Impact of an Anatomy Themed Snapchat Account on Learner Utilization, Satisfaction, and Assessment Outcomes

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**Purpose:** Social media is an effective method of rapidly disseminating information to a large audience and is appealing to anatomy educators looking for ways to provide review opportunities beyond lectures. Snapchat is unique due to the ephemeral nature of the content posted, which disappears after 24 hours. Snapchat users have reported paying closer attention to content due to its ephemeral nature. There is a need to determine learner utilization and satisfaction of an anatomy themed Snapchat account and if the potential for closer attention results in improved short- and long-term assessment outcomes.

**Methods:** To address this need, an anatomy themed Snapchat account was created and used to deliver a series of blood flow drawing summaries during the first-year clinical anatomy course of an entry-level doctor of physical therapy program. Viewing statistics were collected, a user satisfaction survey was distributed, and learner performance on a blood flow question was assessed immediately at the end of the unit of the course and retention assessed 12 months later. Learner performance was also compared with a previous cohort (control group) that took the course during the year prior to the development of the Snapchat account.

**Results:** The Snapchat account was followed by 56 of the 67 (84%) learners in the course. Five Snapchat stories were created that consisted of an average of 23 snaps per story (range: 12-36). The average percent of followers that viewed each story was 70% and of these learners, the percent that completed viewing of all snaps in a story was 87%. The satisfaction survey was completed by 66 of the 67 (99%) learners. Learners rated Snapchat as quite useful in reviewing blood flow drawings (4 out of 5 Likert-scale), as having extremely accurate content (5 out of 5), being quite helpful in preparing for blood flow questions on the exam (4 out of 5), and were quite interested in having more course content summarized using the account (4 out of 5). Strengths of the account included: easily accessible, additional exposure beyond lecture, and content on a platform already being used. Improvements suggested included: maintaining content after 24 hours, beginning use of the account earlier in the course, and providing more content. Learner performance on a blood flow question at the end of the unit was identical between the Snapchat group (100% correct) and the control group (100% correct). One year later, the assessment scores were similar (P = 0.17) between the Snapchat (89.0 ± 14.1% correct) and the control groups (86.7 ± 14.1%).

**Conclusions:** These results demonstrated that an anatomy themed Snapchat account had a large following and was extensively viewed by learners. The user survey revealed learners were satisfied with the usefulness, accuracy, and ability of the account to prepare them for the assessment. There were no significant improvements observed in either short- or long-term assessment outcomes. This initial work showed that learners were receptive to reviewing anatomy concepts using Snapchat and there remains opportunity to determine how to optimize content delivery that results in significantly improved learning outcomes.