



Students' Perceptions of Intraprofessional Education: A Cross-Sectional Study at a UK Dental School

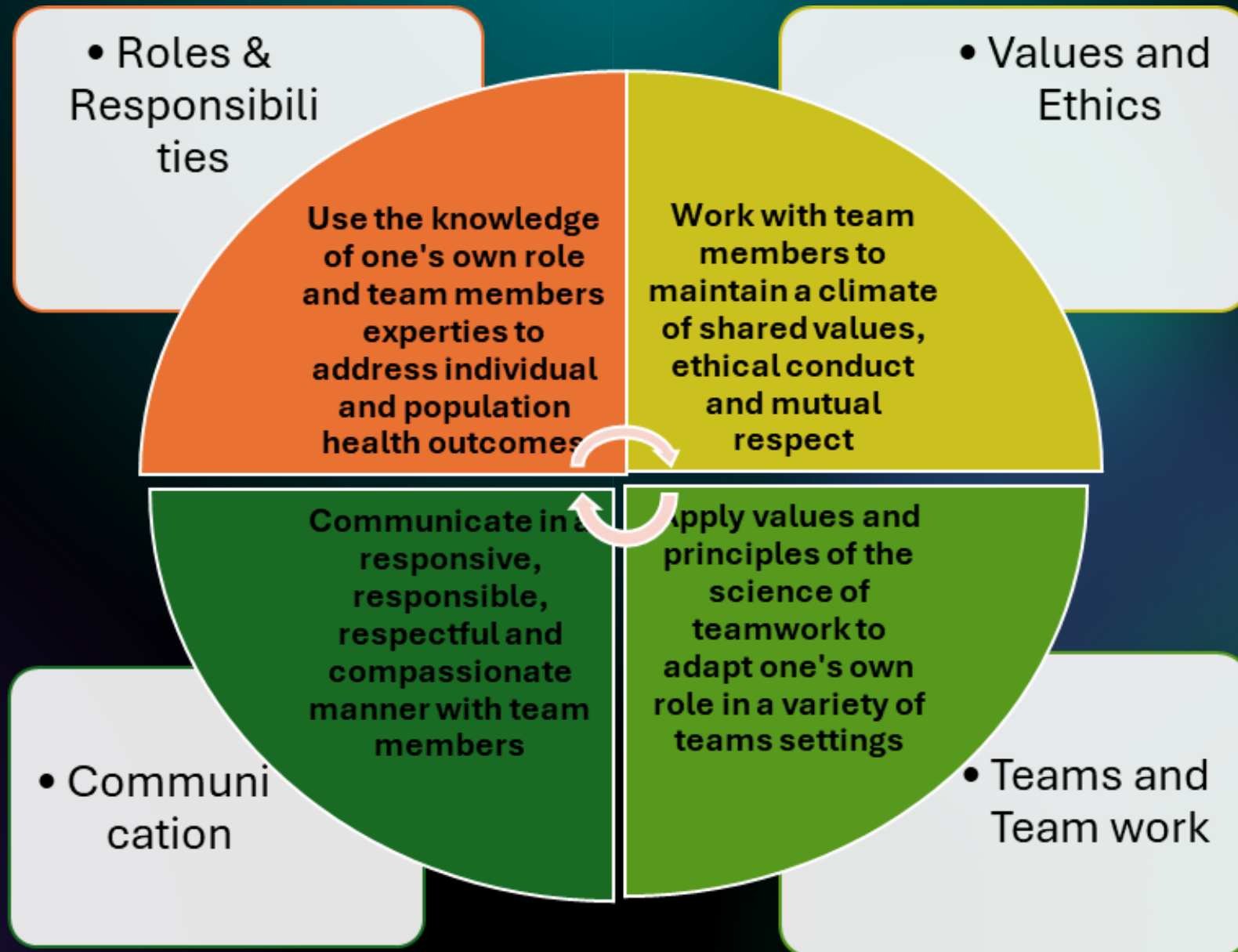
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Background

- In 2010, the World Health Organization (WHO) affirmed its commitment to Interprofessional Education (IPE) and Intercollaborative Practice (ICP) with its Framework for Action on Interprofessional Education and Collaborative Practice, to connect a fragmented healthcare delivery system globally
- Interprofessional education has been defined as “Occasions when two or more professions learn from, with and about each other to improve collaboration and the quality of care”(WHO, 2010).
- Bringing different professionals and students together in the same setting maybe considered insufficient for interprofessional to be meaningful, as the 3 pillars of ‘from, with and about’ have not been met, and the interaction is essential in ensuring the right outcome



Intraprofessional education (IntraPE)—the structured collaborative learning of students from distinct disciplines within the same profession—differs conceptually from interprofessional education and remains under-characterised in undergraduate dental contexts.

At King's College London (KCL), Bachelor of Dental Surgery (BDS) and BSc Oral Health (dental therapy and hygiene, DTH) cohorts undertake a shared curriculum and clinical training. Despite recent National Health Service workforce reforms expanding DTH scope of practice, there are no prospective UK datasets evaluating how shared dental curricula influence intraprofessional attitudes. This study addresses that evident gap.

Aim of study

To evaluate undergraduate students' perceptions of IntraPE within a shared BDS and DTH curriculum and to examine variation by programme, academic year, and demographic factors

Methods

Empirical Studies on Intraprofessional Dental Education

Main IntraPE theme	Title	Author and Year	Aim of Study
Communication	Dental and allied dental students' attitudes towards and perceptions of intraprofessional education https://doi.org/10.1002/j.0022-0337.2015.79.6.tb05933.x	Brame et al., 2015	To assess attitudes towards intraprofessional education among dental and allied dental students
	Dental students' attitudes and perceptions about intraprofessional collaboration/education https://doi.org/10.1016/j.jtumed.2022.09.003	Alsarhan et al., 2022	To explore dental students' attitudes and perceptions of intraprofessional collaboration and education
	Preparing for the dental team: investigating the views of dental and dental care professional students https://doi.org/10.1111/j.1600-0579.2007.00487.x	Morison et al., 2008	To investigate views of dental and dental care professional students on interprofessional education
	Interprofessional education in dental education: An international perspective https://doi.org/10.1111/eje.12341	Davis et al., 2018	Evaluate international perspectives on interprofessional education in dental schools
Roles	Educating the dental team: exploring perceptions of roles and identities https://doi.org/10.1038/sj.bdj.2011.963	Morison et al., 2011	Explore perceptions of roles and identities in the dental team
	Disparity in perception of the working condition of dental hygienists between https://doi.org/10.1111/idh.12105	Muroga et al., 2015	Investigate disparity in perception of working conditions of dental hygienists
Teamwork	Improving teamwork between students from two professional programmes in dental education https://doi.org/10.1111/j.1600-0579.2011.00702.x	Leisnert et al., 2012	To enhance teamwork between dental and dental hygiene students
	Outreach clinical dental education: the Portsmouth experience - a 4-year follow-up study https://doi.org/10.1111/eje.12153	Radford et al., 2016	To assess the impact of integrated team education in dental training
	Collaborative Skill Building in Dentistry and Dental Hygiene through Intraprofessional Education https://jdh.adha.org/content/jdenthgy/92/5/14.full.pdf	Barker et al., 2018	Apply a quality improvement model in intraprofessional educational experience
	The benefits of integrating dental and dental therapy and hygiene students in undergraduate curricula https://doi.org/10.1111/eje.12394	Zahra et al., 2018	Evaluate impact of integrating BDS and BScDTH students in enquiry-based learning sessions
Knowledge/performance	Dental and dental hygiene student perception of interprofessional education https://api.semanticscholar.org/CorpusID:58623261	McGregor et al., 2018	Assess perceptions of dental and dental hygiene students on interprofessional education
	Insights in interprofessional education: Dental hygiene students' suggestions for collaboration https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8937569/	Howey ML, Yoon MN, 2022	Collect suggestions for collaboration from dental hygiene students

No.	Factor	Item	Measurement	Pre	Post
1	/	What is your current educational program/intended profession?	Demographic	X	
2	/	What is the level of your program?	Demographic	X	
3	/	How much health care experience have you had prior to your current educational program?	Demographic	X	
4	/	Do you have a close family member who works in a health care profession?	Demographic	X	
5	Communication & teamwork	I feel comfortable justifying recommendations/advice face to face with more senior people.	UWE-ELIQ	X	X
6	Communication & teamwork	I feel comfortable explaining an issue to people who are unfamiliar with the topic.	UWE-ELIQ	X	X
7	Communication & teamwork	I have difficulty in adapting my communication style (oral and written) to particular situations (R).	UWE-ELIQ	X	X
8	Communication & teamwork	I feel comfortable working in a group.	UWE-ELIQ	X	X
9	Communication & teamwork	I feel uncomfortable putting forward my personal opinions in a group (R).	UWE-ELIQ	X	X
10	Communication & teamwork	I feel uncomfortable taking the lead in a group (R)	UWE-ELIQ	X	X
11	Interprofessional learning scale	I would prefer to learn only with peers from my own profession. (R)	UWE-ELIQ	X	X
12	Interprofessional learning scale	Learning with students from other health and social care dental professions during professional relationships	UWE-ELIQ	X	X
13	Interprofessional learning scale	Learning with students from other health and social care professions improves my teamwork skills than learning only with my peers.	UWE-ELIQ	X	X
14	Interprofessional learning scale	Learning with students from other health and social care professions challenges stereotypes that are held about the different professions.	UWE-ELIQ	X	X
15	Interprofessional learning scale	Learning with students from other health and social care professions improves the service for patients/citizens from five valid perspectives.	UWE-ELIQ	X	X
16	Interprofessional interaction scale	Different health and social care professions have different roles and responsibilities.	UWE-ELIQ	X	X
17	Interprofessional relationship scale	I feel that I am respected by other health and social care professions.	UWE-ELIQ	X	X
18	Interprofessional Teamwork and Team-based Practice	Working with another health and social care profession improves my understanding of the service for patients/citizens from five valid perspectives.	SPICE 2	X	X
19	Roles/responsibilities for Collaborative Practice	My role as a dental professional is different from other health and social care professions.	SPICE 2	X	X
20	Patient Outcomes from Collaborative Practice	A team of professionals from different dental disciplines.	SPICE 2	X	X
21	Interprofessional Teamwork and Team-based Practice	Participation of dental discipline of students enhances my future ability to work on an interdisciplinary team.	SPICE 2	X	X
22	Patient Outcomes from Collaborative Practice	Patients are treated by a team of dental professionals from different disciplines.	SPICE 2	X	X
23	Interprofessional Teamwork and Team-based Practice	All health and social care students should be educated to establish collaborative relationships with members from other disciplines.	SPICE 2	X	X
24	Roles/responsibilities for Collaborative Practice	I understand the roles of other dental professionals within the interdisciplinary intraprofessional team.	SPICE 2	X	X
25	Patient Outcomes from Collaborative Practice	I am taught patient-centeredness when care is delivered by a team of different dental professions.	SPICE 2	X	X
26	Interprofessional Teamwork and Team-based Practice	During their education, medical and pharmacy dental and dental hygiene/ therapy students should be involved in teamwork in order to understand their respective roles.	SPICE 2	X	X
32	Patient Outcomes from Collaborative Practice	My perception of shared learning during dental school is that it can increase a dental hygienist's ability to understand clinical problems.	Modified RIPLS	X	X

A 40-item questionnaire was developed, tailored to the dental profession, based on the literature, panel of experts and critical interviews.

- The cross-sectional survey (Qualtrics) was administered in June 2025 to BDS and BSc Oral Health students in Years 2-5 at KCL.
- The 40-item instrument incorporated adapted measures from five validated scales (UWE-ELIQ, SPICE-R2, SACS, modified RIPLS, HELES learning environment subscale).
- Institutional ethical approval preceded data collection. A total of 219 responses were obtained.
- Descriptive statistics summarised item distributions; planned inferential tests comprise Mann-Whitney U, Kruskal-Wallis across year groups, and multivariable regression to assess demographic predictors.

Results

Participants expressed strong endorsement of IntraPE principles: high agreement was observed for patient-centred team delivery (88.5%; mean $4.35 \pm SD_1$ on a 1–5 scale), understanding of other dental professional roles (86.1%; mean $4.19 \pm SD_2$), and anticipated future intraprofessional collaboration (83.6%; mean $4.19 \pm SD_3$).

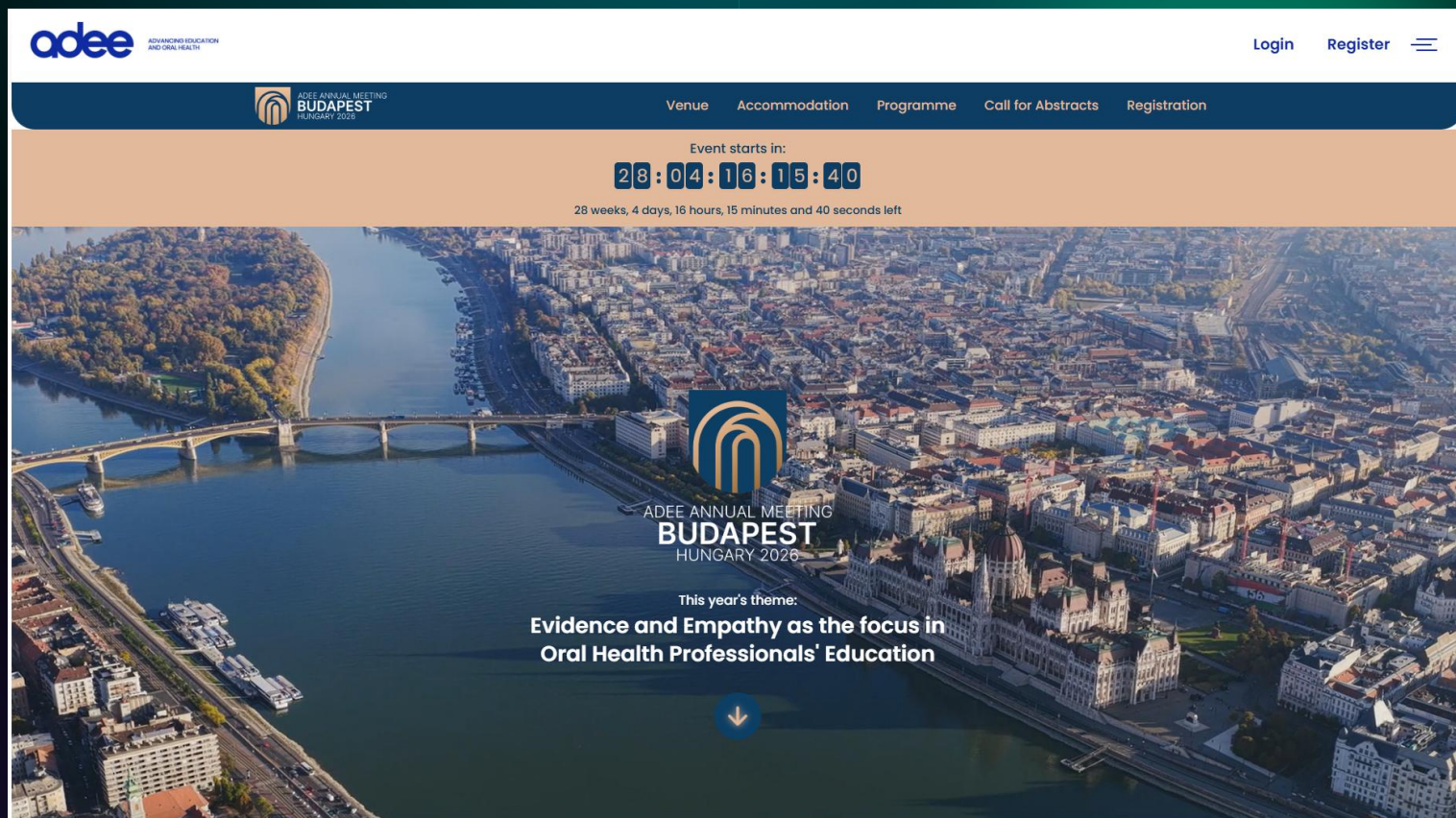
Contrastingly, the HELES-derived learning environment indicators highlighted substantive implementation shortfalls: only 20.9% agreed the curriculum accommodated diverse learning preferences (mean $2.59 \pm SD_4$), and under 39% reported adequate patient care exposure or procedural skill opportunities (means $2.89 \pm SD_5$ and $2.96 \pm SD_6$, respectively).

Discussion and Conclusion

This study yields the first UK cross-sectional evidence on undergraduate students' perceptions of IntraPE, revealing a notable divergence between positive attitudinal endorsement and perceived deficiencies in the enacted learning environment—particularly regarding curriculum design, faculty feedback, and clinical placement opportunities.

These findings identify concrete targets for curriculum development and faculty development initiatives. Longitudinal and comparative programme research is warranted to elucidate developmental trajectories and to evaluate interventions aimed at aligning educational experience with intraprofessional learning objectives, with implications for institutions embedding IntraPE across European dental curricula.

ADEE Annual Meeting will take place in the vibrant city of Budapest, Hungary, in the week of the 24th of august 2026

The banner features a background image of a Budapest river scene with a bridge and city buildings. Overlaid on this is a dark blue semi-transparent box containing the event logo, a countdown timer, and the theme text. The ADEE logo is in the top left corner, and navigation links are in the top right.

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THANK YOU

Special Thanks to

My supervisory team:

Principal Supervisor: Prof. Igor Blum

Second Supervisor: Dr. Nadine Khawaja

Expert Panel:

Dr. Jonathan San Diego

Prof. Chris Luca

Prof. Albert Leung

Research Co-Ordinator:

Prof. Agi Grigoriadis