RESULTS REPORT

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“Flipping a Portion of the General Dermatology Medical School Elective - Incorporation of Basic Procedural Dermatology Videos, Biopsy Simulation Models, Dermatology Quick Reference Cards and Case Scenarios”

D401 General Dermatology clinical elective

Strategy implemented into July 2014 for academic year 2014-2015

Briefly describe the grant-funded experiment and its goals

D401 (General Dermatology) is a Saint Louis University (SLU) School of Medicine (SOM) elective. The elective is broken down into three week sessions. During each session, students learn about diseases affecting the hair, nails and skin and their management through a combination of didactic sessions, including journal club and grand rounds, and direct patient care experiences. The goal was to introduce a blended learning experience at the beginning of the elective with the hope of having students feel more comfortable and able to better integrate into the elective. On the first day of the elective, each student was given a pre-test. Students were then assigned education videos on common procedures performed in dermatology (shave and punch biopsy). They were also given a reference card containing basic dermatology information. This was followed by a hands-on experience where the students were able to practice the procedures they earned from the video. In addition, students participated in a case based scenario where they were ask to apply information they learned in the videos, from the reference card and in the hands on experience. Students were asked to perform both pre and post self-evaluations as well as an evaluation of the experience.

The flipped experience was started on July 7, 2014, with the beginning of the academic year. There were a total of 16 three week session in the elective. 24 students participated in the experience. Results of the evaluations are provided at the end of the report.

Articulate what worked as expected and what did not

Overall, the experience was positive with most of the difficulties having more to do with technical difficulties in loading the case scenario. A few students commented that they would have liked to have watched the videos prior to the start of the elective rather than having them assigned to them on the first day, but I am unsure how this would be completed logistically. There were also a few students that commented that they wished they had this experience earlier in their clinical training, perhaps prior to their third year (D401 is a 4th year elective for medical students). Because of this comment we did introduce the experience to the second year medical school class and it seemed to have gone over well based on student feedback from evaluations. I would say that I believe that the second year medical students had a much harder time applying
the information that they learned through the videos, reference card and hand on experience to clinical experiences than those in more advanced years of training. This is likely because of the lack of clinical encounters by students in the second year of medical school.

Describe lessons learned and possible applications for other faculty members / Identify ways the faculty member may draw upon these lessons and/or use the pedagogical innovation in the future

Based on feedback, I feel that the students really embrace independent learning, especially followed by application of the learned material. This can be applied to other aspects of teaching with the introduction of more hands on or simulation based experiences, especially in the procedure based specialties. Planning ahead is key and I is perhaps my bias, but I feel that beginning or making a change is often better on a small scale and then progressing to a larger scale.
Part 1: Pre-Self Assessment

Please rate your current skill level in the following dermatology skills

- Performing a shave biopsy of skin lesions
- Performing a punch biopsy of skin lesions
- Describing skin lesions using dermatology terminology
- Recognizing worrisome features of pigmented skin lesions
Part 1: Pre-Self Assessment
Please rate your current knowledge level in the following dermatology concepts.
Part 2: Post-Self Assessment

Please rate your current skill level in the following dermatology skills:

1. Performing a shave biopsy of skin lesions
2. Performing a punch biopsy of skin lesions
3. Describing skin lesions using dermatology terminology
4. Recognizing worrisome features of pigmented skin lesions
Part 2: Post-Self Assessment

Please rate your current knowledge level in the following dermatology concepts.

1. List the steps toward completing a shave biopsy
2. List the steps toward completing a punch biopsy
3. Distinguish when to use these different basic procedures in dermatology
4. State some of the limitations and complications associated with these basic procedures in dermatology
5. With basic dermatology, knowing when to refer to a dermatologist, and when to perform basic dermatology skills by myself
6. Describe accurately morphology of lesions and eruptions using appropriate terminology
7. Demonstrate familiarity with worrisome features of pigmented skin lesions
Part 3: Post-Flipped Experience Overall Evaluation

Please provide an overall evaluation of the flipped learning experience in the following areas:

1. Clear expectations of the flipped learning experience and instructional content were established at the beginning of the elective.
2. Information/instructions were presented in an organized manner.
3. Assigned presentations and videos were helpful in my understanding.
4. The assigned presentations and videos provided clear guidelines for trainees to follow.
5. The assigned presentations and videos used terms appropriate to a trainee’s level.
6. The quick reference card was helpful in my understanding.
7. The quick reference card used terms appropriate to a trainee’s level.
8. The hands-on experience was presented in an organized manner.
9. The learning experience was taught in a way that made trainees think for themselves.