Blogging for the Continuum of Medical Education: Engaging Diverse Communities of Learners

Elisabeth Schlegel[1], Janine Primacio[2]

Abstract

In response to the COVID-19 pandemic, colleges and universities established remote teaching and reestablished best practice-based, active education using discussion boards and other means to promote learner collaboration. Increasingly, social media or open educational technology platforms contribute to blended learning. This short article aims to introduce blogs for delivering barrier-free online education to targeted public audiences and groups of learners. Blogs disseminate ideas within a tangible, searchable, and interactive medium, creating a community of learners who share a common interest. We set forth eLearning Bites (eBites), a medical education blog housed at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, which offers easily accessible educational topics aligned with needs from the institution's immediate medical education community. Emphasizing evidence-based, active online learning, eBites finds and merges best practices in medical education with new learning technology. Metrics can be obtained from website analytics tools such as, e.g., Google Analytics providing additional data such as, e.g., number of pageviews or sessions, to elucidate how learners interact with the blog.

Keywords: Blog; eLearning Bites; eBites; Website analytics; Social media; Medical Education; Faculty Development; Continuum of Medical Education

The Role of Blogs in Medical Education

In response to the public health concerns of spring 2020, learning institutions established remote teaching in a rapid fashion and reestablished best practice-based, active education using discussion boards and other means to promote learner collaboration. State-of-the-art learning management systems (LMSs) were available for institutional learners, and academia, in general, embraced a new use of web conferencing services for delivering education. More recently, faculty development initiatives re-introduced blended learning, which combines advantages of synchronous/asynchronous online or face-to-face instruction supported by online tools, as an excellent modality to improve application skills and higher-order thinking (Tolks et al., 2014; Steinert, 2020).

The close collaboration of the academic community also established flexibility in offering education beyond
individual institutions. Webinars reached learners worldwide, and online learning allowed students from different institutions to enroll in nationally offered courses — leading to an exciting exchange of insights and learning. One year since the pandemic started, online healthcare professions education now welcomes diverse communities of learners from all over the globe.

Nevertheless, it also became obvious that medical education without borders demanded accessible evidence-based content and professional, factual discussion forums beyond institutional LMS boundaries or central resources. Learners needed new ways to flourish in a world where individuals and institutions are progressively more interconnected and interdependent (Dowhos et al., 2021). However, additional challenges rooted deeply in human nature as well as the tenets of active learning soon became evident. The lack of important social connection elements (e.g., rapport), the absence of learner-centered education (e.g., activating prior knowledge), and the need for the invigoration of post-session discussion all impeded the establishment of cooperative learning communities. The formation of such communities was hampered further by the lack of access to evidence-based, asynchronous education as needed to accommodate learners across the continuum of healthcare professions education, independent from their geographic location, time zone, or schedule (Dowhos et al., 2021).

The need for barrier-free online education delivery has prompted institutions to embrace both social media and educational technology platforms, allowing users to network and share information, ideas, and other content (Boulos, Maramba and Wheeler 2006; Qi and Mackie, 2014). Notably, the creation of the Free Open Access Medical Education (#FOAMed) movement by Mike Cadogan, Life in the Fast Lane (Cadogan, 2019), aimed for seamless and timely dissemination of information for emergency education and critical care education, and virtual learning spaces, which allow sharing of content and communication, include podcasts and blogs. Blog platforms have even been repurposed as educational online home bases for administrative functions or virtual bulletin boards offering, e.g., up-to-date information and dissemination of specialized content for niche audiences (Saichaie, Benson and Kumar, 2014; Duke et al., 2017; Carley et al., 2018; Bagshaw, 2020; Dowhos et al., 2021).

Blogs in their traditional use function as barrier-free online education delivery systems that promote learner collaboration through comments. Hosted on one of the many free website providers such as WordPress, Weebly, Blogger, or Wix, educational blogs inform a targeted public audience but can also support individual sessions by offering specific content (Schlegel, 2021). Then, independent from the application, metrics from readers visiting and engaging with the blog pages can be obtained from website analytics tools such as e.g., Google Analytics. Data of interest may include, e.g., the number of visitors globally or page views per visit as readers scroll to different blog posts, as well as the average time spent reading individual blog posts during a visit.

The versatility of blogs supports any teaching style and provides content either as a standalone collaborative piece, during a class session (for use in, for instance, breakout groups), or as prework for a flipped classroom-style session. Using the comment section for discussion outside of class time allows deepening of understanding, increased access to the educator, and collaboration with peers. Besides deepening peer-to-peer learning, blogs are great ways for learners themselves to consolidate and reflect on content for higher-order thinking. As an example for complex learning, students in a Humanities elective at Penn State University College of Medicine explored blogs developed by patients and their caregivers. Then, in return, the students developed their own blog posts and engaged with posts of their peers. As an additional step, the students evaluated blogs for chronic conditions, learned genuine patients’ opinions and experiences, and used their critical eyes to identify misinformation (Oser and Oser, 2016). In a recent application at Rice University, blogs were used both as a reflective writing tool for medical students and as a resource for premedical students to learn about the medical profession and core themes of the medical humanities (Bracken et al., 2021). Taken together, blogs are uniquely suited to jump-start authentic writing and combine peer-to-peer learning, consolidation of content, and reflection.
eLearning Bites (eBites)

The need for a learner-centered, seamless learning platform serving the continuum of medical education and supporting different communities of learners from UME, GME, and CME inspired the implementation of the medical education blog eLearning Bites (eBites), accessible at http://elisabeth-fm-schlegel.weebly.com/elearning-bites. Designed with the learner – students, basic science/clinician-educators, and interested medical educators – in mind, eBites aligns with the five core domains of knowledge and skills of health professions education programs: (1) Teaching and Learning; (2) Curriculum Development; (3) Evaluation and Assessment; (4) Research Methods; and (5) Leadership and Management (Tekian and Artino, 2013). Key features of eBites include offering a tangible, searchable, and interactive medium combined with a discussion forum that creates movement, direction, and inspiration.

eBites serves discreet groups of learners as well as specialized public readers interested in medical education and faculty development. Blog post content is based on questions and needs arising from health professions education experiences across the continuum and disseminated through marketing platforms to online interest groups.

The use of blogs in education involves assigning selected blog posts and reflective questions within a flipped classroom framework. Students' experiences with eBites in a flipped classroom application can be illustrated through a generalized learner experience map, which visualizes the process and stages of student engagement with the blog.

Figure 1: Learner Experience Map
As shown in the Learner Experience Map in Figure 1, the process of interacting with the blog in a flipped classroom framework can be divided into five different phases: (1) Awareness, when a new blog post is announced; followed by (2) Pre-work and (3) Discussion, when blog posts are assigned and collaboratively explored; then (4) Review, when learners spend additional time reading; and (5) Application, when blog posts are used for developing a course requirement. Combined with Google Analytics, the number of sessions and interaction with additional blog posts (pageviews) as well as the time spent visiting the site and on individual blog posts can be tracked. Similar to a discussion board, assigning reflective discussion questions in the comment section or on a Google doc (for privacy) establishes a community of learners. Overall, combining blog functionality and online metrics with social learning provides a versatile, innovative framework due to the transferability to many learning environments and educational efforts.

Conclusions

Blogs offer versatile platforms for delivering barrier-free online education to targeted public audiences and groups of learners. We introduce eLearning Bites (eBites), a medical education blog housed at the Zucker School of Medicine at Hofstra/Northwell, which offers easily accessible educational topics aligned with needs from the institution’s immediate medical education community. Emphasizing evidence-based, active online learning, eBites finds and merges best practices in medical education with new learning technology. Metrics from readers visiting
Blog pages can be obtained from website analytics tools such as, e.g., Google Analytics, providing additional data such as, e.g., number of pageviews or sessions, as learners interact with the blog.

Blogs are easy to create and maintain and are highly feasible due to low cost and wide availability. Grounded in the learning theory of connectivism, educational blogs can support content discussed in regular courses, provide a virtual home for a course or institute with schedules or syllabi, and serve as a one-stop shop for foundational knowledge of hot topics (Saichaie et al., 2014; Yousef et al., 2020).

**Take Home Messages**

Blogs are versatile, barrier-free, online education delivery systems that promote learner collaboration. We developed *eLearning Bites (eBites)*, which offers easily accessible educational topics aligned with needs from the institution's immediate medical education community. Overall, blogs are easy to create and maintain and are highly feasible due to low cost and wide availability for medical education without borders.

**Notes On Contributors**

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Figure 1. Source: the authors.

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### Appendices

None.

### Declarations

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