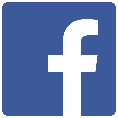
**Social Media Platform #1: Facebook**

Facebook is by far the most popular social network in the world, by number of active users (2.25 billion; Statista, 2018). Though Facebook began largely as a way to connect university students, and eventually, non-student family and friends, it has since become much more commercial. 43% of Americans report getting their news from Facebook and 67% of Facebook users get news from the platform (Pew Research Center, 2018).

Facebook posts generally center around a single or multiple images and/or videos, accompanied by some text. Users may ‘react’ to posts (like, heart, laugh, wow, angry or sad) and write comments on them. Post authors may then respond to comments if they choose. Although Facebook allows users to post ‘stories’ (short videos that are only visible for 24 hours), this feature is much more popular on Instagram and to a lesser extent, Snapchat.

Check out <https://facebook.com/USGSVolcanoes/> for some example posts.

|  |  |
| --- | --- |
| **Primary media** | Text, images, videos (engagement is higher with images and videos) |
| **Character limit** | 63 206 characters (truncated at 80 characters with an ellipsis) |
| **Publicly viewable?** | For personal users, only if they elect to do so. Settings may be changed on individual posts so some are visible and some are not. Posts from businesses and organizations are visible to the public, whether you are a Facebook user or not. |
| **Taggable?1** | Yes |
| **Searchable?** | Yes |
| **Hashtags (#)?2** | Yes |
| **Emojis?** | Yes |

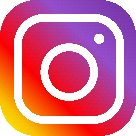
Examples:

* An instructor of a natural disasters course asks students to create a Facebook-style post to assess their ability to communicate about natural hazards.
* Students in an Earth systems science course discuss the role of different components of the Earth system by responding to an instructor-generated Facebook-style post about different regions of the Earth.

1Tagging is a means of linking to other people or agencies. On most social media platforms, this is achieved by typing “@” followed by the person or agencies’ handle, or user name (e.g., tweets about this year’s Rendezvous should tag the NAGT with @nagtgeo).

2Hashtags (#) are a way of characterizing topics in the post, so that they become more easily and widely searchable (much like keywords). Hashtags are often cleverly worded using puns, pop culture references, and other plays on words. They are sometimes recommended by an event organizer or agency (e.g., #EarthER19 is recommended for all posts about this year’s Rendezvous).

1. Identify advantages and opportunities for using and/or replicating this social media platform in teaching and learning.
2. Identify disadvantages, challenges, or barriers to using and/or replicating this social media platform in teaching and learning. For each of these, try to also identify a solution or way to overcome the challenge.

**Social Media Platform #2: Instagram**

Instagram is an image and video driven medium, where words follow to effectively caption the post. Instagram is one of the most popular social media networks worldwide, with 1 billion active users (Statista, 2018). Far fewer Americans get their news from Instagram (8%) than Facebook (43%; Pew Research Center, 2018).

Instagram stories are a near live series of photos and/or videos. Although Facebook offers similar functionality, Instagram is much more widely used for this purpose. Stories may be viewed for 24 hours after they are posted. Within Instagram stories, users may tag others, insert stickers (static images) or GIFs (moving images) that they find by searching within the app, use video effects, tag locations, and more. Stories have a more spontaneous and personal feel, and are one of the most influential content formats at present (Hootsuite, 2019).

Check out <https://instagram.com/accessiblegeo/> for some example posts.

|  |  |
| --- | --- |
| **Primary media** | Images and/or videos captioned by text |
| **Character limit** | 2200 characters (truncated at 150 characters with an ellipsis) |
| **Publicly viewable?** | Only if the account is chosen to be public. Settings on individual posts cannot be changed. |
| **Taggable?1** | Yes |
| **Searchable?** | Yes |
| **Hashtags (#)?2** | Yes |
| **Emojis?** | Yes |

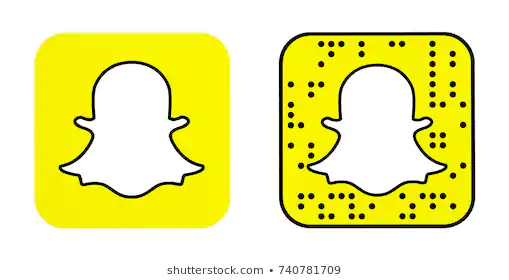
Examples:

* Paleontology students design posts highlighting their favourite fossils, complete with images, descriptions and fun facts.
* Students in a field geology course create Instagram stories that explain the geological history of an area.
* Oceanography students take photos of local shorelines and use an Instagram post to identify and describe features.

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**Social Media Platform #3: Snapchat**

Snapchat is an image and video driven social medium which is much more ephemeral in nature than other social media platforms. Snapchats may only be watched once when sent directly and opened by a user, or as many times within 24 hours if posted to a ‘story’. There are 250 million active users worldwide on Snapchat (Statista, 2018) and only 5% of Americans report getting news from the platform (Pew Research Center, 2018).

Snapchats may be accompanied by filters (picture frames), some of which are unique to an event or location. Users may also add stickers (static images) or GIFs (moving images) that they find by searching within the app, use video effects, tag locations, and more.

See this series of Snapchats from the life of an American environmental science intern in Australia: <https://youtu.be/anPPInKad0Q> for examples, and this World Wildlife Fund campaign leveraging the temporary nature of Snapchats: <https://youtu.be/TOAHBSxMBEA>.

|  |  |
| --- | --- |
| **Primary media** | Images and/or videos captioned by text |
| **Character limit** | 80 characters |
| **Publicly viewable?** | Only if posted in a specific way (via ‘our story’, which is linked to a specific location). Custom stories may also be created by inviting friends or nearby users. Snapchats may only be viewed by non-Snapchat users by sharing a direct link. |
| **Taggable?1** | Yes |
| **Searchable?** | No |
| **Hashtags (#)?2** | No |
| **Emojis?** | Yes |

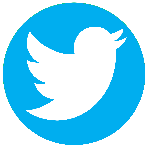
Examples:

* Atmospheric science students create short weather forecast snapchat videos explaining their predictions and the processes involved.
* High school students in a summer geology program design a series of snapchat filters for local sites of interest in state parks, addressing specific questions and themes (GeoFORCE Instructional Team, [https://serc.carleton.edu/dig\_blueprints/blueprints/geoforce\_academy/ challenge\_b.html](https://serc.carleton.edu/dig_blueprints/blueprints/geoforce_academy/%20challenge_b.html)).

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**Social Media Platform #4: Twitter**

Twitter is centered around short bursts of text, called ‘tweets’, that are sometimes accompanied by up to four images or a video. Users can reply to someone’s tweet or retweet it to share more widely. Replies to tweets are viewed in a thread where each response can be scrolled through in sequence. Twitter has a much more back and forth nature than other platforms. It offers a transparent and near real time window into discussion and debate, which has unique implications for scientists.

Twitter has 325 million active users worldwide (Statista, 2018). Although only 12% of Americans get their news from Facebook, 71% of Twitter users get news from the platform (Pew Research Center, 2018).

Check out <https://twitter.com/iris_epo> for some example tweets.

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| --- | --- |
| **Primary media** | Text and/or up to 4 images or a video |
| **Character limit** | 280 characters |
| **Publicly viewable?** | Yes |
| **Taggable?1** | Yes |
| **Searchable?** | Yes |
| **Hashtags (#)?2** | Yes |
| **Emojis?** | Yes |

Examples:

* Students participating in a volcanic hazards simulation receive tweets from the general public and have to decide if and how they might counter misconceptions in their press briefings (Jacqueline Dohaney, <https://serc.carleton.edu/introgeo/roleplaying/examples/125523.html>).
* Planetary science students are asked to follow scientists in related disciplines and report back on recent publications and news.
* Students in an earth science class use common STEM inclusivity hashtags (e.g., #blackandSTEM, #LGBTSTEM, #womeninSTEM, #disabledandSTEM, #ThisIsWhatAScientistLooksLike) to read about and reflect upon diverse perspectives and challenges in STEM.

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