



Assessing Dental Hygiene Students' Readiness for Interprofessional Learning

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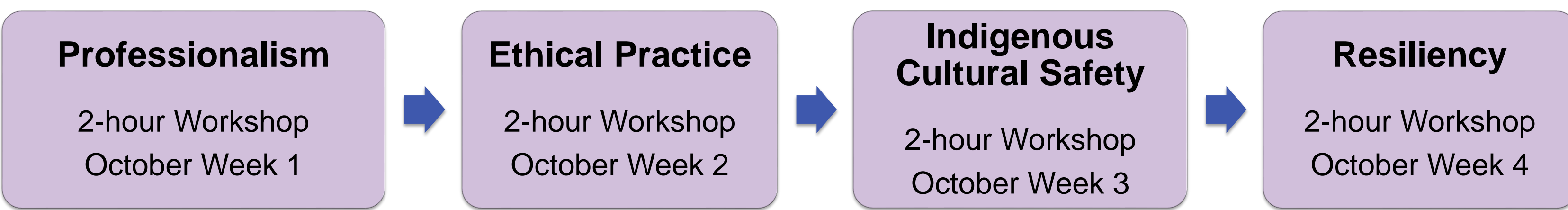
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INTRODUCTION

- The need for interprofessional education (IPE) has been recognized by healthcare educators as a means to foster a collaborative workforce. IPE is defined as “students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.”^{1,p.7}
- The strongest influence on students' attitudes towards IPE and collaborative practice behaviours appears to be experiences in entry-to-practice professional programs.²
- The Office of University of British Columbia (UBC) Health facilitated a collaboration between 12 academic programs:

Audiology and Speech Sciences	Dental Hygiene	Dentistry	Dietetics	Genetic Counseling	Medicine
Midwifery	Nursing	Occupational Therapy	Pharmacy	Physical Therapy	Social Work

- The result was the development of an integrated IPE curriculum that stemmed from identifying common areas of learning across programs.



OBJECTIVE

- To assess dental hygiene degree students' readiness for IPE and collaborative practice at UBC as a result of the integrated curriculum.

METHODS

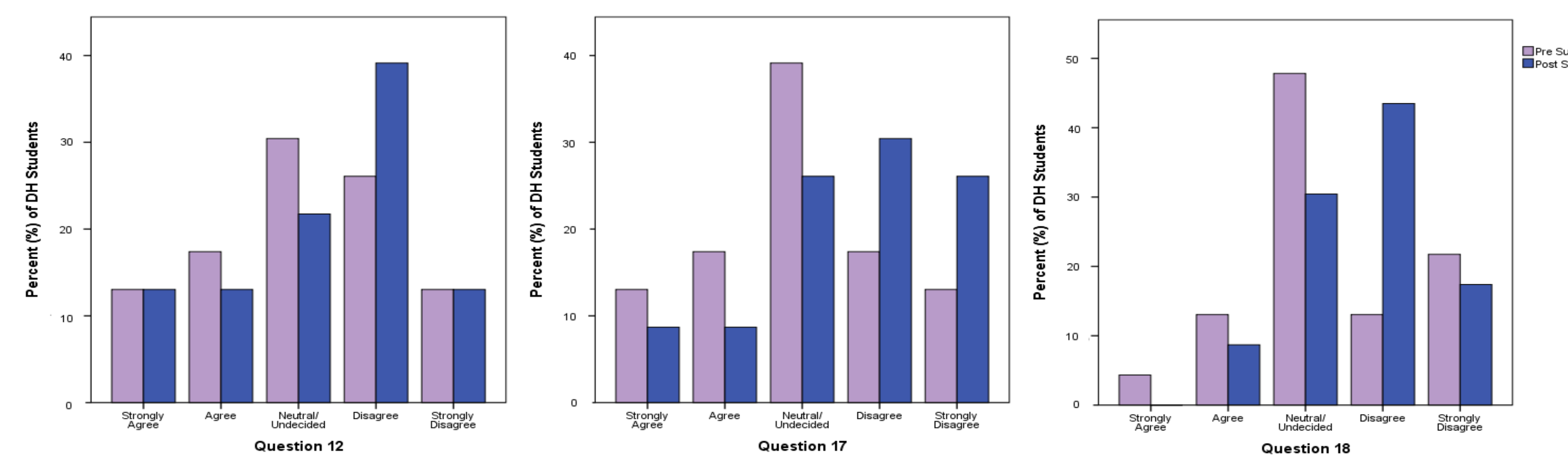
- Pre-post repeated measures study with focus group.
- Ethics approval by UBC's behavioural research ethics board (H18-02026).
- Modified Readiness for Interprofessional Learning Scale (RIPLS) survey conducted (n=23; 96% response rate) on second-year dental hygiene students before and after integrated 4-week IPE curriculum. Two-sample Kolmogorov-Smirnov test conducted, using a p-value of 0.05 .
- Focus group (n=5) explored learning experiences and impact on attitudes about collaborative practice. Qualitative analysis included a process of inter-rater reliability and member checking.

SURVEY RESULTS

- Attitudinal shifts from neutrality to disagreement were observed in three RIPLS measures. No statistically significant differences surfaced between the pre-post attitudinal survey data.

Pre-Post Modified RIPLS Questions	Pre-survey (%)					Post-survey (%)					p-value	Pre-survey mean median	Post-survey mean median	Difference
	1	2	3	4	5	1	2	3	4	5				
1. Learning with other students will make me a more effective member of a health care team	39	57	4	0	0	35	61	4	0	0	1	1.65	1.70	0.05
2. Patients would ultimately benefit if health care students worked together to solve patient problems	52	48	0	0	0	61	35	4	0	0	1	1.48	1.43	-0.05
3. Shared learning with other health care students will increase my ability to understand clinical problems	61	39	0	0	0	39	61	0	0	0	0.65	1.39	1.61	0.22
4. Learning with health care students before qualification/licensure would improve relationships after qualification/licensure	61	26	13	0	0	43	48	9	0	0	0.88	1.52	1.65	0.13
5. Communication skills should be learned with other health care students	56.5	43.5	0	0	0	39	57	4	0	0	0.88	1.43	1.65	0.22
6. Shared learning will help me to think positively about other health professionals	44	39	17	0	0	39	52	9	0	0	1	1.74	1.70	-0.04
7. For small group learning to work, students need to trust and respect each other	70	30	0	0	0	56.5	43.5	0	0	0	0.99	1.30	1.43	0.13
8. Team-working skills are essential for all health care students	74	26	0	0	0	61	39	0	0	0	0.99	1.26	1.39	0.13
9. Shared learning will help me to understand my own limitations	48	48	4	0	0	30	61	9	0	0	0.88	1.57	1.78	0.21
10. It is worth my time learning with other health care students	52	48	0	0	0	39	52	9	0	0	0.99	1.48	1.70	0.22
11. It is necessary for undergraduate health care students to learn together	48	44	4	4	0	39	52	4.5	4.5	0	1	1.65	1.74	0.09
12. Clinical problem solving skills can only be learned with students from my own department/ school	13	17.5	30.5	26	13	13	13	22	39	13	0.99	3.09	3.26	0.17
13. Shared learning with other health care students will help me to communicate better with patients and other health professionals	48	52	0	0	0	39	61	0	0	0	1	1.52	1.61	0.09
14. I would welcome the opportunity to work on small group projects with other health care students	39	48	9	0	4	35	52	9	4	0	1	1.83	1.83	0.00
15. Shared learning will help to clarify the nature of patient problems	43.5	43.5	13	0	0	35	65	0	0	0	0.99	1.70	1.65	-0.05
16. Shared learning before qualification/licensure will help me become a better team worker	44	52	4	0	0	48	43	9	0	0	1	1.61	1.61	0.00
17. The function of dental hygienists is mainly to provide support for other health professionals	13	17.5	39	17.5	13	9	9	26	30	26	0.41	3.00	3.57	0.57
18. I'm not sure what my professional role will be with other health care students	4	13	48	13	22	0	9	30	44	17	0.41	3.35	3.70	0.35
19. I have to acquire much more knowledge and skills than other health care students on a healthcare team	0	9	70	17	4	9	17	48	26	0	0.88	3.17	2.91	-0.26

Likert Scale: 1 = strongly agree; 2 = agree; 3 = neutral/undecided; 4=disagree; 5 = strongly disagree



- Q12: Students disagreed that clinical problem-solving skills can *only* be learned with students from their own department
- Q17: Students disagreed that the function of dental hygienists is mainly to provide support for other health professionals
- Q18: Students found greater clarity on what their professional roles will be

FOCUS GROUP FINDINGS

- Focus group revealed three prominent themes: 1. greater role clarification, 2. recognition of similarities in knowledge and practice with other professions, and 3. cultivation of professional identity.

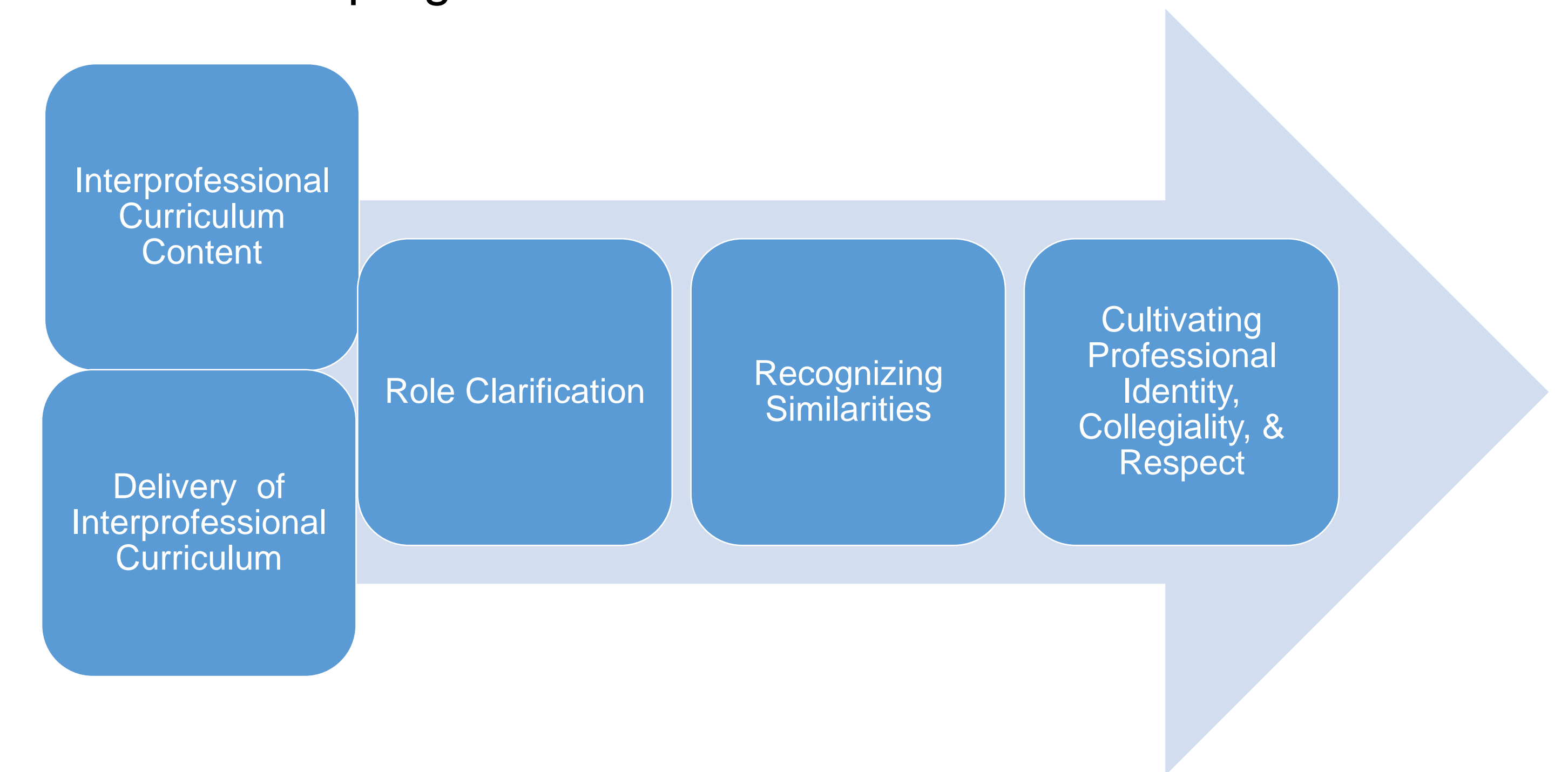
“Going into it, I didn't really have a large understanding about how we can work with other professionals. I liked the ability to show what we know to the other professionals... and it allowed us to show that our profession can benefit largely in team-based care... and to learn about other professions and what they bring to the table as well was valuable.”

[as a result of IPE] “... we can better relate to each other in the future... to those occupations and how we can actually behave and work together.”

“I have more respect for other professions because of the amount and amplitude of responsibilities they have.”

CONCLUSIONS & IMPLICATIONS

- Dental hygiene degree students gained greater clarity about professional roles and developed an enhanced appreciation for collaborating with other health professions after completing the integrated IPE curriculum.
- Results from this study have informed a larger scale evaluation of IPE across health programs at UBC.



REFERENCES

1. World Health Organization. Framework for action on interprofessional education and collaborative practice. Geneva: WHO. 2010. At: https://www.who.int/hrh/resources/framework_action/en/.
2. Groessl JM, Vandenhousten CL. Examining students' attitudes and readiness for interprofessional education and practice. Educ Res Int. 2019;1-7.

ACKNOWLEDGEMENTS

Study partially supported by UBC's Institute for the Scholarship of Teaching & Learning and the Centre for Teaching, Learning and Technology's Seed Program. Thank you to Lisa White (study design and analysis support) and Heike Kilian (participant recruitment).