

# Designing a Quiz on Twitter for Self-assessment of Classroom Learning: A Technical Guide

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## ABSTRACT

The use of the social media has increased over the recent years owing to the easy accessibility of smartphones and internet networks. Medical and paramedical students use smartphones both for their social activities and academic purposes. Twitter is a microblogging platform on the social media, where the users have a limited number of characters to express their thoughts. The use of hashtags (writing the word of interest followed by #) helps to find the topic of interest by the users. A closed group can also be created on Twitter for posting a message to like-minded users. Twitter poll is utilized to collect anonymous public opinion. The poll can be created with four response options. It has the potential to be used as multiple-choice questions (MCQ) or quizzes. Additionally, it can be employed for self-assessment purposes. However, the correct answer would be posted later by the teacher. As the use of the social media is increasing among students, a self-assessment quiz may further attract them to academic activities while surfing the internet. In this article, we described the technical details of how to design a quiz using a Twitter poll.

 $\textbf{Keywords:} \hspace{0.3in} \textbf{Social media, Self-assessment, Students, Twitter}$ 

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#### Problem

With the easy access to the internet through smart devices, life today is inseparable from smartphones and tablets. The social media platforms, like Facebook, Twitter, and LinkedIn, are used for staying connected with like-minded people and share own stories with others. Medical and paramedical students all over the world use smartphones both for their social activities and academic purposes (1). There was a sharp rise in online education during the COVID-19 pandemic. Students and teachers had no options, but to adopt a fully electronic mode of teaching and learning. Along with teaching, assessments

were also conducted online (2).

Twitter is a microblogging platform on the social media, where the users have a limited number of characters (up to 280 characters) to express their thoughts. The use of hashtags (writing the word of interest followed by #) helps to find the topic of interest by the users. While posting a tweet, a user can select either to post it for the public or a closed group of users. There is an option on Twitter to post a poll in order to collect opinions on a particular topic (3). However, the poll can be created with only four response options, with 25 characters for each. Hence, we sought to find if we can conduct a Twitter poll-based quiz for our

students in order to assess classroom learning. If it is possible, the students would have an option to participate in an academic activity while they are on the social media. In addition to Twitter, other social media like Instagram and LinkedIn, social media messenger like Telegram, or dedicated e-learning service like Adobe connect can be used for the same purpose. However, we aimed to test Twitter for self-assessment quiz as it was previously used for academic purposes successfully. It is a free social media with simple user interface that would facilitate the teachers for creating a poll and the students can easily participate.

Thus, we explored the potential of Twitter poll for designing quizzes for formative assessment of classroom learning. Herein, we are sharing the technical guide so that other interested teachers can design similar quizzes for their students in the future.

#### Solution

# Prerequisite

A Twitter account is the prerequisite for creating a poll. Nonetheless, an account with students as followers would be better for reaching the assessment questions (tweets) to the students. To this end, teachers may promote their Twitter accounts among the students with intimation about the upcoming formative assessment on this platform. Moreover, teachers can share particular hashtags they would use during posting the quizzes; this would facilitate following teachers or finding tweets with a particular set of hashtags.

## Creating A Poll

On the landing page, after logging into a Twitter account, there is an icon for inserting media (image, video), gif, poll, emoji, schedule, and tagging a location. Click on the "poll" icon and start writing the question on the box saying "Ask a question." You can add the hashtags along with the questions or add the topic or group of students for whom the quiz is designed. By default, there are two response options, "Choice 1" and "Choice 2". You may click on the "+" for adding more

response options (Figure 1). The poll length is the period the poll would be collecting responses; a maximum of seven days is allowed for collecting responses. After filling every field, click on "Tweet" to post the poll.

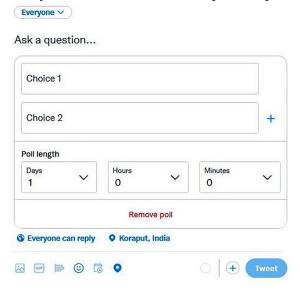
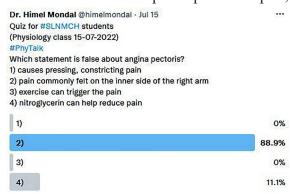


Figure 1: Creating a poll on Twitter.

## An Example

An example is shown in Figure 2. As seen, the poll was for a particular group of students identified by the hashtag #SLNMCH (name of the medical college). The quiz was designed for a particular class (physiology), conducted on a particular day (15-07-2022). Another hashtag, #PhyTalk, was additionally used to facilitate searching the quizzes by the interested students. Subsequently, the question and responses were posted. In this example, the poll had already ended; hence, the highest response is shown in blue color. When a student participates in a poll,



**Figure 2:** An example of a Twitter poll-based quiz.

they do not get this result until the poll time is over. Before that, only the grey bar shows the percentage of votes for each option.

# Choosing the Audience and Respondents

Twitter polls as quizzes can be either posted to the public or a closed group of audience. A teacher can create a Twitter circle with students. While posting a poll, the teacher may click on the default "Everyone" dropdown button to get the option of either posting it for everyone or a closed "Twitter Circle." The circle can be created by clicking on the "Edit" button against the Twitter Circle (Figure 3a). Accordingly, the teacher is able to share the quiz with either a particular closed group or the public view. If the quiz is posted in a closed group, only the group members can see the poll and participate in it.

Once the poll is posted for everyone, the teacher has the option to choose who can reply to the poll. By default, the poll is posted for everyone. However, it can be changed; for that, click on the "Everyone can reply" below the poll options (Figure 1). Afterwards, select either "People you follow" or "Only people you mention" (Figure 3b). These two options would not be a good choice as new students may want to participate, whom the teacher does not follow. In addition, mentioning (i.e., mention individual students with "@") all the students is practically a tedious job without

any potential advantages. If the teacher posts the poll with a message about the target audience (Figure 2), it is better to post it for everyone and open the poll participation to the public.

## Limitation of Twitter Poll as a Quiz

While designing the quiz on Twitter, teachers may face the problem of accommodating a long phrase as the response option. In this situation, they may post the options with the poll questions and put the option number as the poll response option as shown in Figure 2. Furthermore, a Twitter poll cannot be used for image-based MCQ. Posting a tweet as a poll is restricted to text only. Nevertheless, if it is inevitable, teachers can post an image with a clinical figure, question, as well as response options, and take the response as a reply to the tweet. It is however beyond the scope of Twitter poll. In addition, in certain countries, there is a ban on or limited access to Twitter. Hence, teachers from those countries cannot use Twitter as a medium for formative-assessment of classroom learning.

# Suitability and Limitation of Twitter Poll as Formative Assessment

Formative assessment should be faceless (4). This is one of the major maxims of formative assessment as students may

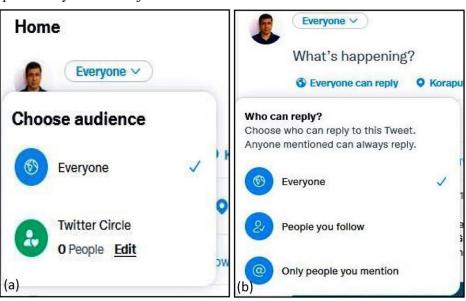


Figure 3: While posting a poll, the teacher can (a) choose the audience or (b) restrict the participation.

not participate in an optional formative assessment if their identity information is recorded. Twitter poll is anonymous; it can be therefore used as a medium for formative assessment. On the other hand, in Twitter poll, the correct answer cannot be shown to the participant immediately, making it impossible to give immediate feedback to students, which is possible in a quiz created in Google forms (5). This is because Twitter poll is primarily developed as a poll, and not for a quiz. However, the teacher could post the correct answer and explanation with a reply to the tweet after a certain window period.

## **Result and Conclusion**

Twitter poll, as a self-assessment quiz for classroom learning, was successfully conducted in our institution. Students could participate in Twitter poll-based quizzes without their identity being declared. Thus, this platform can be taken into consideration in other institutions as well. This guide may help them to design the poll as a quiz with ease.

As the use of the social media is increasing among students, a self-assessment quiz on the social media may help them to get engaged in academic activity. Teachers may consider designing a few (in our institution, we used five MCQs) questions as a formative assessment after a 1-hour lecture class. The questions should be set according to the objectives of the class. After designing the questions, they may be reviewed by an expert colleague who check their clarity, suitability for students, proper wording, and level of difficulty. Firstorder and second-order questions may be combined so that students get a combination of easy-to-solve questions and higher-order questions.

## **Authors' Contribution**

HM: Conceptualization, study design, literature search, visualization, drafting the manuscript. SM: Conceptualization, literature

search, editing the manuscript.

Conflict of Interest: None declared.

## **Ethical Considerations**

Preparation of this article did not involve any research conducted on human subjects or animals. Hence, approval from the ethics committee is not required. The Twitter profile shown in this article belongs to the first author and the screenshots were captured from open social media.

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