes at events that can direct people to learn more about the organization through YouTube

- Create in-depth, well-researched and timely science videos- drawing on the successes of large science content creators

2.4 Threats to Prepare For

- Many popular science channels on YouTube as competition: SciShow, TedTalk, Minute Earth, Crash Course, NASA, National Geographic, BBC Earth, Earth Stories

- These channels' views range in average from the ten-thousands to millions

- Channels also range in content offerings, including documentaries, short deep dives on critical science issues, and unique science topic explorations

Priority Audience

PRI is an institution that integrates education and research, providing a diversity of programs and resources on Earth and environmental sciences specifically for K12 teachers. Earth@Home is a free online toolkit for teachers to learn about earth science through online Zoom workshops. PRI also has education programs such as Teacher-Friendly Guide to Climate Change/Earth Science, Teach Climate Change, and Learn & Teach at Home to help teachers teach climate change while adjusting to the pandemic time. According to PRI's annual report of 2021, 1202 teachers were trained through the resources provided by PRI (2022). YouTube channel is a place where PRI updates its education resources, therefore the K12 teachers are one of the groups of our target audience.

Meanwhile, PRI also aims at educating the public about climate change and earth-related knowledge. The school and community group programs are available for a wide range of ages in topics such as Earth science, the history of life, and many more. PRI is trying to engage the public with its knowledge and resources. There were 2,555 hours of free trial access at the Cayuga Nature Center, 10,368 public visits to the Museum of Earth, and 838,278 web visitors across all platforms according to PRI's 2021 annual report (2022). YouTube channel has a large amount of potential audience for PRI to attract, combined with PRI's goal of educating society, the general public is also the audience of our campaign.

Therefore, our target audiences are teachers and the general public.

Objectives and Target Goals

4.1 Behavior Objective

Our behavior objective is for educators to go to PRI as a resource for teaching, as well as interact with PRI's YouTube channel by way of likes, comments, shares, and subscriptions.

4.2 Knowledge Objective

It is important to educate and care about climate change and the environment. Doing so can protect future generations and make the world a better place.

4.3 Belief Objective

PRI's YouTube channel is an accurate, enjoyable, and available resource for educators.

4.4 Target Goals

PRI's current YouTube following is at about one thousand subscribers. After a year, their following will be up to two thousand subscribers.

Positioning Statement

In order to position PRI's YouTube channel, a perceptual map was conceived in order to compare PRI's content to top alternatives within the science and environmental content genre. Key channel competitors include: TedTalk, Minute earth, Crash Course, NASA, National Geographic, BBC Earth, Earth Stories, Kurzgesagt – In a Nutshell. Competitors are mapped based on informal/humorous or formal/serious presentation tone/style and whether their content is geared towards science news or science education. PRI ranks a lot closer to the education-focused spectrum compared to alternatives, and they have a moderate mix of both serious and informal presentation styles. In other words, PRI can offer an educational perspective that many of the top alternatives do not.

Based on this perceptual map, PRI should adhere to the following benefits focused position statement:*"We want teachers and educators to see PRI's YouTube videos as convenient and accessible learning materials that provide fun, comprehensive, and up-to-date lessons on the environment."*
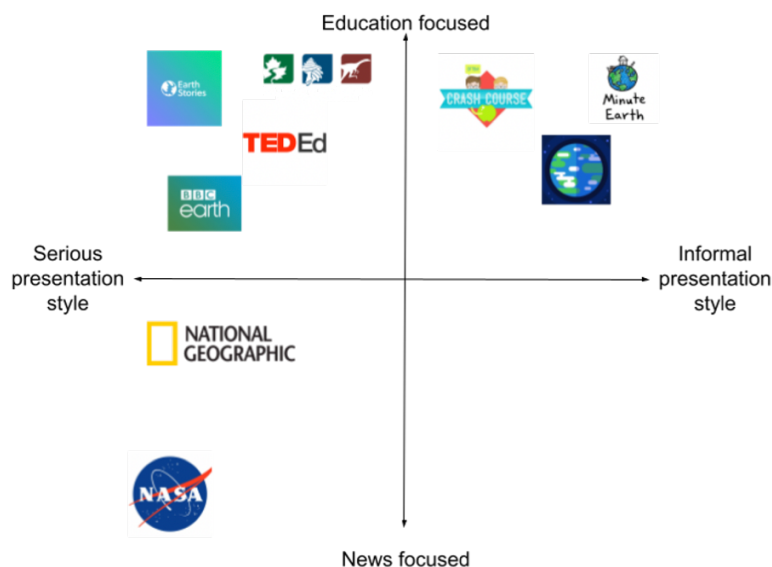
Marketing Mix Strategy

Product: Accessible, fun, comprehensive learning

- Through engaging with PRI's YouTube channel, the priority audience will attain accessible, fun, and comprehensive learning or teaching materials. A YouGov national survey revealed that the great majority of people believe in the importance of teaching about climate change and the environment in school. By engaging with these YouTube videos, educators are able to conveniently and seamlessly incorporate climate change/environmental education into their teaching curriculum in a fun, accessible, and trustworthy manner.

Price: No monetary cost for users

- One of the benefits of PRI's channel, is it is extreme accessibility to anyone with internet access. Because of this, there is no direct monetary cost for the intended audience.

Place: For at-home viewing

- Ideally, these YouTube videos can be incorporated into teaching lessons, so that teachers may comprehensively and accurately teach about science and the environment. This is why, it is ideal that our priority audience will distribute these videos in the classroom. However, ideal use for the videos is as homework assignments. Studies have shown that instructors tend to assign YouTube videos for outside-of-class viewing due to limited class time (Horbal, 2018).

Promotion: Video distribution campaign

- From the YouGov survey, it was found that users seek out educational content pretty frequently, which is beneficial for PRI because it means that there is an adequate audience and demand for their YouTube content. Additionally, most individuals agree with the need for climate change and environmental education being integrated into school curriculum. Therefore, promotional efforts should be geared towards connecting the discrepancy between teacher's openness to educational video content, and educational video application in schools. Key messages should center around communicating the convenient and reliable values of the videos to educators through a push strategy distributed through school district email listserv's, starting with the local Finger Lakes area school districts.
- There are a few key components to this promotional strategy:
    - Increasing the perceived credibility of PRI's content through refined imagery and brand cohesion of the YouTube channel.
    - Optimizing PRI's videos for the YouTube recommendation system, which is how many people find videos (Fyfield et al., 2020; Horbal, 2018).
    - Apply a push strategy through a campaign geared towards demonstrating

      how the videos could be seamlessly incorporated into existing lesson plans and guidelines (See Appendix Figures 1 and 2).

Monitoring and Evaluation Plan

Purpose and audience for evaluation: An evaluation will be conducted to assess audience engagement with PRI's YouTube channel. In particular, the evaluation will focus on engagement metrics such as subscribers, length of video watch time, number of views, number of likes and dislikes, and comment count. These measures will be important for PRI to observe channel growth. PRI's marketing team can use the data collected to determine the allocation of resources for related future marketing activities and make changes/corrections to the channel to achieve PRI's YouTube campaign goals. A study conducted by Andry J. F., et al. (2021), found that the main factors that influence a trending video are views, likes, dislikes, and comments. In addition, PRI might also be able to use this data to show success and attract potential fundraisers or collaborators.

Input measures: Money spent, staff employed, and staff time utilized.

Output measures: Number of media posts about channel content, number of YouTube videos posted, and number of users interacted with.

Outcome measures: Number of channel subscribers, number of video views, number of likes and dislikes, number of comments, view duration, audience retention, click-through rate (CTR), playlist engagement, keywords on videos, increased knowledge of PRI, increased knowledge of the PRI YouTube channel.

How and when to measure: Tracking engagement numbers (number of channel subscribers, number of video views, number of likes and dislikes, number of comments) using YouTube Analytics. General social media monitoring for increased discussion on PRI and/or PRI's

YouTube content. These methods are cost-efficient while also providing PRI with accurate, up-to-date, and valuable insights (Kotler & Lee, 2020).

PRI and the IPCC Report Opportunity

On February 28th, 2022, the IPCC (Intergovernmental Panel on Climate Change) came out with their latest report detailing the impacts of climate change and suggestions for how we can adapt and address the issue. The current problem PRI is facing is how to best disseminate the key takeaways from the report to the public given limited time, budget, and staff availability. Some popular methods of information dissemination include publishing in news or journals or presenting through radio or television. However, these solutions are not really within PRI's bandwidth given their limited resources. Instead, PRI should create a social campaign through an Instagram story challenge with an associated hashtag. PRI already has high credibility and an established following on their social media platform. Additionally, the information presented in the IPCC report is extremely new and generally unknown to the general public. PRI could optimize this opportunity through an infographic on their Instagram story which highlights the key takeaways and associated climate change action items for users to digest and share. By including buzzwords and popular climate hashtags such as #sustainability, #innovation, or #environment (Pilar et al., 2019). Additionally, by including a "challenge" aspect, users could upload a copy of the graphic to their own socials and continue the spread of information. For example, the graphic could include something along the lines of "climate change impacts us all. Tag 3 friends who also support the cause!" This would alleviate the burden on PRI to disseminate the information, as users will generate engagement and spread information through mutual shares. If it is in PRI's capabilities, PRI could also generate higher levels of engagement and sharing by rewarding viewers through a giveaway (Rohde & Mau, 2021).

PRI Example Social Media Post

1. The problem: People do not know or do not presently have a clear idea of what PRI does and what they could provide.

2. The solution: Through an Instagram/Facebook post, PRI would be able to very clearly define their mission and their two primary resources/venues (Cayuga Nature Center and Museum of the Earth)

3. Effectiveness: This would allow PRI to reach users (primarily younger demographics) and introduce them to PRI in a concise fashion while also providing a call-to-action by including hyperlinks or directing them to their relevant websites.

PALEONTOLOGICAL
RESEARCH INSTITUTION

About Us
PRI is an organization that strives to integrate education and research towards increasing knowledge, educating society, and encouraging wise stewardship of the Earth.

Cayuga Nature Center
Cayuga Nature Center is an indoor and outdoor exhibit where visitors can explore the natural history of the Cayuga Lake Basin and its ecosystem.

Museum of the Earth
Museum of the Earth is an 8,000 square food exhibition taking visitors on a Earth's 4.5 billion years of history

PALEONTOLOGICAL
RESEARCH INSTITUTION

About Us
PRI is an organization that strives to integrate education and research towards increasing knowledge, educating society, and encouraging wise stewardship of the Earth.

Cayuga Nature Center
Cayuga Nature Center is an indoor and outdoor exhibit where visitors can explore the natural history of the Cayuga Lake Basin and its ecosystem.

Museum of the Earth
Museum of the Earth is an 8,000 square food exhibition taking visitors on a Earth's 4.5 billion years of history

Our areas of focus include Paleontology & Earth Science, Evolution & Biodiversity, Collections, Conservation Paleobiology, Climate Change & Energy, and STEM Education.

Swipe up to learn more!

PRI Video Recommendations

    PRI has an established YouTube channel, yet they are lacking in viewership and engagement compared to popular videos despite having similar themes. So why aren't PRI's videos generating the same views and engagement? What are these successful videos doing that PRI is not but could be doing? When searching "thermal expansion water" on YouTube, PRI's video can easily be found: https://www.youtube.com/watch?v=7q2SGL_qmbg Yet, it only has 2,000 views compared to another video from Wayne Breslyn that has 64,000 views and can be found when scrolling down a bit: https://www.youtube.com/watch?v=IHhvaUdWfDI What makes this video so much more appealing than PRI's?

    Upon first inspection, there are a couple aspects of the Wayne Breslyn video does that the PRI video does not have. In this chart area two things the Wayne Breslyn video is doing, that PRI could implement in order to improve their video engagement:

Solution	Reasoning + Evidence	Implementation
Easily digestible thumbnails	Research has shown five dominant meta-level features that can increase video popularity: first day view count, number of channel subscribers, video thumbnail, Google hits, and keywords (Hoiles, 2017). PRI takes all of these into ample	In order to optimize their YouTube thumbnails, PRI could use concise text on their thumbnails along with high contrast photos (Koh, 2017). This would increase readability and improve viewer search, while also boosting credibility through

	consideration, yet, compares to the Wayne Breslyn videos, the thumbnails have yet to be optimized. Thumbnails need to be informative, yet also grab the viewers' attention through visual appeal (Koh & Cui, 2022).	higher levels of creative branding: having a PRI "brand" associated color scheme, font group, and layout.
Clear, concise, comprehensive video title	In a research study, which used two duplicate videos uploaded onto YouTube and only differing in video titles, the one with more specific and dynamic video titles gained more views (Johnson, 2013). While the two channels have similar video titles, Wayne Breslyn's thermal expansion video includes an explicit and concise description in the title informing viewers that the video contains	In order to improve video titles for viewer search, PRI should create more explicit and attention-grabbing YouTube videos. For instance, adding buzzwords that entice the viewer before they even click on the video by informing them what they can expect to find or learn by watching.

	"demonstration and explanation," whereas PRI's video only contains the topic, "thermal expansion."	

Appendix A. Interview and Analysis

From our search, we found a lot of great insights from previous research done regarding YouTube promotions, educational content, and audience preferences. These helped shape our interview questions, which were focused on more specific measures to understand how our audience is drawn to certain content on YouTube and what causes them to engage with certain content, such as climate change education.

My interviewee is a clinical researcher who also works as a genetics instructor and part-time STEM tutor of high school students. I reached out to her for an interview because she is an educator in a STEM related field to both high school students and college students. Her research is also focused on a biology-related field.

There are a couple really useful insights that she provided during the interview. The first is that the user prefers fun and upbeat video styles, because they make her excited about the content being presented. She also cited an affinity towards the British voice acting style because they are very "peaceful." This is in alignment with previous research, which has shown that viewers care about speaker's diction and tone of voice when watching videos (Almeida & Almeida, 2018). More specifically, viewers tend to prefer educational videos with non-boring and understandable lecturing and respectable perceived instructor expertise (Cihangir & Çoklar, 2021). The second major insight was that the interviewee tends to find videos through YouTube's recommendation system. This is also in alignment with patterns seen in teacher's video search strategies. We asked this question because the process by which teachers select YouTube videos for students is highly understudied. However, some studies suggest that teachers typically rely on the YouTube algorithm to push relevant content to them or find them through "word of mouth" (Fyfield et al., 2020; Horbal, 2018). The interview insights suggest that

these findings are accurate. Another major insight was related to the type of videos that people will recommend, particularly related to science-related content. The interviewee cited a preference towards videos around the 10 minute mark, because short videos feel very "clickbait-y." Additionally, she tends to recommend videos as with visual images and diagrams because most kids are visual learners. This is incredibly useful when coupled with the idea that most educators will recommend YouTube videos primarily as supplemental material to watch outside of class time (Horbal, 2018).

Finally, the interviewee provided a few pointers towards the reason why PRI's YouTube channel does not feel engaging as a viewer. They suggested that the reason PRI's videos are not enticing is because the videos feel poor production, and then less credible. Some of the ways this could be improved is through better organizational structure of the videos to make navigation easier for the viewer as well as making thumbnail and video titles more accessible.

Interview Transcript

What type of content do you typically watch on YouTube? Why?

I watch a lot of documentaries, especially nature documentaries. To relax, I love watching other people play video games. As for why… for the nature videos, it is very peaceful and helps me destress. The British voice actors are really good.

What type of personality attracts you to a YouTube channel?

Someone who is… well… it depends on what content I'm watching; I prefer fun and upbeat because it makes me excited about the content I am watching.

Walk me through the process of finding a new video on YouTube. Why did you choose this video?

I open YouTube. I find a new video, usually through the YouTube videos I watch and then I scroll through the recommended videos until something piques my interest. To be honest, I don't usually put that much thought into it.

How often do you subscribe to content on YouTube? What motivates you to subscribe?

Not that often… I feel like I have standard things that I watch and if I select a few videos on a channel, I won't usually watch everything. But, if I like most of their videos and am looking forward to the next video, that's when I will subscribe. But if I don't care, it doesn't matter to me.

What is the length of videos you typically watch? Why?

I prefer not too short so I like the 10-minute mark, but I can watch 30 minutes to an hour. I don't like really short videos because they feel very clickbait-y.

What makes you engage in YouTube comments, or what would make you engage if you don't already?

Nothing. I hate YouTube comments, they are so toxic. If I know the person who is uploading, I will offer positive comment and support.

Do you often talk to others about the videos you watch on YouTube? Why or why not?

For personal reasons, no, because a lot of my friends do not have the same taste as me. For educational purposes, if I find a cool story, I will share it.

What resources do you use when teaching about climate change?

YouTube is great. I mean, in general I always direct my students to YouTube videos, especially the short ones that diagram out a specific pathway or concept in image form because most kids are visual learners. I don't usually instruct on climate change specifically though…

What are your feelings on climate education? Why?

I think climate change should be taught more. I think people are hesitant to talk about it because it can be a controversial topic, which it shouldn't be. More kids should be able to actively do their own research and it would be great for an educator to provide that guidance.

Do you seek out educational content? Why or why not? If so, what resources do you use?

Of course – To teach myself, to teach others. I think educational content with this day and age of the internet, is bountiful and super useful. In terms of the resources, I typically use… YouTube, Google, Reddit, and…. Wikipedia! Specific YouTube videos include TedTalks, those are super great. Minute Earth, I love the BBC nature channel. Netflix has some great educational documentaries as well.

What stands out most to you about the PRI YouTube channel? (Show interviewee YouTube channel page, a couple of videos)

To be completely honest, nothing stands out in a super great way. First of all, they should invest in a ring-light because I feel like a lot of videos look poor production quality, which makes me doubt its credibility. The thumbnails could also be more engaging. A lot of the videos are extremely long, and the titles are too specific, which make it feel inaccessible to a wider audience. Honestly, very honestly, I would not click or watch these.

Appendix B. Social Branding Refresh

About Us

PRI is an organization that strives to integrate education and research towards increasing knowledge, educating society, and encouraging wise stewardship of the Earth.

Our YouTube Channel

Our YouTube Channel provides an abundance of educational resources, perfect for outside of school viewing! Keep reading to learn more!

Contact For More Info

📞 +1 (607) 273-6623
📍 1259 Trumansburg rd. Ithaca, NY 14850
🌐 www.priweb.org

A Teacher's Guide To
PRI's YOUTUBE LEARNING

PALEONTOLOGICAL
RESEARCH INSTITUTION

Our Recommendation

Climate change and environmental education are increasingly important, yet the bustling teaching curriculum provides very little support for these topics. Our videos provide fun, comprehensive, and easily accessible learning materials on a variety of Earth science topics - Perfect for outside of class or supplementary learning material!

Fig. 41. Phanæus faunus. (Left-hand figure, male.)

Fig. 12. Lipelicus cantori. (Left-hand figure, male.)

Video Topics Include:

01 Climate change and energy

02 Paleontology and Earth science

03 Evolution and biodiversity

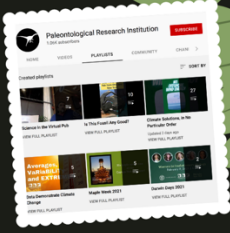**04** Conservation of natural environments

Check it out!

Be sure to check out some of our most popular series! Such as:
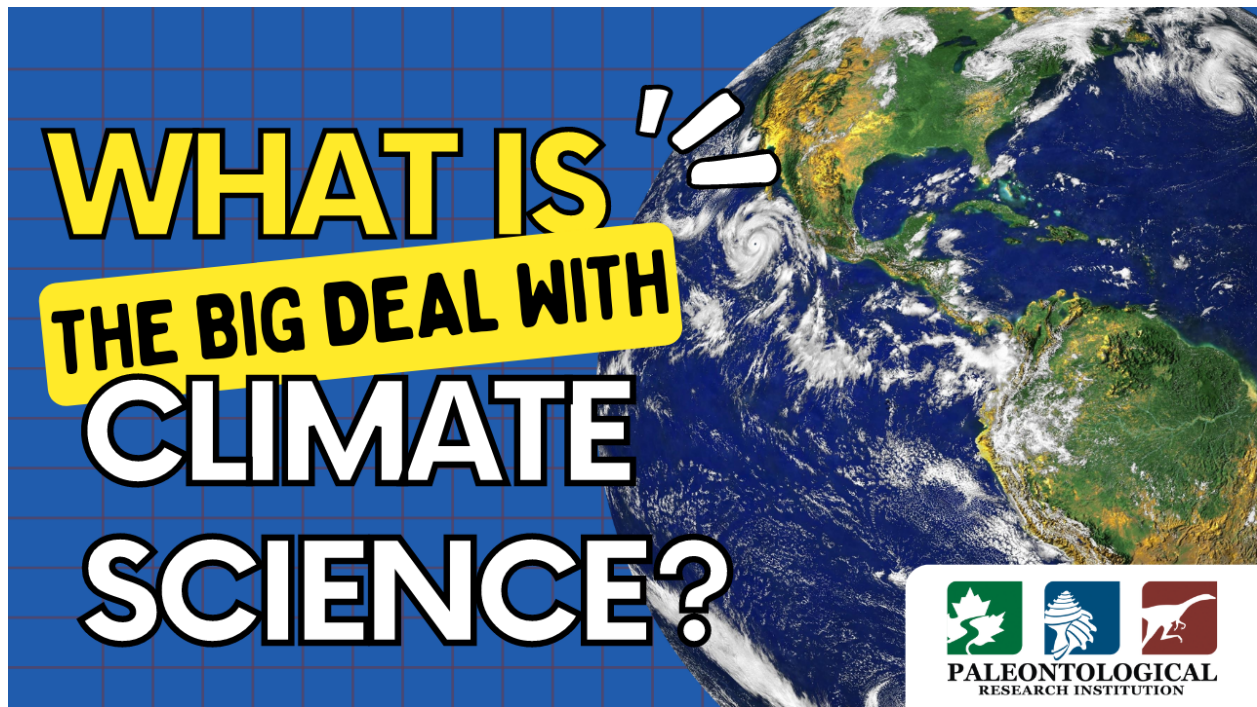
- In the Greenhouse: Exploring Climate Change
- Bees! Diversity, Evolution, Conservation
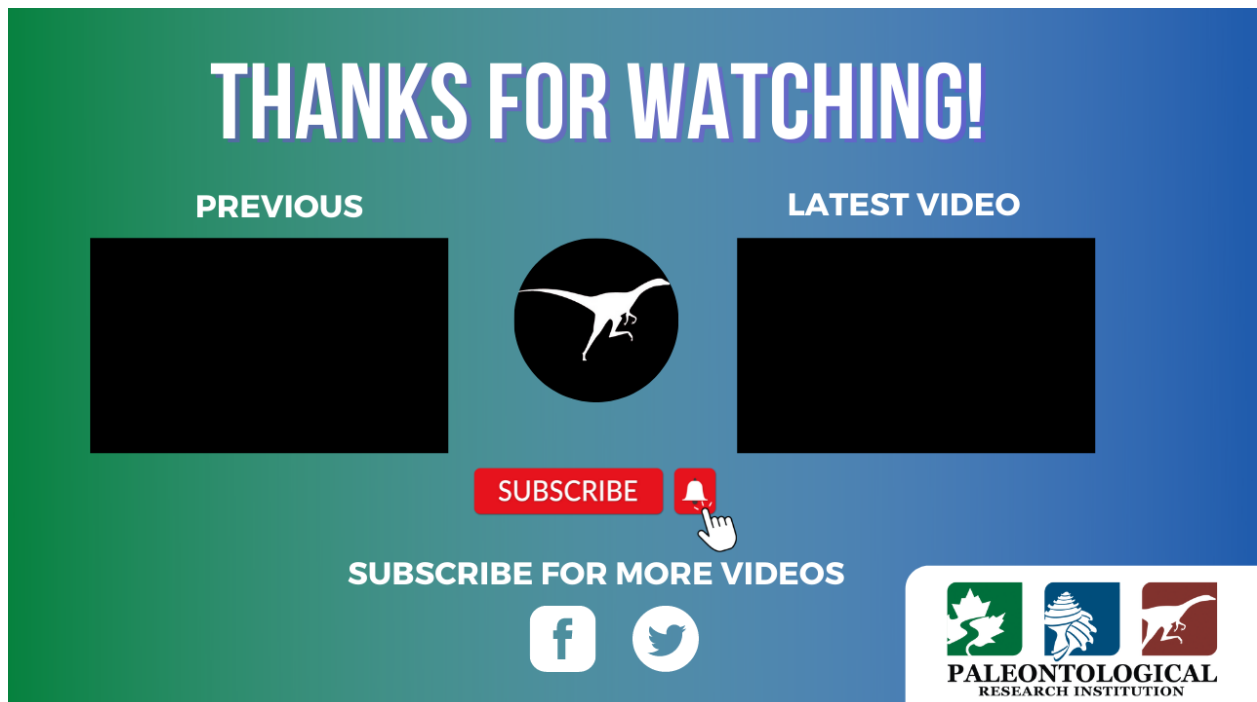- Climate Solutions, in No Particular Order

https://www.youtube.com/c/PaleontologicalResearchInstitution/videos

Example of Engaging YouTube Thumbnail

Example of Building Cohesive Brand Image

NEW VIDEO

GO CHECK IT OUT ON OUR
YOUTUBE CHANNEL!

Example of improved social media; to be shared on Instagram/ Facebook to promote YouTube videos

References

Andry J. F., Reynaldo S. A., Christianto K., Lee F. S., Loisa J., and Manduro, A. B. (2021). Algorithm of trending videos on YouTube analysis using classification, association and clustering. 2021 International Conference on Data and Software Engineering (ICoDSE), 1-6. DOI: 10.1109/ICoDSE53690.2021.9648486.

Chang H. T., Lee H. G., and Lee, S. 2021. "Intention to subscribe to YouTube channels: trust in creator and trust in content." Asia Pacific Journal of Information Systems, 31(3), 277–95. https://doi.org/10.14329/apjis.2021.31.3.277.

Environmental Protection Agency. (n.d.). *Climate Change Resources for Educators and Students*. EPA. Retrieved May 16, 2022, from https://www.epa.gov/climate-change/climate-change-resources-educators-and-students

Fyfield, M., Henderson, M., & Phillips, M. (2020). Navigating four billion videos: Teacher search strategies and the YouTube algorithm. *Learning, Media and Technology, 46*(1), 47-59. https://doi.org/10.1080/17439884.2020.1781890

Halim, E., Anindya, R., & Hebrard, M. (2020). The impact of motivation to watch YouTube, subjective norms, behavior control, information success model to watching YouTube engagement. Information Management and Technology (ICIMTech), 800–805. https://doi.org/10.1109/ICIMTech50083.2020.9211225.

Horbal, A. (2018). Instructor use of educational streaming video resources. *The Journal of Academic Librarianship, 44*(2), 179-189. https://doi-org.proxy.library.cornell.edu/10.1016/j.acalib.2018.02.009

Hoiles, W., Aprem, A., & Krishnamurthy, V. (2017). Engagement and popularity dynamics of YouTube videos and sensitivity to meta-data. *IEE Transactions on Knowledge and Data Engineering, 29*(7), 1426-1436. http://doi.org/10.1109/TKDE.2017.2682858

Jaffee, L. (2021, February 24). *Why don't more U.S. schools teach about climate change?* News Decoder. https://news-decoder.com/why-dont-more-u-s-schools-teach-about-climate-change/ Kamenetz, A. (2019, April 22). *Most teachers don't teach climate change; 4 in 5 parents wish they did*. NPR. https://www.npr.org/2019/04/22/714262267/most-teachers-dont-teach-climate-change-4-i n-5-parents-wish-they-did

Johnson, J. S. (2013). YouTube and you: Using cybernetics to optimize self-promotion on YouTube. *ProQuest Dissertations & Theses Global*. Retrieved from https://www.proquest.com/dissertations-theses/youtube-you-using-cybernetics-optimize-self/docview/1418032629/se-2?accountid=10267

Kotler, P. & Lee, N. (2008). *Social marketing: Influencing behaviors for good*. 3rd ed. Los Angeles: Sage Publicataions. Paleontological Research Institute. (n.d.). *About PRI*. https://www.priweb.org/about/about-pri

Koh, B. & Cui, F. (2022). An exploration of the relation between the visual attributes of thumbnails and the view-through of videos: The case of branded video content. Korea University Business School, Korea University.

Paleontology Research Institution. (2022). 2021 Annual Report: Reimaging, Reopening, Reinspiring.https://static1.squarespace.com/static/5c9f919e94d71a2bab6d18d8/t/616f0cf7eb84d00d3d5d4b09/1634667779745/AnnualReport2021.pdf

Pilar, L., Stanislavska, L. K., Pitrova, J., & Krejci, I. (2019). Twitter analysis of global communication in the field of sustainability. *Sustainability, 11*(24). http://dx.doi.org/10.3390/su11246958

Rohde, P., & Mau, G. (2021). "It's selling like hotcakes": Deconstructing social media influencer marketing in long-form video content on YouTube via social influence heuristics. *European Journal of Marketing, 55*(10), 2700-2734. https://doi.org/10.1108/EJM-06- 2019-0530