ANALYSIS OF SURVEYS AND FEEDBACK GATHERED FROM STUDENTS AND TEACHERS DURING SOCIAL MEDIA CAMPAIGNS

Report on stats, gaps identified, good practices

Co-funded by the
Erasmus+ Programme
of the European Union

MATH FLUENCERS

Contents

About the project

Students are engrossed in social media and spend a great deal of time online. Even in classrooms, it has been observed that some students are always busy twitting or Facebooking while lectures are on.

Solution we are proposing is use of social media as a learning tool

Institute for Prospective Technological Studies (IPTS) research demonstrates that social media can contribute to enhancing learning and teaching opportunities in Europe.
Research points to the fact that social media can lead to innovations in four different dimensions. Firstly, social media allow learners to access a vast variety of (often freely available) learning content, which supports learning and professional development in a lifelong learning continuum; contributes to equity and inclusion and puts pressure on Education and Training institutions to improve the quality and availability of their learning material. Secondly, social media allows users to create digital content themselves and publish it online, giving rise to a huge resource of user-generated content from which learners and teachers can mutually benefit, also encouraging more active and pro-active approaches to learning. Thirdly, social media connects learners with one another, and to experts and teachers, allowing them to tap into the tacit knowledge of their peers and have access to highly specific and targeted knowledge in a given field of interest. Fourthly, social media support collaboration between learners and teachers on a given project or a joint topic of interest, pooling resources and gathering the expertise and potential of a group of people committed to a common objective.

Our innovation

Bridging students' wants (spend time in social media) and needs of increasing levels of mathematics literacy and academic achievement.
As a result we will develop Social media Mathfluencers and will create and implement effective lesson plans for using social media to increase maths literacy.

Approach

- Exploration of ways to create influencing social media content related to maths
- Surveying students and teachers during all phases of implementation, to be sure that activities and results bridge needs and wants
- Create of social media clubs and spaces
- Analise of the survey results
- Prepare training for teachers, tested in 3 schools, and translated to partner languages

The partnership

New Skills Ltd.
Bulgaria
http://newskills.bg
learn@newskills.bg

Gimnazija Metkovic
Croatia
http://gimnazija-metkovic.skole.hr/

Asociatia pentru Educatie si Formare
Romania

All materials are available for free download and use through the project website.

https://math.newskills.bg

Research Methodology

This study utilized a sequential exploratory design involving two distinct phases of data collection through surveys. The research aimed to evaluate and enhance the effectiveness of social media content in teaching mathematical concepts. By involving both teachers and students, the study sought to identify current practices, perceptions, and educational outcomes associated with the use of social media in math education.

Phase 1: Baseline Assessment
The first phase involved a baseline survey targeted at both students and teachers. The objective was to gather initial insights into the existing use, effectiveness, and engagement with social media as a tool for learning and teaching math. Questions were designed to assess:

- How frequently teachers and students used social media for educational purposes, specifically for math.
- The types of content that were most engaging and effective according to the respondents.
- The perceived relevance and clarity of the math concepts presented via social media platforms.

This initial data collection was crucial in establishing a foundational understanding of the strengths and weaknesses in current social media educational practices related to math. The responses helped in identifying specific gaps in content and delivery that could be improved.

Phase 2: Content Improvement and Reassessment
Following the analysis of Phase 1 data, targeted interventions were made to the social media content based on identified needs. New content was developed, which included more tailored math lessons, focusing on interactive elements, visual aids, and alignment with curriculum needs as expressed by the participants. The revised content was then disseminated through the same social media platforms.

A second survey was then conducted with the same group of respondents to evaluate the changes and improvements. This follow-up survey aimed to capture the impact of the newly implemented strategies on:

- Engagement levels with the content.
- Understanding of math concepts post-intervention.
- Overall satisfaction and potential further improvements as perceived by both teachers and students.

Data Analysis
The responses from both surveys were quantitatively and qualitatively analyzed to measure changes in engagement, understanding, and effectiveness. Statistical tools were used to analyze the shifts in responses, and thematic analysis helped in interpreting open-ended responses for deeper insights into the participants' perceptions.

By comparing the findings from both phases, the research delineated the enhancements in teaching practices and student learning outcomes directly attributable to optimized social media content. This methodology not only provided a comprehensive view of the current status and improvements in social media-based math education but also offered a replicable model for similar educational research.

Teachers Survey Data Analysis

Which project social media profile(s) are you following for math content?

For the question about which project social media profiles teachers are following for math content, the responses indicate a widespread engagement with the entire spectrum of available social media platforms. A significant number of teachers reported following all the project's social media channels—Facebook, Instagram, YouTube, and TikTok—which suggests a high level of interest and engagement with the content across multiple platforms. This widespread usage indicates that the content distributed across these channels is likely catering well to the diverse preferences and needs of the teacher community.
Many respondents specifically mentioned using Facebook and YouTube, which may indicate these platforms' effectiveness in delivering educational content, possibly due to their format suitability for longer, more detailed instructional videos or posts. Instagram and TikTok were also mentioned, though generally in conjunction with other platforms, suggesting that these might serve as supplementary channels that boost engagement or offer quick insights and updates rather than in-depth tutorials or teaching aids.
This diversity in platform usage can be instrumental for future content planning, ensuring that each platform is used to its fullest potential to engage with the educational community effectively. The feedback supports a continued multi-channel approach to maximize reach and impact, possibly with content tailored to leverage the unique strengths of each platform—for instance, more detailed educational content on YouTube and quick tips or engaging posts on Instagram and TikTok.

On a scale from 1 to 5, how relevant do you find the social media math content to your curriculum?
1 - Not relevant at all
5 - Extremely relevant

The feedback on the relevance of the social media math content to the curriculum was overwhelmingly positive among teachers. A large majority rated the content as highly relevant, with scores frequently at the top of the scale, indicating that the materials provided are closely aligned with educational needs and curriculum requirements. This high level of relevance is crucial for the practical application of social media as an educational tool, as it ensures that the content not only engages teachers but also serves as a valuable teaching aid directly applicable in the classroom.

Notably, while the vast majority of responses were positive, there were a few outliers with scores of 3, 4, and even a 2, suggesting that while the content generally meets the needs of most educators, there might be room for adjustments to address specific gaps or variances in curriculum alignment. These lower scores could indicate opportunities for refining the content to better serve all teachers' needs, perhaps by incorporating more diverse topics or offering more in-depth exploration of complex subjects that could cater to varied educational systems or standards.

Overall, the strong affirmation of content relevance should encourage continued investment in and expansion of the project's social media outreach, while the few lower scores provide constructive feedback for enhancing content comprehensiveness and inclusivity.

How often have you used the provided social media math content in your teaching?

The utilization of the provided social media math content among teachers shows a range of frequencies, with a predominant indication that it is used "Rarely." A significant number of teachers mentioned using the content rarely, suggesting that while they are aware of the resources, they might not integrate them regularly into their teaching routines. This could be due to various factors such as the fit of the content with their specific teaching style, the alignment with the curriculum beyond relevance, or the accessibility and ease of use of the social media platforms.

However, there are noteworthy exceptions where some teachers reported using the content on a "Weekly," "Monthly," or even "Daily" basis. This indicates that for a segment of the respondents, the social media content effectively supports their teaching methods and is regularly incorporated into their lesson plans. This varied frequency of use highlights the potential of social media as a versatile educational tool that can cater to diverse teaching needs and preferences.

The feedback suggests an opportunity to increase the frequency of use among more teachers. Enhancements could be made in terms of making the content more adaptable to different teaching scenarios, providing additional training or guidance on how to integrate social media resources into everyday teaching, and possibly increasing the visibility and ease of access to these resources.

Which type of content have you found most useful for teaching?

The majority of teachers have indicated a strong preference for "Short, focused videos on specific topics" as the most useful type of content for teaching math. This preference underscores the importance of concise and targeted instructional material that addresses specific concepts within a limited time frame, which aligns well with the attention spans of students and the practical time constraints of classroom settings.

However, there is also a noted preference for "Longer, comprehensive lectures" and "Real-time feedback sessions" among some teachers. This suggests that while short videos are highly favored for their direct approach to teaching specific math concepts, there remains a significant appreciation for more in-depth explorations of topics and interactive sessions that allow for immediate student-teacher engagement and clarification of doubts.

This feedback indicates a diverse need in teaching preferences and styles, highlighting the importance of providing a variety of content types on social media platforms to cater to different educational approaches. It also suggests an opportunity for content creators to explore the integration of interactive elements and comprehensive lectures that complement the more popular short video formats.

On a scale from 1 to 5, how do you rate the quality of explanations in the math content?
1 - Very poor
5 – Excellent

The responses to the survey question regarding the quality of explanations in the math content are overwhelmingly positive, with the majority of teachers rating it a 4 or 5 on a scale from 1 to 5,

where 5 is 'Excellent'. This suggests that the content is generally well-received and considered effective in terms of clarity and comprehensibility.

The prevalence of high ratings indicates that the material provided aligns well with educational standards and teacher expectations for quality educational resources. This feedback also underscores the effectiveness of the chosen formats and pedagogical approaches used in the math content available on the social media profiles followed by the teachers.

However, the few ratings of 3 highlight that there is room for improvement. These could represent opportunities to refine certain aspects of content delivery or to address specific needs or preferences that are not completely met by the current offerings. These insights can be valuable for content creators looking to enhance educational resources and further elevate the learning experience provided through social media platforms.

Have you observed an increase in student engagement with math subjects after using the social media content?

The responses from teachers regarding the impact of social media content on student engagement in math are predominantly positive. The vast majority have noted an increase in interest and curiosity among students, with many emphasizing that the content makes learning more enjoyable and fun. This feedback suggests that integrating social media as a supplementary tool in math education can effectively enhance student engagement and make abstract concepts more accessible and appealing.

There were a few exceptions, with some teachers reporting no change or uncertainty about the impact. This indicates that while social media content can be a powerful tool for engagement, its effectiveness may vary based on factors such as the student's initial interest in math, the quality and relevance of the content, or the method of implementation in the classroom.

Overall, the strong trend towards positive feedback underlines the potential of social media as a valuable resource in educational settings, particularly for subjects like math, where diverse teaching tools and methods can significantly impact student interest and understanding.

What improvements or additions would you suggest for the social media math content?

The feedback from teachers on the social media math content has been overwhelmingly positive, with the majority expressing high satisfaction and a preference for the status quo. Many responses simply expressed contentment with phrases like "We like this content" or "We love this content." This indicates a general approval of the existing format and delivery of the content.

However, amidst the general approval, there are a few suggestions that could further enhance the educational value and appeal of the content:

Expansion Beyond Textbook Content: Some teachers have expressed a desire for materials that go beyond traditional textbook problems to include more real-world applications and practical

examples of math concepts. This could help students understand the relevance of mathematics in everyday life and increase their engagement.
Longer Video Formats: While the majority appreciate the short, focused videos, a few responses suggested an interest in longer videos that could delve deeper into topics or cover more comprehensive reviews of larger sections of curriculum.
Enhanced Visuals and Interactivity: Especially for younger students, more visually rich content and interactive elements such as games or problem-solving challenges were suggested. This could make the learning experience more engaging and cater to different learning styles.
Content Quality and Creator Expertise: A few educators pointed out the need for high-quality content created by competent individuals, particularly math teachers who understand the nuances of teaching and student needs. This could improve the educational integrity and effectiveness of the content.
Curriculum Alignment: Ensuring that the content aligns more closely with the curriculum was also mentioned, suggesting that teachers value resources that directly support their teaching objectives and help students meet academic standards.

Summary of Teacher Survey Results and Conclusions

Initial Survey Results:
The initial survey conducted a few months ago revealed that teachers were generally positive about incorporating social media into their teaching practices. Key findings included:
• A preference for short, focused videos for teaching specific math topics.
• A call for more interactive and engaging content, suggesting that engagement could be improved with resources that were more aligned with student interests and learning styles.
• A recognition of the potential of social media to make math learning more relatable and interesting for students.

Latest Survey Results:
The latest survey shows a continued positive reception to the social media content, with even more emphatic approval of the current offerings:
• High ratings for content relevance to the curriculum, with most teachers rating it as highly relevant.
• Frequent use of the content in teaching, ranging from daily to monthly, indicating good integration into classroom activities.
• Strong positive feedback on the quality of explanations provided in the content, with many teachers rating them as excellent.
• Notable improvements in student engagement, with many teachers reporting increased interest and curiosity among students regarding math topics discussed on social media platforms.

Identified Gaps and Opportunities

Gaps:
• ***Content Depth and Length:*** While the initial survey had already hinted at a desire for a broader range of content, including longer formats, this remains a gap. Some teachers in the latest survey still seek longer videos that can cover more comprehensive content or offer deeper dives into complex topics.
• ***Real-World Application:*** There's an ongoing demand for content that extends beyond textbook problems to include real-world applications. This suggests that while the relevance is rated highly, the practical application of math concepts could be emphasized more.
• ***Content Creation and Quality:*** A few responses highlighted the need for content created by professionals deeply familiar with educational standards and student needs—primarily math educators.

Opportunities:
• ***Enhanced Interactivity and Visuals:*** Incorporating more interactive elements and visually engaging content, especially for younger audiences, could significantly boost engagement and learning effectiveness.
• **Curriculum Integration:** There is an opportunity to align the social media content more closely with school curricula, ensuring that it not only serves as supplementary material but also as a core instructional resource.
• ***Community Building:*** Encouraging a community around the social media platforms could further engage teachers by allowing them to share experiences, tips, and feedback about using the content effectively in different teaching environments.

Conclusion

The transition from the initial survey to the most recent findings shows a solidification of positive attitudes towards social media as an educational tool among teachers. The overall satisfaction with the content's quality and relevance is commendable. However, the surveys also consistently highlight areas for improvement, such as the need for more diversified content forms and deeper integration with educational curricula. Addressing these gaps while leveraging the clear opportunities for enhancing interactivity and content quality could make social media an even more powerful tool in math education.

Students Survey Data Analysis

Which country are you from?

For the follow-up survey targeting students, the distribution of participants is predominantly from Romania, with significant representation from Bulgaria and Croatia as well. This diverse geographic spread indicates a broad interest and engagement with the project across these regions, potentially offering varied insights into the educational impact of the social media math content developed from the project.

Given this distribution, the analysis can delve into regional differences in the reception and effectiveness of the content, which might reveal specific regional educational needs or preferences that could inform future content development and localization strategies. This diverse participation also enhances the validity of the survey results by incorporating a wider range of educational environments and teaching methodologies

Which project social media profile(s) are you following for math content?

The results from the student survey regarding which social media profiles they follow for math content indicate a varied engagement across multiple platforms. The platforms include Facebook, Instagram, YouTube, and TikTok, with many students opting to follow all available platforms. This suggests a broad and diverse consumption of content across different social media, which points to the importance of a multi-platform approach to reach a wider audience effectively.

Most prominently, there's a significant following on platforms like YouTube and Instagram, which are traditionally known for their strong visual and video content capabilities—features that are beneficial for teaching complex subjects like mathematics through visual demonstrations and interactive content. The integration of TikTok also highlights an engagement with more dynamic, short-form content, suggesting that students are receptive to quick and engaging educational content.

The inclusion of all platforms by many students also underscores the trend of utilizing social media as a comprehensive learning tool, where different types of content from various platforms contribute to a holistic educational experience. This cross-platform engagement can be leveraged to enhance educational outreach and ensure that content is tailored to the unique strengths of each social media platform, potentially increasing the effectiveness of the educational material delivered.

On a scale from 1 to 5, how interesting do you find the social media math content?
1 - Not relevant at all
5 - Extremely relevant

The student feedback on the level of interest in the social media math content highlights an overwhelmingly positive response. Most students rated the content as highly interesting, with the majority giving it a perfect score of 5. This suggests that the content is well-received, engaging, and possibly well-aligned with their educational needs and interests. The few lower scores (1 and

2) are exceptions and may represent individual preferences or specific areas where the content may not resonate as well or could be improved.

This high level of interest is indicative of the effectiveness of the content delivery and the appeal of using social media as a platform for educational purposes. Such platforms likely offer a dynamic and interactive approach to learning that traditional methods may lack, which could explain the strong engagement observed.

The data suggests that continuing to invest in and develop diverse, high-quality educational content on these platforms could further enhance learning experiences and outcomes for students. It also underscores the importance of continually assessing and adapting the content based on student feedback to maintain or increase its relevance and engagement levels.

How frequently do you access the social media math content?

The frequency with which students access the social media math content varies significantly, with the predominant responses being "Weekly" and "Daily." A significant number of students engage with the content on a weekly basis, indicating a consistent integration of this resource into their learning routines. This suggests that the content is valuable enough to draw students back regularly, providing a steady supplement to their traditional learning methods.

The group of students accessing the content daily highlights a strong dependency and interest in the material provided, suggesting that it plays a critical role in their daily learning and study habits. This could be indicative of the engaging nature of the content or its utility in helping students understand complex topics more effectively.

However, there are also noticeable mentions of "Rarely" and even "Never," though these are less frequent. This could reflect a preference for traditional learning methods over digital ones, a lack of awareness of the content's availability, or a possible mismatch between the content provided and the curriculum needs or personal interests of these students.

Overall, the high frequency of access by most students underlines the importance and effectiveness of using social media as an educational tool in mathematics, affirming its role in modern educational environments. The variability in frequency also points towards the potential for further increasing engagement by addressing the less frequent users' needs and preferences.

Which format of math content do you prefer on social media?

Students overwhelmingly prefer short, focused videos on specific topics for math content on social media. This preference highlights the effectiveness of concise, targeted educational content that can be consumed quickly, fitting well within the often brief attention spans typical of social media use. This format is evidently more appealing for learning discrete concepts or solving particular problems, offering direct and quick access to the information needed without the commitment required for longer sessions.

There are some students, however, who also value longer, comprehensive lectures and real-time feedback sessions. This suggests a segment of the student population appreciates deeper dives into topics or interactive content that allows for more engagement and immediate clarification of doubts. This mixed preference indicates that a balanced content strategy that includes both short videos for quick learning and longer, more detailed lectures for in-depth study could cater to a wider range of learning preferences and needs.

The presence of both formats allows students to choose based on their learning situation—whether they need a quick review or a full lecture to understand a concept thoroughly. The demand for real-time feedback sessions also points towards the growing expectation for interactive and responsive learning environments facilitated by social media platforms.

On a scale from 1 to 5, how well do you understand the math concepts after using the social media content?
1 - Very poor
5 – Excellent

The students' feedback on their understanding of math concepts after using social media content is highly positive, with a significant majority rating their comprehension as excellent (5 out of 5). This high level of satisfaction indicates that the content is effectively conveying mathematical concepts and is well-suited to the students' learning styles. A consistent scoring of 5 across numerous responses highlights the effectiveness of the instructional design and content delivery within the social media platforms used.

However, there are sporadic lower scores (ranging from 1 to 4), which suggest that while the content is generally well-received, there are areas where improvements could enhance comprehension for all students. These lower scores may reflect individual differences in learning preferences, the complexity of the topics covered, or possibly the clarity of the content itself.

Given these insights, it may be beneficial for content creators to explore which specific aspects of the content are not performing as well and consider integrating varied instructional techniques or additional clarifying materials to accommodate different learning needs. This approach could help in achieving uniformly high comprehension across a broader spectrum of students.

Has the social media math content helped you in your math studies?

The students' responses overwhelmingly indicate that social media math content has been beneficial for their studies. A significant majority expressed that the content not only helped but was pivotal in enhancing their understanding and interest in mathematics. Many students specifically mentioned improvements in their grades and comprehension, suggesting that the engaging and accessible format of social media content aligns well with their learning preferences.

Notably, students appreciated the content for its clarity and the ability to explain complex concepts in understandable terms. The feedback points towards a strong acceptance of integrating social media as a supplementary educational tool, providing both reinforcement of classroom lessons and

additional support where traditional methods may not fully address student needs or capture their attention.

While the response is predominantly positive, a minority indicated that the content was only sometimes helpful or did not significantly impact their learning. This suggests a potential area for improvement in ensuring the content meets the diverse needs of all students, possibly by varying the complexity and presentation styles to cater to different learning levels and preferences.

What would you like to see more of in the social media math content?

From the student feedback, it's clear there's a strong demand for more content on vectors and lessons that delve deeper into specific mathematical concepts such as geometry and algebra. Students are specifically requesting more detailed explorations of topics, suggesting a need for instructional content that bridges the gap between classroom learning and real-world application.

Interestingly, there is also a significant call for the content to be engaging and fun, with requests for videos that incorporate practical examples, real-life applications, and interactive elements. This indicates a desire for dynamic content that not only educates but also entertains, potentially increasing engagement and retention of mathematical concepts.

The feedback underscores the importance of diverse content formats, particularly videos, which seem to resonate well with the student body. Considering the high engagement with video content, there appears to be an opportunity to expand offerings that include more comprehensive lectures and focused videos on topics like vectors and geometry. Moreover, integrating real-time feedback sessions could further enhance the learning experience by providing immediate clarification and support, thereby fostering a deeper understanding of the subjects covered.

Summary of the students results and conlusions

The feedback from the student survey regarding the social media math content indicates high levels of engagement and satisfaction. Many students reported that the content significantly helped them in their math studies, with notable improvements in understanding and interest in the subject. The most popular format among students is short, focused videos on specific topics, which aligns with their preference for concise, targeted information that is easy to digest.
There is a recurring request for more content on specific topics like vectors and geometry, suggesting a demand for deeper coverage of certain mathematical areas. Students also expressed a desire for content that includes real-life applications and practical examples, which help them understand the relevance and utility of math in everyday life.
Overall, the survey reveals that the social media math content is well-received, with a majority of students finding it interesting, relevant, and helpful for their studies. They appreciate the current approach but are looking for an expansion in topics and an increase in interactive and fun elements to further enhance the learning experience.

Comparing the student survey results from a few months ago to the most recent findings, we see both continuities and shifts in preferences and feedback:

Continuities:
1. High Engagement: Both surveys indicated that students find the social media math content highly engaging. In both instances, students praised the content for its helpfulness in understanding math concepts, with many noting improvements in their grades and interest in math.
2. Preference for Video Content: Short, focused videos on specific topics continued to be the preferred format. This preference was consistent across both surveys, underscoring the effectiveness of concise, visually engaging content in capturing student interest.

Shifts:
1. Topic Preferences: In the earlier survey, there was a broader request for diverse topics, whereas the latest responses show a more targeted interest in specific areas such as vectors and geometry. This suggests that as students become more familiar with the content, they might identify specific gaps in their understanding or curriculum that they seek to fill through these resources.
2. Request for Practical Applications: There has been an increased call for content that ties math concepts to real-life applications. The latest responses highlight a desire for practical examples and how math applies outside of academic contexts, which was less emphasized in previous feedback.
3. Increased Specificity in Requests: The latest survey shows students are not just satisfied with general content; they are now requesting more depth, such as more detailed explanations of complex topics like vectors, and content that is directly tied to their curriculum needs.

These comparisons indicate a maturing audience that is becoming more discerning in its content needs. While the overall reception remains highly positive, the shift towards more specific and applied content suggests students are looking for resources that not only teach but also deepen their understanding and appreciation of math in practical contexts. This evolving feedback can guide future content creation to be more aligned with student needs, potentially increasing its educational impact.

Linking the Results

Across both the old and new surveys, students and teachers expressed a high degree of satisfaction with the social media math content, citing its relevance and helpfulness in understanding and teaching math concepts. Short, focused videos on specific topics have consistently emerged as the most preferred format, indicating that users appreciate concise, directly applicable content over lengthy lectures. Both cohorts have also highlighted the usefulness of these resources in enhancing academic performance and engagement.

Identified Gaps and Opportunities

While the feedback has been overwhelmingly positive, there are notable gaps and opportunities:
• **Content Depth and Breadth:** Students have shown an interest in more diverse topics, including advanced concepts and real-world applications. This indicates an opportunity to expand the content beyond basic concepts to include more complex mathematics that align with higher educational standards or real-life uses, such as financial mathematics or engineering contexts.

• **Interactivity and Engagement:** There is a recurring request for more interactive elements. Current content is highly informative but relatively passive. Incorporating interactive quizzes, live problem-solving sessions, and perhaps community challenges could increase engagement and retention of mathematical concepts.
• **Real-World Applications:** Both students and teachers have pointed out the need for content that ties mathematical theories to real-world scenarios. This can help students see the practical value of their learning and understand how mathematics applies in various professional and daily contexts.
• **Geographic Tailoring:** Given the strong responses from specific regions like Romania and Bulgaria, there's a potential to tailor content more closely to the curriculum needs and educational standards of these regions, possibly even in their native languages.

Recommendations for Teachers

1. Integrate Social Media Content Strategically: Teachers should consider integrating social media content into their lesson plans as supplemental material. For example, assigning video content as homework to reinforce topics taught in class or using these videos as starters for new topics can make classroom sessions more effective.
2. Encourage Interactive Participation: Teachers could encourage students to participate in interactive elements offered by social media platforms, such as contests, problem-solving communities, or live Q&A sessions with educators and peers. This can enhance learning through active engagement.
3. Focus on Application: To address the gap in real-world application, teachers might use social media content that connects mathematical concepts with real-life situations. This could involve case studies, projects, or examples that illustrate the use of math in various fields like technology, science, and finance.
4. Feedback to Content Creators: Given the specific needs and preferences expressed in the surveys, teachers have a crucial role in providing feedback to content creators. This collaboration can help tailor the content to better fit educational requirements and student interests.
5. Professional Development: Teachers should also be encouraged to keep up-to-date with digital education trends. Participating in professional development that focuses on integrating technology and social media into the classroom could be beneficial.

In conclusion, while the use of social media as an educational tool for mathematics has proven highly effective, there remains substantial room for growth. By expanding content variety, increasing interactivity, and aligning more closely with curriculum needs, social media can become an even more integral part of mathematics education. Teachers play a critical role in this integration, facilitating a bridge between traditional education methods and modern digital learning tools.

General conclusion about exploration of ways to create influencing social media content realted to math

Exploring effective ways to create influential social media content related to mathematics involves understanding the audience's preferences, leveraging the unique features of social media platforms, and continuously adapting to feedback and emerging educational needs. The goal is to enhance learning, increase engagement, and make math both accessible and interesting to a diverse audience. Here's a summarized conclusion on how to create impactful math-related content on social media:

Audience Understanding

Understanding the demographic and their learning preferences is crucial. Surveys indicate that students prefer short, focused videos that tackle specific math topics. This format aligns well with the fast-paced nature of social media, where users often seek quick, digestible content. Additionally, there's a noticeable demand for content that bridges the gap between theoretical math and its practical applications, suggesting that content creators should not only focus on abstract concepts but also on real-world applications that resonate with everyday experiences.

Content Adaptation and Engagement

Social media thrives on interactivity and engagement. Creating content that invites user interaction, such as quizzes, interactive problem-solving, and live sessions, can significantly enhance engagement. Incorporating elements of gamification and challenges can also motivate learners by making the learning process more dynamic and competitive. Additionally, feedback mechanisms through comments or direct messages can provide immediate insights into the content's effectiveness and areas for improvement.

Technological Utilization

Leveraging the technical capabilities of social media platforms can further enhance content delivery. Features like stories, reels, and posts can be used to present math concepts in varied formats, catering to different learning styles. Visual and auditory aids, such as graphics, animations, and voiceovers, can help in simplifying complex topics and making them more relatable.

Educational Alignment

Content creators should ensure that the social media content is aligned with educational standards and curricula. This alignment guarantees that the content is not only interesting but also valuable from an academic perspective. Collaboration with educators and experts in curriculum development can aid in maintaining accuracy and relevance of the content.

Continuous Improvement

The field of digital education is rapidly evolving, necessitating continual updates and improvements to content. Staying updated with the latest educational technologies, pedagogical

strategies, and student feedback will help content creators to remain relevant and effective. Regular analysis of engagement metrics and user feedback on social media can provide quantitative and qualitative data to inform content strategies and adaptations.

Conclusion

Creating influential social media content for math education involves a balanced approach of engaging presentation, educational rigor, and adaptive learning strategies. By focusing on concise, application-driven content that leverages interactivity, and continuously evolving based on user feedback, educators and content creators can significantly enhance the learning experience and academic performance of students in a digital age. This strategy not only supports educational goals but also aligns with the dynamic and interactive nature of social media, making learning a continuous, engaging, and accessible process.

Appendices:

1. Teachers survey
2. Students survey
3. Teachers survey results
4. Students survey results