Table 1

Literature Review Summary

Authors (Year) Country	Purpose	Study Design	Sample	Platforms Used	Teaching Pedagogies in using Social Media	Findings	Level of Evidence/ Quality
Bayram et al. (2020) Turkey	To identify the effect of WhatsApp supported training on the knowledge of nursing students about safe administration of IM injection into the ventrogluteal site	Randomized control trial	1st-year nursing students $N = 100$: Intervention ($n = 46$), Control ($n = 54$)	WhatsApp	Faculty explained safe IM injection in the VG area to all students via a PowerPoint presentation, question and answer session, discussion, and demonstration using a simulator. The intervention group received additional intentional videos and pictures: the control group did not receive them. Student learning was measured with the knowledge proposition into the VG site, skill control list of the VG injection, and post-clinical application evaluation forms.	Statistically significant differences between the two groups in the average post-knowledge test scores ($p = .017$) and changes in knowledge ($p = .012$) and the average post-skill test scores ($p = .000$) and changes in skill ($p = .000$). In the post-skills test, 89.1% of the intervention group administered the injection in the correct area, compared to 31.5% in the control group. 97.6% of the intervention group acknowledged WhatsApp-supported training enhanced nursing students' knowledge on the proper administration of intramuscular injection into the VG site.	Level I; B. Good

Gazza (2019) United States	To describe a learning experience that effectively engaged RN-to-BSN students in healthcare policy initiatives using social media	Qualitative	RN-to-BSN students in an online health policy course N = 49	Twitter	Faculty created a Twitter account for the course and asked students to complete learning activities and Twitter activities, including reviewing evidence on a health policy topic, reading assignments, engaging in an online debate, and writing a scholarly paper about a selected policy issue. Student engagement was measured by analyzing the extent of microblogging and student reflections on the use of Twitter.	Students followed a total of 645 policy-related individuals and groups on Twitter. Two themes emerged: Staying up to date and Opening my eyes. Microblogging with Twitter was effective for student engagement in health care policy.	Level V; C. Low
Johnston et al. (2018) Australia	To develop and integrate evidence-based YouTube videos into undergrad bioscience courses and evaluate the utility of these videos	Quality Improvement - Mixed Methods	1st and 2nd year nursing and paramedicine students N = 2500	YouTube	Faculty created a Biological Sciences YouTube channel and integrated 149 evidence-based educational videos into the channel. Student engagement was measured by the number of subscribers, the number of views, viewing time, and student comments. Students' perceptions of YouTube videos were collected by standardized university course evaluations.	Subscribers logged more than 318,626 views of the 149 videos. The average view duration was 4 min and 56s. 90% of the students agreed the videos in the course assisted their bioscience learning. Students' comments were positive regarding content quality, learning goal alignment, motivation, presentation design, interaction usability, accessibility, reusability, and standards compliance. Student confidence and subsequent access to the YouTube videos was enhanced by their familiarity and the breadth of information available.	Level V; B. Good

| Jones et al. (2016) United Kingdom | To assess if it is feasible to include Twitter as an assessed element of 1st year nursing curriculum | Case Study - Mixed Methods | 1st year nursing students

$N = 547$: 1st cohort ($n = 450$), 2nd cohort ($n = 97$) | Twitter | Faculty provided face-to-face lectures, two webinars, two drop-in help sessions, and chat rooms to introduce skills nested throughout a nursing program. Students were encouraged to be active in Twitter activities. Faculty monitored the Twitter accounts and Digital Professionalism accounting for 10% of students' grades.

An online survey by followers or a short essay by students were used to evaluate course effectiveness. | 70.1% of the 1st cohort and 88% of the 2nd cohort of students thought Twitter was worthwhile.

70.8% of the 2nd cohort vs. 44.4% of the 1st cohort reported learning more.

81.6% of the 2nd cohort vs. 43.3% of the 1st cohort reported continued use of Twitter.

Cohort and age were highly significant predictors of learning ($p < .001$). | Level III; B. Good |
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| Morales (2017) United States | To find ways to engage students and facilitate learning through active learning strategies that included gaming and social media use | Quality Improvement – Mixed Methods | 1st year associate of science nursing students in a pharmacology course

$N = 140$ | Facebook | Faculty posted daily NCLEX questions, monitored student engagement, and provided feedback.

Student learning experience was evaluated through student engagement, benchmark testing scores, a classroom critical incident survey, listing three words to describe the class, and feedback comments. | Students reported that the class Facebook platform was helpful for discussing NCLEX questions and for getting to know remote campus students. Benchmark testing scores improved. Student engagement in the class Facebook correlated with higher grades. | Level V; C. Low |

| Pimmer et al. (2018)

Nigeria | To investigate the use of WhatsApp and its correlation with a number of socio-professional indicators | Cross-sectional, descriptive | Senior nursing students

N = 196 | WhatsApp | Faculty encouraged students to use the instant messaging platform (WhatsApp) during clinical placement.

Student learning experience was evaluated through questionnaires that measured intensity of use, general use, relationship with peers, degree of isolation, identity development, placement satisfaction, and determinants of WhatsApp use. | Students reported frequent use of WhatsApp, perceived ease of use, and usefulness in the clinical setting.

Nursing students' WhatsApp use during placement was positively associated with their professional identity ($r = .21$, $p < .01$) and their placement satisfaction ($r = .17$, $p < .05$), and negatively associated with the students' feelings of professional isolation ($r = −.18$, $p < .05$).

WhatsApp use during the placement was positively associated with perceived usefulness of WhatsApp ($r = .23$, $p < .01$) and perceived ease of use ($r = .18$, $p < .05$). | Level III; B. Good |
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| Price et al. (2018)

England | To evaluate 1st year nursing students' use of social media, before and after commencing a pre-registration program using Twitter | Cross-sectional, descriptive | 1st year nursing students in Adult, Child, and Mental Health nursing courses

N = 121 | Twitter | Faculty implemented a compulsory module where Twitter was an optional component to discuss 'what is nursing?' Faculty provided students the opportunity to attend tweets training sessions and asked them to engage in discussion using Twitter.

Online self-report questionnaires assessed student use of Twitter and social media in nursing students' education. | Students reported positively to social media to engage and promote discussion and share information about nursing; 81% perceived Twitter as beneficial to increase awareness of nursing issues within the course; 57.8% understood the purpose of Twitter, but a small number of participants felt overwhelmed and unsure of the purpose.

Although 14% of the students did not use Twitter within the module, 65.5% recommended | Level III; B. Good |

						that the school of nursing should develop use of social media.	
Theron (2017) Canada	To report the development and students' perceived learning after use of Facebook as a platform of a Digital Health Assignment	Quality Improvement-Mixed methods	2nd-year BSN students in a childbearing family course N = 47	Facebook	Faculty created a closed course Facebook group linked to the course page and asked students to complete a digital health assignment, which appraised the trustworthiness of social media health information. Digital Health Assignment Student Evaluation Survey was conducted to measure student learning experience.	Facebook was praised for social interaction in student comments. However, 32% were greatly dissatisfied with using Facebook as a learning platform. Students also commented about the difficulties of posting documents on Facebook. Faculty found challenges in locating and marking the assignments on Facebook.	Level V; B. Good
Tubaishat (2018) Jordan	To assess students' perceptions of using Facebook to support their study as an interactive learning platform in nursing education	Single group pretest and posttest design	1st and 3rd year nursing students in Adult Health Nursing and Advanced Health Nursing courses N = 151	Facebook	Faculty created a Facebook course page. Students completed a questionnaire about their perceptions of using Facebook as an educational platform at the beginning and the end of the semester.	78.8% perceived Facebook as an effective tool for nursing education. 84.8% recommend using Facebook in future courses. Students commented that Facebook enhanced communication between the students and instructors, facilitated the learning process by providing non-traditional materials, the availability and accessibility of course materials, and provided support. Reasons for Facebook not being useful included a lack of technological skills preventing engagement, distraction, and privacy concerns.	Level III; A. High

| Vicdan (2020)

Turkey | To evaluate the effect of mobile-assisted education regarding IM injection on the ventrogluteal site by using the Instagram application and to nursing students | Randomized control trial | 1st year nursing students

N = 138: Instagram app (*n* = 69); Classroom (*n* = 69) | Instagram | Faculty created a teaching web page with 64 teaching materials, including PowerPoint presentations, images, handwritten notes, questionnaires, videos, and live webcasts, and posted them to the Instagram app. Students were asked to follow the page.

Student learning was measured with a knowledge evaluation form regarding VG IM injections and a skills application checklist.

Students' likes and comments about live webcasts on the Instagram app were used to evaluate the teaching methods. | No statistically significant differences were found between skill level mean scores and knowledge mean scores of both groups. The knowledge and skills increased in both groups.

The Instagram app was found to be just as effective as classroom teaching when evaluating the knowledge and skills of nursing students. | Level 1; B. Good |
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Note: BSN = Bachelor of Science in Nursing; IM = Intramuscular; NCLEX = National Council Licensure Examination; RN = Registered Nurse; VG = Ventrogluteal