Does longitudinal Twitter use complement all anatomy learning? A comparison between two cohorts

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Abstract

Students of today’s generation are regularly using social media to access and learn anatomical information. To avoid losing the skill of engaging with students, anatomy educators have been increasing their efforts to use popular social media sites such as Facebook to support their student's learning. At the University of Southampton, a Twitter hashtag (#nlm1soton) was created for Year 1 medical students completing the nervous & locomotor 1 (NLM1) anatomy course. This was an attempt to offer a learning support tool to Year 1 students, since a similar Twitter hashtag (#nlm2soton) had previously been successfully used to support Year 2 medical students during the difficult nervous & locomotor 2 (NLM2) anatomy course, which covers head, neck and neuroanatomy. #nlm2soton was reported to enhance communication, boost morale and create a supportive network amongst students and educators.

Background

Students of today’s generation are regularly using social media to access and learn anatomical information. To avoid losing the skill of engaging with students, anatomy educators have been increasing their efforts to use popular social media sites such as Facebook to support their student's learning. At the University of Southampton, a Twitter hashtag (#nlm1soton) was created for Year 1 medical students completing the nervous & locomotor 1 (NLM1) anatomy course. This was an attempt to offer a learning support tool to Year 1 students, since a similar Twitter hashtag (#nlm2soton) had previously, been successfully used to support Year 2 medical students during the difficult nervous & locomotor 2 (NLM2) anatomy course, which covers head, neck and neuroanatomy. #nlm2soton was reported to enhance communication, boost morale and create a supportive network amongst students and educators.

Methods

Participants: Cohort 1 = 189 Year 1 medical students on the NLM1 anatomy course (6 weeks). Cohort 2 = 197 Year 2 medical students on the NLM2 anatomy course (14 weeks).

Procedure: We created and monitored the use of 2 Twitter hashtags feeds (#NLM1SOTON and #NLM2SOTON), both of which were displayed via a widget on the appropriate course page of the University’s Virtual Learning Environment (Figure 1 & 2). At the end of both courses, each cohort of students were invited to complete a Likert-scale style questionnaire about their use of the respective hashtags, how frequently they did so and their opinions on the usefulness of the hashtags for aspects of anatomy learning.

Analysis: Student questionnaire responses from both cohorts were compared using non-parametric Mann-Whitney U tests.

Results

Year 2 students viewed (P < 0.0001) and contributed (P < 0.0002) to Twitter significantly more frequently than Year 1 students. This was particularly true for students who were <20 years old (P < 0.0001). There was no significant difference in how frequently students who were >20 years old made contributions to the hashtags (P = 0.1055).

Overall, Year 2 students perceived their #nlm2soton hashtag to be significantly more useful for aspects of learning, compared to the Year 1 cohort (Figure 3).

Conclusions

This study found that Year 1 medical students were less receptive to Twitter use in learning anatomy and used the hashtag significantly less often than their Year 2 counterparts. This would suggest that the optimal use of longitudinal Twitter use in anatomy education is most probably dependent on a number of criteria. Preliminary evidence suggests that important variables to consider may include age of students, module length, module difficulty and teacher engagement.

References