





BACKGROUND & OBJECTIVES

To improve students' confidence with interpretation, a radiology interpretation laboratory, designed using a blended-learning model, was added to the radiology program.

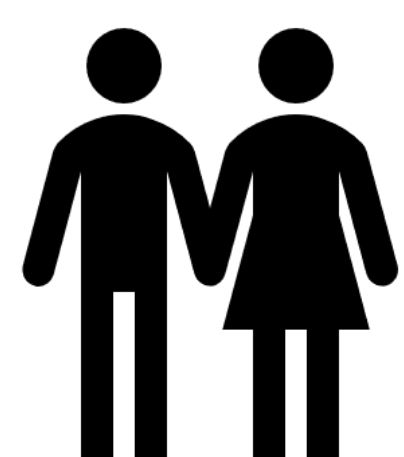
This study aims to raise the students' perceptions of their own level of confidence in interpreting dental x-rays after engaging in the laboratory session.

Learning Outcomes:

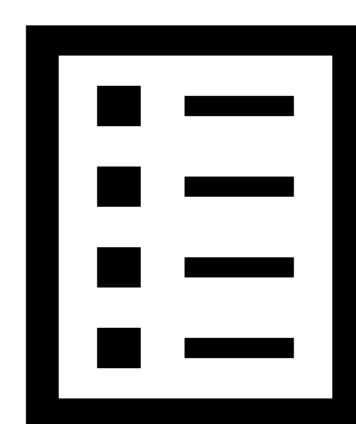
-  Increase students confidence and motivation
-  Improve academic performance by integration of online and small groups learning
-  Recognize abnormalities and incidental findings on oral radiographs
-  Apply a standardized screening methodology for radiographic interpretation

MATERIAL & METHODS

REB at the University of Alberta granted for the protocol and informed consent process - Pro00068435



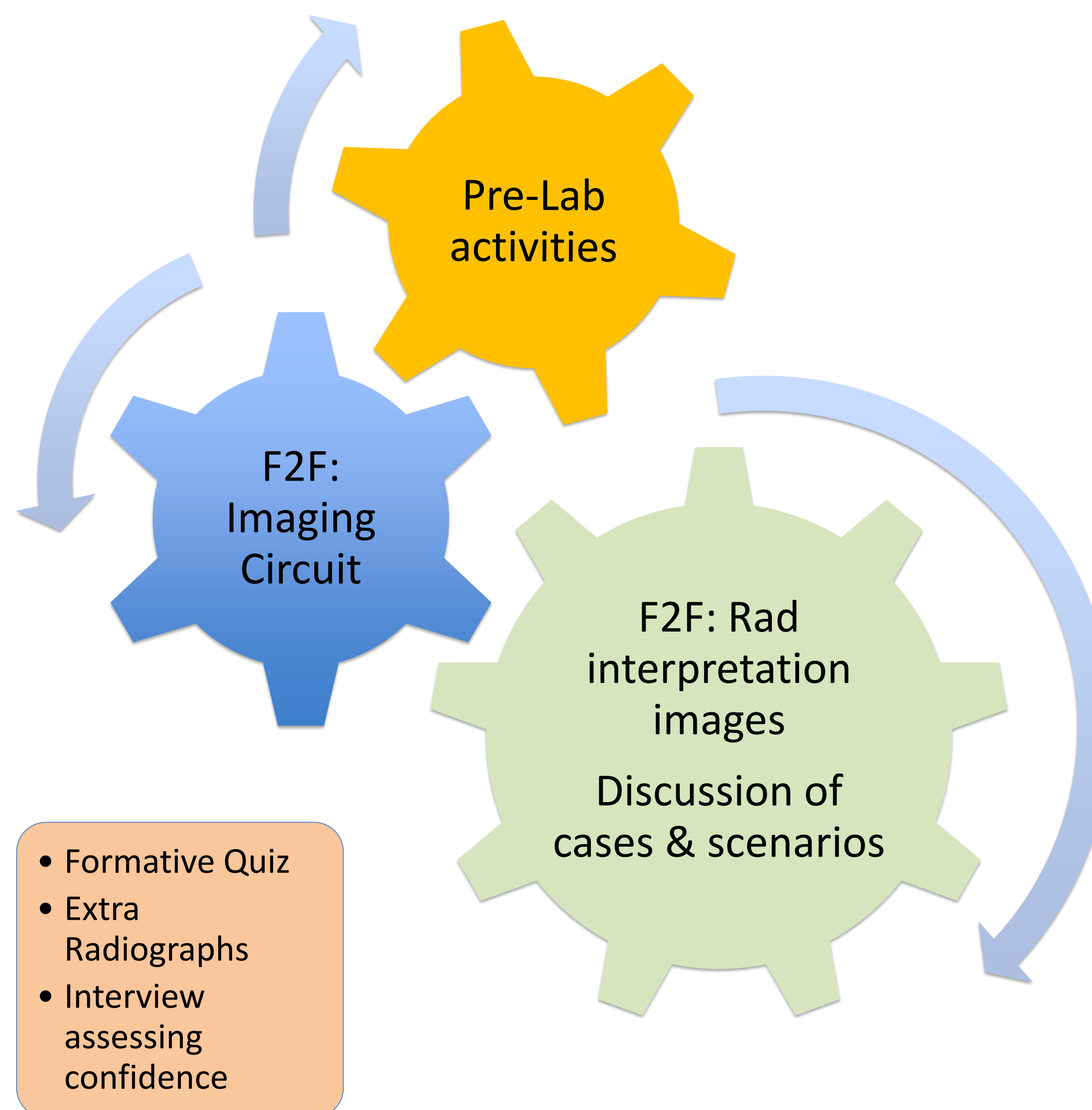
- 39 participants from Dental hygiene (DH) program
- F=38 & M=1



- Tablets
- Explain Everything app to load the images

Participants: all DH senior students who participated in the dental radiology module, between October and December of 2016 completed the Rad interpretation module.

IMPLEMENTATION



Students' perception of their confidence after the lab:

"It definitely increased my confidence because we went so much more in depth and thoroughly through everything..."

"Um, I'd say it's still limited. According to our scope of practice, we should be able to diagnose, I don't feel comfortable."

"So, my confidence level on, um, looking at x-rays, if I was to say suspect an-a cavity in one area, I'd wanna double check with somebody else if it wasn't quite as obvious."

Students reported their evaluation of the BL model on their 2016/17 Exit Survey:

The oral radiology interpretation lab improved my learning process for interpreting oral images.

Dental Hygiene Class	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Weighted Average
2016	5	1	9	19	5	39	3.46
2017 Blended Learning Introduced	0	3	4	19	13	39	4.08

DISCUSSION

Since 2006, Dental Hygienists in Alberta have been entrusted to prescribe and interpret x-rays for patients. Prior to this time, interpretation fell solely within the Dentists' professional practice.

Our program could respond to these changes in the professional landscape by creating an impactful learning experience that focused not only on the skills of the learners but also on their confidence levels.

Overall the inclusion of a blended learning laboratory session has increased moderately the students' confidence at this point in their learning.

Their constructive feedback favor the re-design of the second lab happening this fall.

CONCLUSION

The laboratory session itself was described as beneficial and positive by the students. Most of the suggestions for improvement were identified and have already been incorporated into our next course session.

Lessons to learn:

- Clear instructions & deadlines
- Small groups discussions
- Calibration of DH & DDS instructors

Future directions. The description of the student's confidence in their abilities will enable the DH program to examine the competencies required and balance these requirements with the overall classroom, laboratory and clinical settings that these students experience as part of their overall education.

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