

**Communication Audit of the North Carolina State University
Department of Materials Science and Engineering**

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COM 533: Organizational Culture, Identity and Brand
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Executive Summary

This project involves a comprehensive communication audit of the North Carolina State University Department of Materials Science and Engineering (MSE), where I have served as the Department Communicator since 2021. With approval from departmental leadership and colleagues, I am analyzing MSE's internal and external communication strategies, cultural identity and stakeholder engagement practices.

To date, I have collected a broad range of artifacts, including internal documents, publications, social media content and communications related to events and partnerships. I have also initiated interviews with faculty and staff to gather personal narratives and insights into how MSE's culture shapes communication.

The project is grounded in several key communication and organizational theories. These include Sense-Making Theory (Weick, 1995), Organizational Culture Theory (Schein, 2010), and Stakeholder Theory (Freeman, 1984), which help interpret how messages are created, shared, and perceived both within MSE and with external audiences. Additionally, theories such as Organizational Control Theory (Deetz, 1992), Organizational Identity Theory (Albert & Whetten, 1985), Social Capital Theory (Bourdieu, 1986; Coleman, 1988), and Institutional Theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) are being applied to examine power structures, legitimacy, and the formation of identity within the academic context.

While progress has been steady, one emerging challenge is the broad scope of the audit, particularly the dual focus on internal and external communications. As a result, I narrowed my analysis to focus on the most critical communication touchpoints: specifically, how MSE engages with prospective students and external partners, and how these interactions reflect and reinforce internal culture.

As the project came to a close, I refined the **scope**, collected additional artifacts and analyzed the data using the **selected theoretical frameworks**. The ultimate **goal** is to provide meaningful insights into how MSE communicates its identity, builds relationships and maintains cultural coherence across audiences.

Scope and nature of the study

This report presents findings and recommendations from an evaluation of internal and external communications, 2 focus groups, and a total of 39 participants:

- 17 faculty out of a possible 24 faculty members interviewed: a 70% response rate;
- 10 staff out of a possible 16 staff members interviewed: a 62.5% response rate.

The interviews lasted approximately 15 minutes to an hour and a half and were conducted between March 13 and April 10, 2025. To have the least impact on the team, the interviewees were given the option to meet either virtually or in person at NC State in Engineering Building 1. Most participants were forthright and used this rare opportunity to talk openly about the issues in the MSE department.

Introduction

NC State MSE is a dynamic academic unit within the College of Engineering on NC State's Centennial Campus in Raleigh, North Carolina. It spans numerous buildings, including Engineering Building I (EB1), the Monteith Research Center (MRC), Partners I and II, the Plant Sciences Building, Research Buildings I and II, the Center for Advanced Manufacturing and Logistics (CAMAL), and the Analytical Instrumentation Facility (AIF). MSE is embedded in an environment for interdisciplinary research, collaboration, and innovation.

NC State MSE is a foundational discipline that drives advancement across every modern technology sector. The field is central to solving complex industrial and scientific challenges, from fuel-efficient automotive components and ultra-durable mobile displays to life-saving biomedical implants. MSE is known for its approachable faculty, collaborative culture, and high-impact opportunities for undergraduate and graduate students.

MSE's **mission** focuses on providing a rigorous education in materials science, advancing scientific understanding, and contributing to economic and societal development through teaching, research, and outreach (NC State MSE, 2026):

Department Mission Statement

“The mission of MSE is to provide students with a sound materials science and engineering education, advance the understanding and application of scientific principles, enhance economic development, and improve the quality of life of our citizens through teaching, research, and outreach programs.

In addition to ensuring that our students are exposed to modern materials science and engineering principles and have access to modern equipment and technology to support their educational experience, the department seeks to create a team-oriented environment throughout our academic enterprise.

Our goal is to produce well-rounded materials scientists and engineers who function effectively in the technical arena as well as possess the skills to assume leadership roles in industry, academia, and government.”

As of April 2026, MSE includes 23 tenure and tenure-track faculty, 3 teaching lecturer professors, 22 postdoctoral researchers, 2 research scholars, and 13 staff members. Following the close of the interview phase on April 8, 2025, three staff members had accepted new positions at a peer engineering department within the university, a shift that reflects the mobility and advancement opportunities within this academic network.

This communication audit explores how MSE, the brand (Appendix D), communicates internally and externally and how its practices reflect its organizational culture, mission, and identity. The project combines analysis of digital and print artifacts, internal communication samples, and interviews with faculty, staff, and academic leadership. Key **theoretical frameworks**, such as **Sense-Making Theory**, **Organizational Culture Theory**, **Stakeholder**

Theory, and **Organizational Identity Theory**, guide the data and provide insights into MSE's communication strengths and challenges.

Understanding these dynamics is especially important given the competitive context in which MSE operates. According to the 2025 U.S. News & World Report rankings for Materials Engineering programs, NC State is currently tied for **#24** nationally, alongside Duke University and the University of Washington. Peer and aspirant institutions include the Massachusetts Institute of Technology (#1), Stanford University (#3), UC Berkeley (#3), Georgia Tech (#7), and the University of Michigan (#8). In a field where reputation and stakeholder engagement play a critical role in faculty recruitment, student enrollment, and research funding, effective communication is essential to sustaining growth and long-term impact.

This audit seeks to identify how MSE can strengthen alignment between its internal culture and external messaging and how its communication practices can support continued success in a highly competitive academic landscape.

Methodology

Communications Plan

Objective of the Audit

Purpose

I conducted a communication audit of MSE, where I have been the Communicator since 2021. With permission from my department head and colleagues, I gathered information about MSE's culture, communication practices, and branding using websites, publications, social media, and internal communication artifacts.

Focus on Culture, Identity, and Brand

Relevant theories that guided my analysis include *Sense-Making Theory*, *Organizational Culture Theory*, and *Stakeholder Theory*. These theories helped me analyze MSE's internal and external communication, organizational culture, and relationships with stakeholders such as students, faculty, and industry partners. I plan to conduct interviews with faculty members, staff, and students to gather narratives and explore how MSE's culture influences communication practices.

Communication Artifacts to Analyze

I chose this approach to artifact analysis after considering Keyton's (2010) emphasis on how communication practices help define and reflect organizational culture through both formal and informal channels (Appendix E).

Internal Communication Artifacts

- Emails, memos, and meeting notes
- Observations from faculty and staff meetings between March 13 - April 10, 2025
- MSE's mission statement, organizational chart, newsletters, and position policies

External Communication Artifacts

- 11 press releases I authored from March 13 to April 10, 2025, showing outreach and impact
- 15 social media posts across LinkedIn, Instagram, and Facebook (Appendix B)
- A digital ad in the MRS weekly email newsletter (updated twice during the project period)

Sampling Methods

My sampling strategy was shaped by Daymon's (2011) work, which emphasizes the role of purposeful sampling in gaining deep, contextual insights in organizational settings, especially under time constraints.

Purposeful Sampling

In early March, I originally planned to randomly select 5-10 faculty and staff, and 50 students. However, due to a compressed timeline and competing priorities (spring break, Day of Giving, Open House, Davis Lecture, midterms, and finals), I revised the plan:

- Participants: 39 (17 faculty, 10 staff; 3 faculty and 3 staff declined; 2 faculty excluded after non-response)
- Student voices were excluded from interviews due to unavailability, but student-facing content was analyzed through newsletters, marketing materials, and social media.

Contexts

Communication was assessed across six academic and research units within MSE:

- Computational Materials Science
- Electronic, Optical, and Magnetic Materials
- Energy Materials
- Materials Characterization
- Soft Materials and Biomaterials
- Structural Materials

A seventh unit, Artificial Intelligence, was introduced mid-semester but was excluded due to timing and scope.

Assessment Criteria

To systematically evaluate organizational communication, concise yet comprehensive definitions of consistency, inclusiveness, and effectiveness are essential. These definitions aim to be broad enough to apply to all organizations while identifying common elements for analysis.

The following criteria guided the evaluation of MSE's communication practices:

Consistency

Consistency in organizational communication refers to uniformity and reliability in the style, tone, frequency, and quality of messages across all channels and platforms. It ensures alignment with the organization's values, goals, and branding, fosters trust, and reinforces messages. Consistent

communication reduces confusion, enhances employee understanding, and supports a coherent organizational identity (Diggs-Brown, 2013; Dolzall, 2012).

- Uniformity in messaging style and tone
- Regularity in communication frequency
- Alignment with organizational values and goals
- Reliability of information across all disciplines

Inclusiveness

Inclusiveness in organizational communication ensures that all employees, regardless of their background or identity, feel welcomed, valued, and able to participate fully. It involves using respectful language, accommodating diverse needs, and fostering an environment where every voice is heard. Inclusive communication drives collaboration, innovation, and employee engagement while promoting a sense of belonging (Testa & Sipe, 2011).

- Respectful and non-discriminatory language
- Accommodations for diverse needs (e.g., visual and auditory access)
- Active listening and two-way dialogue
- Equal opportunities for meaningful contributions

Effectiveness

Effectiveness in organizational communication refers to the degree to which communication achieves its intended purpose: whether fostering collaboration, driving engagement, or facilitating decision-making. Effective communication is clear, transparent, goal-oriented, and tailored to its audience. It helps organizations meet their objectives by improving productivity, employee satisfaction, and organizational performance (Diggs-Brown, 2013; Keller, 2013).

- Clarity and transparency in messaging
- Alignment with organizational goals
- Facilitation of collaboration and innovation
- Positive impact on productivity and engagement

Rationale

I developed this plan using both qualitative and limited quantitative methods, in line with Watkins' (2013) argument that organizational culture is best understood through interpretive frameworks grounded in real experiences of communication. I observed recurring themes in interviews, meeting dialogue, and internal documentation, which pointed to implicit values and norms. I did not send out a survey, but I tracked the frequency of phrases and themes in artifacts.

Limitations and Boundaries

Time was the most significant limitation. I was not invited to faculty leadership meetings but was given access to slides and notes. Had more access been granted, I believe deeper cultural insights could have been revealed. The exclusion of students from interviews is another limitation, though their experiences were considered through external-facing content.

Next Steps

In alignment with May's (2003) recommendation that audits be iterative and reflect change management, I will treat this plan as a living document. Future iterations could deepen the data and stakeholder engagement.

Timeline

This audit occurred over four weeks amid a hectic semester. Despite collecting useful data, I could sense that some colleagues viewed my project as an additional burden. A 3-6 month timeframe would yield more robust insights. The College of Engineering's recent communication audit (conducted by outside consultants from June 2024 to April 2025) proved how impactful a longer, well-scoped audit can be: leading to staff changes, new hires, and meaningful policy shifts for communicators.

Tools for Analysis

- Google Docs: for designing the final report
- Google Sheets: for tracking and organizing qualitative data
- Google Drive: for organizing notes and presentation files
- Organizational Chart: for confirming personnel and aligning questions in the department
- Publications: for reviewing how MSE externally presents itself to stakeholders

Audit Diary

I completed the data collection phase of my project by gathering a wide range of organizational artifacts that provide insight into MSE's culture and internal communication practices. These include staff and faculty departmental meeting agendas, MSE's mission statement, organizational chart, publications such as annual reports, newsletters, internal emails, flyers, and other forms of internal communication. These artifacts provide a contextual foundation for interpreting patterns in organizational identity and values.

A key part of my data collection involved interviews with personnel (Appendix A). I created a comprehensive list of current faculty and support staff and began tracking interview participation (Appendix C). I have completed interviews with 27 individuals across various roles, including professors, administrators, support staff, and leadership positions. I've maintained a detailed tracking sheet, which includes interview status, role, date of first contact, and interview format (in-person, virtual, or phone). All names have been masked for confidentiality and replaced with role-based aliases.

I also documented individuals who declined to participate or have not yet responded, which helps to maintain transparency in my sampling process. While some declined due to scheduling conflicts or personal preference, I was able to secure a strong and diverse range of voices. My interview notes are organized and ready for analysis. The results section incorporates select quotations and samples from these interviews and documents to illustrate key themes and organizational narratives that emerged.

Results of the Audit Process

The audit revealed a complex communication ecosystem shaped by multiple internal and external audiences, each with distinct needs and expectations. Internally, MSE's primary audiences include faculty, staff and current undergraduate and graduate students. Faculty often operate as independent researchers, functioning as self-contained "businesses" with their own funding, lab structures and communication practices. Staff support these efforts through administrative, technical and student-facing roles, while students engage with the department through coursework, research and advising. Externally, MSE communicates with prospective students, alumni that include founders of major companies such as CREE/Wolfspeed, industry partners, vendors, federal and private funding agencies, peer institutions and media outlets. This wide audience range requires a level of strategic coordination that is not yet consistently present across communication channels.

Several key insights emerged from interviews and artifact analysis. First, awareness of materials science as a discipline remains low among undergraduate students, suggesting a need for clearer introductory messaging and early-stage storytelling. Outreach efforts, particularly those that emphasize hands-on demonstrations or real-world applications, were consistently identified as effective ways to build interest. International recruitment also presents an opportunity for growth, as messaging is not currently tailored to specific countries or cultural contexts. At the graduate level, advanced Ph.D. students were identified as a critical audience for both recruitment and retention, given their role in research output and departmental reputation.

Internal communication practices were described as functional but inconsistent. Email and meetings serve as the primary channels, yet participants noted a lack of transparency, especially during staff transitions or departmental changes. Information often circulates informally, creating gaps between faculty and staff and reinforcing silos. There is no single, trusted hub for departmental updates, which contributes to confusion and uneven awareness of initiatives, accomplishments and resources. This fragmentation is further reflected in the decentralized nature of faculty communication, where individual websites, messaging styles and outreach efforts vary widely.

Externally, stakeholder engagement is uneven. Alumni relations are hindered by incomplete or inaccurate data, including labeling errors and missed opportunities for follow-up. Participants noted that alumni are willing to engage but lack consistent touchpoints. Similarly, donor and industry communications require a more polished and strategic approach to support long-term relationship building. Industry-facing communication, particularly around Senior Design projects and partnerships such as those with Hitachi, represents a significant opportunity to demonstrate real-world impact.

Content development practices also show both strengths and gaps. High-impact content, such as major research breakthroughs, publications in journals like *Science* or *Nature*, grant awards and national recognitions, was consistently identified as a priority. These stories contribute to reputation building and align with the expectations of external stakeholders. At the same time, participants emphasized the importance of community-oriented content, including faculty and staff milestones, student profiles, departmental traditions and alumni storytelling. There is strong interest in showcasing mentorship, career trajectories and spin-off companies, as well as curiosity-driven research that makes the field more accessible and engaging.

Despite this range of content opportunities, execution remains inconsistent. Participants noted issues such as redundant messaging across platforms, outdated or broken web content and overpromotion of low-impact internal news. There is also a lack of differentiation in how content is tailored to specific platforms, which reduces overall effectiveness. At the same time, emerging formats such as short-form video, student-led content and virtual event recordings show promise but require coordination and infrastructure to scale effectively.

Platform analysis reinforced these findings. The MSE website requires significant updates to improve clarity, navigation and visual storytelling. Opportunities include the development of lab directories, research visualizations and a historical timeline drawn from archived materials. Email newsletters and print magazines provide a strong foundation, with quarterly digital communications and annual print editions already in place. However, content submission processes need to be streamlined, and tools like Emma will improve reach and consistency. Social media platforms vary in effectiveness: LinkedIn is a strong channel for professional engagement, Instagram offers potential for visual storytelling and TikTok remains untapped. In contrast, Twitter (X) has been abandoned due to shifts in the platform's goals, and Facebook is a low priority due to limited engagement.

Across all areas, a consistent theme emerged: MSE has a wealth of stories, assets and ideas, but lacks the systems needed to organize, amplify and sustain them. Shared resources are difficult to access, leading to duplicated efforts or underutilized content. Participants expressed interest in solutions such as visual maps, interactive tools and centralized content hubs to improve visibility and coordination. There is also strong support for expanding video content, including student tutorials, lab walkthroughs and feature stories that highlight both research and community.

The interview process itself reinforced the importance of intentional communication planning. Questions focused on audience, purpose, timing and format prompted participants to think more strategically about their own communication practices. This revealed a gap between the desire to share information and the frameworks needed to do so effectively.

Finally, the audit identified a range of experimental ideas and forward-looking opportunities. These include positioning faculty as distinct research brands, reconnecting with alumni through both print and digital storytelling, and expanding hands-on outreach for K-12 audiences. Participants proposed developing an "Inside the Lab" video series, launching short-form content on platforms like TikTok and Instagram Reels, and creating interactive maps to visualize alumni outcomes and research impact. Additional opportunities include repurposing course materials for public audiences, tracking embargoed research for timely promotion, and aligning storytelling with university-level campaigns.

Taken together, these findings suggest that MSE's communication challenges are not rooted in a lack of content or engagement, but in the absence of coordinated systems, shared infrastructure and strategic alignment. The department is well-positioned to strengthen its communication practices by building on existing enthusiasm, clarifying priorities and investing in tools and processes that support consistent, audience-centered storytelling.

Conclusions and Recommendations

Conclusions

MSE's story is compelling but underleveraged. MSE has a rich history, high-impact research and a network of influential faculty and alumni. However, current communication practices do not fully express this value. This gap reflects a breakdown in sensemaking, where organizational members produce meaning internally but fail to translate that meaning effectively to external audiences (Weick, 1995). While the brand mantra “Discover. Create. Enhance.” aligns with MSE's identity, its inconsistent execution limits its effectiveness as a guiding narrative (Keller, 2013).

Faculty operate as independent units. Faculty often function as autonomous research entities, which supports innovation but fragments communication. This structure reflects tensions within organizational culture, where decentralized practices shape how information is shared and interpreted (Schein, 2010; Keyton, 2010). The lack of coordination also weakens a cohesive organizational identity, making it difficult to present a unified message (Albert & Whetten, 1985).

Key audiences are known, but strategies are uncoordinated. MSE has identified its primary stakeholders, including prospective students, alumni, industry partners and funding agencies. However, communication strategies are not tailored to these groups. This misalignment suggests a gap in stakeholder-centered communication, where engagement remains reactive instead of strategic (Freeman, 1984). As a result, opportunities to build long-term relationships are underdeveloped.

Digital tools are underutilized. MSE's website, email systems and social platforms lack strategic integration and consistent use. Processes such as alumni tracking and research promotion remain manual or inconsistent. This reflects institutional inertia, where existing systems persist despite opportunities for modernization (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). The absence of tools like automated alerts further limits the department's ability to respond in real time to research outputs and achievements.

There is untapped internal enthusiasm. Faculty, staff and students demonstrate a strong desire to share their work and contribute to the department's visibility. This represents valuable social capital that remains underutilized due to a lack of structure and support (Bourdieu, 1986; Coleman, 1988). Without clear systems for contribution, this energy does not consistently translate into outward-facing communication.

Recommendations

Redesign the website with a focus on storytelling and navigation. Reorganizing the website around key audiences, prospective students, researchers and alumni, will strengthen alignment between identity and communication (Albert & Whetten, 1985). Visual lab directories and a living timeline can support sensemaking by helping users interpret MSE's legacy (Weick, 1995).

Establish a quarterly communications rhythm. A structured newsletter cycle can improve consistency and reinforce organizational culture through recurring narratives and shared milestones (Keyton, 2010). Regular communication also strengthens stakeholder relationships by maintaining visibility and trust over time (Freeman, 1984).

Develop an internal news pipeline. Creating a standardized intake process for faculty updates will improve transparency and coordination. Early identification of embargoed research and awards allows for more strategic communication, aligning internal knowledge production with external messaging (Weick, 1995).

Invest in platform strategy and training. Designating content leads and developing platform-specific strategies will enhance effectiveness across channels. Tailored content formats, such as short-form video or research highlights, can better align with audience expectations and improve engagement (Keller, 2013).

Engage alumni with personalized, targeted communication. Strengthening alumni outreach through LinkedIn, newsletters and print materials can rebuild relationships and expand MSE's network. These efforts reinforce the department's role as a long-term relationship partner, grounded in trust and shared value (Freeman, 1984; Fournier, 1998).

Create orientation and outreach materials. Developing onboarding guides and visual research maps will improve internal clarity and inclusiveness. These tools help new members navigate the organization and understand their role within it, supporting both culture and communication (Schein, 2010).

Pilot an experimental communications series. Testing new formats, such as short-form video or student-generated content, creates opportunities for innovation and adaptation. Iterative experimentation aligns with change management principles, allowing communication practices to evolve based on feedback and performance (May, 2003).

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Appendix A - Interview Tracking Table

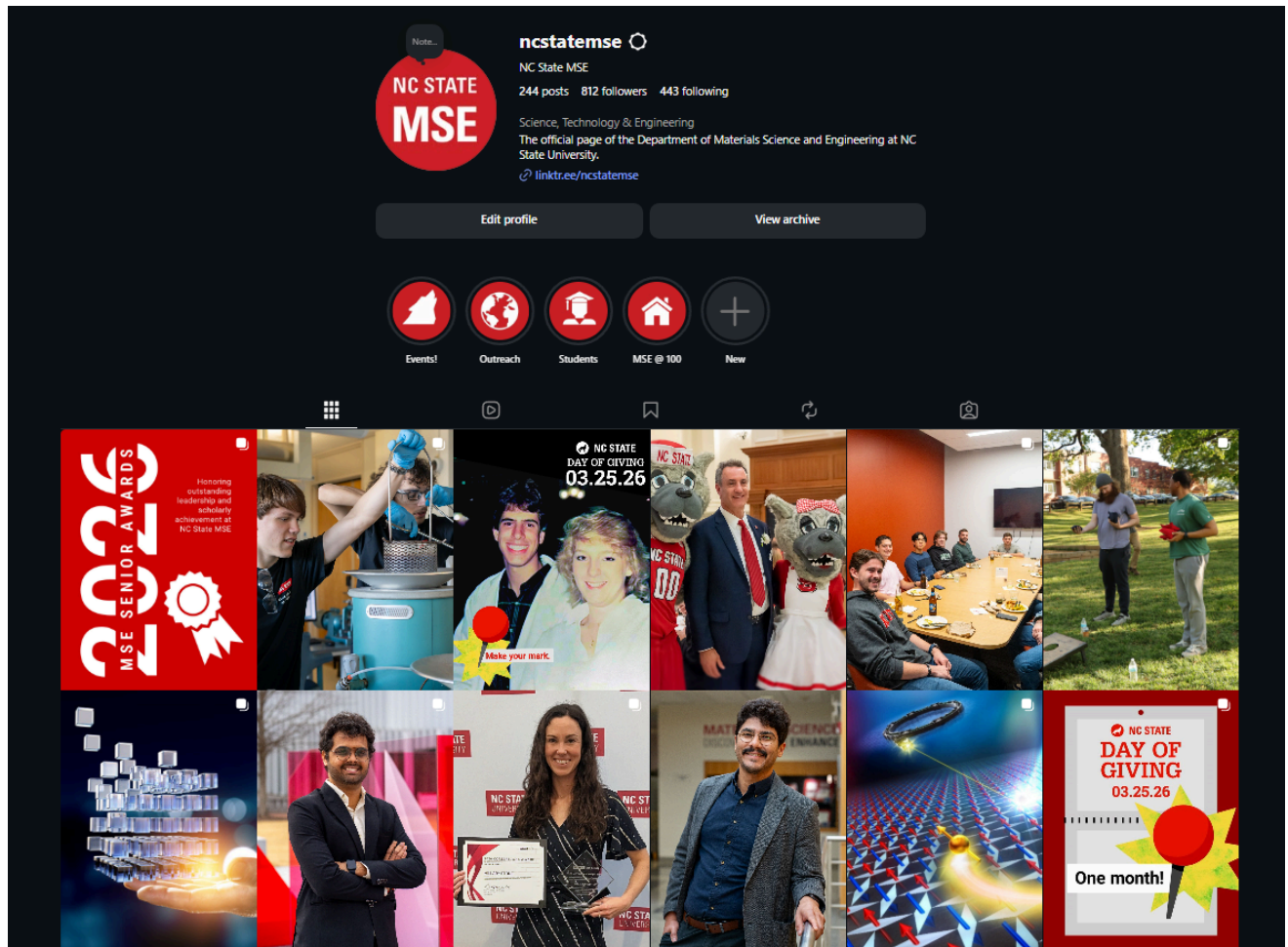
Interview Status by Role and Format. Faculty are denoted by (F). Staff are denoted by (S).

Role	Title	Style	Status	Notes
F	Assc Dept Head	In-Person	Completed	In France. Calendar invite sent
F	Professor	In-Person	Completed	Calendar hold placed
F	Professor	In-Person	Completed	Emailed invite
F	Professor	In-Person	Completed	Emailed invite
F	Assc Professor	In-Person	Completed	Emailed invite
F	Asst Professor	In-Person	Completed	Emailed invite
F	Professor	In-Person	Completed	Emailed invite
F	Res Professor	In-Person	Completed	Emailed invite
F	Professor	In-Person	Completed	Emailed invite
F	Professor	In-Person	Completed	Emailed invite
S	Accountant	In-Person	Completed	Emailed invite
S	Human Res	In-Person	Completed	Emailed invite
S	Tech Support	In-Person	Completed	Emailed invite
S	Program Spec	In-Person	Completed	Emailed invite
S	Safety Manager	In-Person	Completed	Emailed invite
S	Research Staff	In-Person	Completed	Emailed invite
S	Dev Officer	Phone	Completed	COE contact, donors
F	Professor	Virtual	Completed	Google Drive, social media
F	Professor	Virtual	Completed	Emailed invite
F	Assc Dept Head	Virtual	Completed	Calendar hold placed
F	Teaching Prof	Virtual	Completed	Calendar hold placed
F	Assistant Prof	Virtual	Completed	Emailed invite
S	UG Advisor	Virtual	Completed	Emailed invite
S	Accountant	Virtual	Completed	Emailed invite
F	Associate Prof	Virtual	Completed	Emailed invite
F	Teaching Prof	Virtual	Completed	Emailed invite
S	Technical Mgr	Virtual	Completed	Emailed invite
F	Dept Head	N/A	Declined	Emailed invite
S	Office Assistant	N/A	Declined	Emailed invite
F	Professor	N/A	Declined	Calendar not updated
S	Admin Support	N/A	Declined	Emailed invite
S	Exec Assistant	N/A	Declined	Declined to be interviewed
F	Professor	N/A	High	Emailed invite
F	Grad Director	N/A	High	Emailed invite
S	Grad Advisor	N/A	Not Picked	Emailed invite
S	Business Mgr	N/A	Not Picked	Emailed invite
S	Contracts Mgr	N/A	Not Picked	Emailed invite
F	Professor	N/A	Not Picked	Not Selected
F	Professor	N/A	Not Picked	Not Selected

Appendix B - Platform Strategy

Updated April 5, 2026

Platform	Current Status	Strategic Opportunities
Twitter/X	597 followers	Abandoned. Too political and remains unmonitored.
Facebook	172 followers	Low engagement. Define a clear messaging strategy.
LinkedIn	3K followers	Active. Useful for industry, alumni, and prospects.
YouTube	119 subscribers	Low reach. Tours, experiment explainers, tutorials.
Instagram	812 followers	Active. Visual storytelling and community moments.
TikTok	Not active	Could do student-led storytelling, outreach content.
Magazine	Annually, 500 readers	Long reads on research, awards, tenure updates.
Newsletters	Quarterly, 4K readers	Digestible stories featuring students and faculty.



Instagram (NCStateMSE, 2026):

MSE Facebook Posts and Mention

+ Add stream + Add social account View as: Standard

My Posts NC State Materials Science

Last 7 days


Posts	Engagements	Engagement rate
from 4	from 38	from 17.17%
1	8	25%


[View on Analytics](#)

NC State Materials Science • 6 days ago

Congratulations to our 2026 MSE Senior Award winners!

Each year, the NC State Department of Materials Science and Engineering celebrates...

Lead MSE Undergraduate Ambassador 

Researcher in the Xu Research Group 

Boost post

Write a comment...

NC State Materials Science • Mar 27

Don't miss the 15th annual Davis Lecture today featuring Professor Yury Gogotsi, the Charles T. and Ruth M. Bach Endowed Chair at Drexel University...

MARCH 27, 2026
HUNT LIBRARY AUDITORIUM
NC State Centennial Campus
Free and open to the public

3:00 p.m. Reception with refreshments
1st Floor Atrium, EB1

4:00 p.m. 15th Annual Davis Lecture presented by **Yury Gogotsi**, Drexel University
Hunt Library Auditorium


PROFESSOR YURY GOGOTSI is a pioneer in nanomaterials and energy storage. Known for developing a new family of

Mentions NC State Materials Science

NC State Materials Science • Mar 26

NC State Engineering Open House is almost here 🎉


Join us Saturday, March 28 from 9 a.m. to 2 p.m. for this rain-or-shine drop-in event for...



Write a comment...

NC State Materials Science • Mar 25

This #DayofGiving, NC State Engineering and NC State Materials Science proudly recognize Jennifer ('88 Business Management) and Andy ('90...



Facebook (NC State Materials Science and Engineering, 2026):

The image displays a collection of 15 LinkedIn posts from various accounts related to NC State Materials Science and Engineering (MSE). The posts are arranged in a grid-like fashion, showing a mix of text, images, and promotional graphics. Key elements include:

- arieldnguyen (Apr 6):** A post about Cordelia McKelvy, Adriana Lara, and Aaron Thomas traveling to Washington, D.C. for the Material Adv... see more. Includes an image of a group of people in front of a building.
- ncstatemse (Mar 30):** A post about the 15th annual Davis Lecture featuring Professor Yury Gogotsi. Includes a promotional graphic for the lecture series.
- ncstatemse (Mar 30):** A post celebrating the #DayofGiving at NC State College of Engineering and NC State Materials Science and Engineering. Includes a photo of two people.
- fuyun-tsai-a8b6b32... (Mar 23):** A post about the TMS Annual Meeting. Includes a photo of a presentation screen.
- ncstatemse (Mar 16):** A post about the 15th annual Davis Lecture. Includes a portrait of a man.
- ncstatemse (Mar 31):** A post about two outstanding seniors, Grace Harvey and another student. Includes a portrait of Grace Harvey.
- martineifrid (Mar 30):** A post about the 18th annual Triangle Soft Matter Workshop. Includes a graphic for the workshop.
- ncsu-metal-hub (Mar 30):** A post about the successful completion of the first Level 1 METAL Bootcamp. Includes a group photo of participants.
- yury-gogotsi-2178273 (Mar 30):** A post about traveling to North Carolina to meet colleagues and deliver the 15th annual Robert... see more.
- ncstatemse (Mar 7):** A post congratulating Dr. Dhanush Jamadagni on successfully defending his dissertation. Includes a photo of Dr. Jamadagni.

LinkedIn (NC State Materials Science and Engineering, 2026):

Appendix C - MSE Organization Chart

Organization Chart

Empl Class Filter

Show Peers of

Manager Level

Dean - Engineering
34 Directs

Focus Level

Head
Phone
Email
46 Directs / 198 Total

Directs Level

Unpaid Retiree	Asst Teaching Professor 1 Directs	Professor 7 Directs	Unpaid Research Scholar
Asst Professor 6 Directs	Unpaid Emeritus	Unpaid Faculty All Ranks	Professor 19 Directs
Accountant	Unpaid Emeritus	Professor 9 Directs	Professor 9 Directs
Assoc Professor	Professor 4 Directs	Professor 2 Directs	Unpaid Research Scholar
Unpaid Faculty All Ranks	Professor 3 Directs	Assoc Professor 1 Directs	Unpaid Emeritus 2 Directs
Executive Assistant	Graduate Research Asst	Asst Professor 2 Directs	Professor 12 Directs
Unpaid Emeritus	Business Officer 4 Directs	Niki Jennings Public Comm Specialist 1 Directs	Assoc Professor 18 Directs
Unpaid Research Scholar	Assoc Professor 6 Directs	Unpaid Research Scholar	Professor 4 Directs
Assoc Professor	Unpaid Research Scholar	Asst Professor 1 Directs	Postdoctoral Research Sch...
Unpaid Research Scholar	Asst Teaching Professor 1 Directs	Graduate Research Asst	Professor 2 Directs
Assoc Professor 5 Directs	Unpaid Research Scholar	Professor 12 Directs	Asst Professor 3 Directs
Unpaid Emeritus	Professor 5 Directs		

Appendix D - Brand Analysis

I analyzed the brand of the NC State University Department of Materials Science and Engineering (MSE) using the three branding frameworks in the module: cocreation, relationship partner, and cultural parasite.

These frameworks helped understand how MSE engages with its stakeholders, builds relationships, and aligns itself with relevant cultural narratives. I assessed MSE's brand mantra, "Discover. Create. Enhance," and evaluated if it represents MSE's brand identity.

The concept of cocreation involves the participation of key stakeholders, such as students, faculty, alumni, and industry partners, in shaping the brand. MSE encourages cocreation by involving its students in research and innovation. MSE emphasizes hands-on learning experiences, with opportunities for students to contribute to materials science projects in industries from aerospace to electronics. According to Boyle (2007), cocreation is a process in which the brand and its audience collaborate to define the brand's meaning. This involvement allows stakeholders to shape MSE's image through research, discoveries, and technological advancements.

MSE's collaborative partnerships with industry leaders and research institutions enhance its cocreation efforts. With a culture of collaboration, MSE invites external stakeholders to contribute to the development of materials science solutions. This creates a process where both MSE and its stakeholders learn from each other and drive innovation together. MSE's research centers, such as the AIF and RTNN research centers, provide platforms for students and partners to cocreate new materials and technologies, thus enhancing MSE's standing as a leader in materials science.

If MSE were to limit its engagement with external stakeholders or reduce student involvement in research and innovation, it would likely hinder its ability to stay at the forefront of scientific advancements. The lack of cocreation could diminish MSE's ability to adapt and innovate in the rapidly changing field of materials science.

Viewing MSE as a relationship partner emphasizes the emotional and functional connections it builds with stakeholders. Fournier (1998) suggests that successful brands develop lasting relationships with their key audiences based on trust, commitment, and shared values. MSE excels at maintaining these relationships by offering a supportive environment for students, encouraging a sense of community and belonging.

MSE's brand promise in its mantra "Discover. Create. Enhance," reflects its commitment to the personal and academic growth of its students. By focusing on discovery (research opportunities), creation (innovation in materials), and enhancement (improving real-world applications), MSE creates a sense of purpose and accomplishment for its students and faculty. MSE's success in building relationships is evident through its alumni network, which provides continued engagement for graduates who stay connected to MSE through industry collaborations, mentorship, and funding initiatives. MSE's communication strategies also contribute to maintaining strong relationships. It regularly communicates with students, alumni, and industry partners through newsletters, social media, and events. These touchpoints provide ongoing engagement, which is critical for nurturing long-term relationships. MSE also supports students by offering career development services, networking opportunities, and access to research projects that prepare them for success in the professional world.

From the perspective of Fournier's relationship framework, MSE can be considered a good relationship partner. It provides the resources, opportunities, and support necessary for students and faculty to thrive. However, if MSE were to neglect its relationship with stakeholders or fail to provide sufficient support and engagement, it could alienate its audience, leading to decreased trust and loyalty.

The cultural parasite framework, as described by Holt (2006), posits that brands often align themselves with cultural myths or narratives to build emotion with their audience. MSE taps into the cultural myth of scientific progress and innovation. The field of materials science is at the forefront of technological advancements, and MSE is seen as a leader in creating new materials that address global challenges such as sustainability, energy efficiency, and healthcare. This alignment with the cultural narrative of progress and innovation allows MSE to connect with stakeholders who share a vision of solving real-world problems through science.

If MSE did not incorporate these cultural myths into its branding, it would likely struggle to engage with stakeholders who value the role of science and innovation in solving global problems. Without this connection to relevant cultural concerns, MSE might appear disconnected from issues that drive interest in materials science.

Evaluation of the Brand Mantra

MSE has a brand mantra: "Discover. Create. Enhance." This mantra captures MSE's identity. "Discover" reflects the commitment to research and its role in advancing knowledge in materials science. "Create" speaks to MSE's focus on innovation and the development of new materials with real-world applications. "Enhance" represents MSE's goal of improving technologies and materials to benefit society, aligning with its emphasis on creating materials that address critical global challenges, such as sustainability and healthcare.

This mantra is well-aligned with MSE's activities and values. It communicates the research-driven and innovative nature of MSE, and it resonates with students, faculty, and industry partners who are committed to advancing the field of materials science. It also provides a strong foundation for MSE's brand identity, aligning with the cultural myth of scientific progress and innovation, as well as reinforcing the importance of cocreation and relationship-building within the academic and industrial communities.

MSE embodies the three frameworks: cocreation, relationship partner, and cultural parasite. Through its collaborative research initiatives and partnerships with industry, MSE yields a cocreation process that drives scientific advancement. MSE's focus on student success, its communication with stakeholders, and commitment to sustainability prove it as a strong relationship partner. MSE's alignment with the cultural myth of scientific progress and its focus on sustainability allow it to communicate its relevance to broader societal concerns.

The brand mantra, "Discover. Create. Enhance," sums up MSE's identity, reflecting dedication to innovation. MSE positions itself as a leader in the field of materials science with a brand that is well-suited to its goals and values.

