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ADEA THE VOICE OF DENTAL EDUCATION WILEY

ASSOCIATION REPORT

ADEA-ADEE Shaping the Future of Dental Education III

From interprofessional education to transprofessional learning: Reflections from dentistry, applied linguistics, and law

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Abstract

The World Health Organization has indicated that Interprofessional Education (IPE) occurs when "students from two or more professions learn about, from, and with each other".[1] These IPE experiences are widely thought to provide students with the opportunity to learn and practice the knowledge, skills, behaviors and attitudes that will ultimately translate into the provision of safer, higher quality, team-based patient care when they become health care practitioners in collaborative care environments. At the joint American Dental Education Association (ADEA) and Association for Dental Education in Europe (ADEE) 2019 Shaping the Future of Dental Education III conference in Brescia, Italy, delegates explored the concept of transprofessional learning, where students learn skills across a wider range of professions than health professions alone. The workshop continued the dialogue that began during the 2017 ADEA-ADEE Shaping the Future of Dental Education II conference in London, England as previously reported by Davis et al.,[2] and explored the use of transprofessional learning through the lenses of dental education, applied linguistics education and law education focusing on the use of reflective practices. The workshop brought together educators from around the globe in a highly interactive setting where they had the opportunity to discuss and develop tools and practices for teaching reflective practice by using a transprofessional learning approach.

KEYWORDS

applied linguistics, dentistry, education, interprofessional, law, transprofessional

1 | INTRODUCTION

The aim of the 2019 ADEA/ADEE Shaping the Future of Dental Education III Interprofessional education and practice workshop was to explore, model, and discuss transprofessional learning within the disciplines of dentistry, law, and applied linguistics. Put simply, the workshop sought to explore what dental educators could learn from educators

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in other disciplines—in particular, educators who prepare students to enter other professions.

2 | BACKGROUND AND LITERATURE REVIEW

Interprofessional education (IPE) is defined as "students of two or more professions associated with health or social care, engaged in learning with, from, and about each other.[3]" The "classical" definition of IPE, certainly in clinical contexts, is about how we teach students to adopt a patient-centered approach, and bring together the insights of different health professionals, in seeking to treat that patient. Currently, the remit of IPE is largely confined to health care or social care professional education. Though there is a great deal of interest, activity, and implementation of IPE, it is still unclear whether clinical outcomes improve due to varied definitions and heterogeneous research design.[4] The potential gap between classroom activities and interprofessional clinical care remains a challenge. Identified barriers to collaborative care include lack of clear roles, financial concerns, time constraints and organizational barriers.[5,6] Interestingly, much of the discussion, development, implementation, and evaluation of IPE and interprofessional collaboration (IPC) involve health care professionals. Creative problem-solving will require looking beyond our traditional, convenient, and comfortable boundaries.

If one considers the notion of wider *trans*professional collaboration, the emphasis here is on developing skills that are mutually interchangeable across a wider range of professionals.[7] Dr. Julio Frenk describes transprofessional education (TPE) as having the potential to break down professional silos, while enhancing collaborative and non-hierarchical relationships.[8] As such, transprofessional insights have great promise to not only enhance students' learning and experience, but also to impact patients' experiences and outcomes. These relationships are shown in Figure 1.

Taking this concept further, transprofessional *learning* recognizes that the professional learning environments within which faculty teach and research are, themselves, embedded in a network of broader transdisciplinary spaces. This notion is physically and philosophically supported by the traditional structure of universities—although, paradoxically, it is often the case that health care educators are less able and experienced at engaging with a wider pedagogic network than those in other disciplines. If one reviews the identified barriers to collaborative care, transprofessional collaboration from a psychological,[9] sociological,[10] and economic perspective[11] could very well provide a needed fresh perspective to address persistent roadblocks.

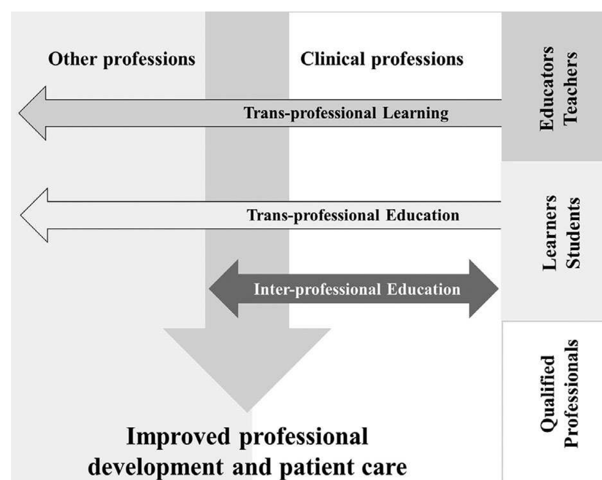

FIGURE 1 The relationship between inter-professional education, trans-professional education, and trans-professional learning within the contexts of profession and level of education

3 | METHODS AND WORKSHOP FORMAT

To facilitate effective discussions around interprofessional and transprofessional education and learning, it was necessary to identify some curricular elements that were common to clinical disciplines, law, and applied linguistics. A review of the literature and practice suggests that one, and perhaps the key, element of curricula for professional programs is "reflective practice."[12–16] Further, reflective practice is often considered a threshold concept that should be ideally embedded longitudinally across professional programs; thus, it serves as an ideal candidate for transprofessional learning.[17]

The workshop challenged participants to consider reflective practice outside of their professional silos and encouraged them to discuss and formulate tools for teaching reflective practice. The workshop drew on experiences and case studies from three contexts: applied linguistics, dentistry, and law. The workshop explored the advantages and disadvantages of a longitudinal approach, in which reflective practice is embedded from a very early stage of student learning. It provided a space for discussing associated challenges and sharing solutions. A dialogic format was followed in which participants were given multiple opportunities to interact and engage in task-based discussions around some of the key themes.

4 | WORKSHOP PRESENTATIONS

4.1 | Lessons from law and applied linguistics

The workshop facilitators presented insights into their own experiences developing pedagogic interventions involving

reflective practice, drawing on relevant literature. Within the professional context of legal education, reflective practice is associated with professionalism, but the forms in which it is taught vary significantly in different contexts. While professional educational standards require ethical awareness, equality/non-discrimination/inclusion, or client-centered approaches as part of their benchmarks—all of which might be inculcated and evidenced by reflective practice at the professional formation stage—none explicitly refer to reflective practice, per se.

Experiences of law schools seeking to include reflective practice in their curricula are difficult to measure and they suggest that neither students nor faculty necessarily understand its value.[18–20] This is contrasted by the experiences within dentistry, where educational standards explicitly mention reflective practice. Some regulatory bodies go further to facilitate the process, providing case studies that link together the concepts of professionalism, reflection, and ethics.[21] As a result, over time, the concept of reflective practice has become embedded within dental curricula across Europe.[22] Though it can be argued that in dentistry, students and faculty do understand the value of reflective practice, there is a concern that the process itself is poorly taught and understood.

Through this insight into education in transdisciplinary contexts, participants in the workshop were given an opportunity to understand the pedagogical underpinnings of reflective practice, learn about disciplinary approaches, and plan reflective practice learning and teaching in their academic dental institutions.

4.2 | Emerging themes

The workshop opened with a discussion around current issues, and several key points emerged from this discussion.

1. Time and structure. There was a consensus that too little time was allocated to reflection in the dental curriculum, and it needed to be less piecemeal and more structured. "*Reflection needs to be more systematic and less ad hoc; less piecemeal, not like 'mosaic stones.'*"
2. Focus. As is often the case when discussing reflective practice, there was a feeling of too great a focus on things that needed improving rather than championing things that are going well. An extreme perspective voiced during the discussion questioned the need for reflective practice with students: *"In a rather neo-liberalist education context, which prevails today, some might argue, 'Why should I reflect? What's the point?'"*
3. Staff involvement. There was a strong sense of a need for smaller group- and task-specific reflection, guided by academic staff. In recent research, the need to teach reflection has been advocated on more than one occasion.[23,24] Some participants commented on the need for teaching staff to reflect as well as students: *"We need to make staff more aware of the ways in which they can reflect on their own teaching, on their own practice. It's not just about teaching students to reflect."*

From this opening session and drawing on their experiences in different disciplinary contexts, the workshop facilitators further discussed three key issues relating to reflective practice for deeper learning among the workshop participants:

- How can reflection be more evidence based and data led? Specifically, what constitutes data and evidence, and how might it be used?
- How might reflective practice be more dialogic? Dialogic reflection is concerned with co-constructing new understandings through collaboration with other professionals; dialogue is central to the process.[25]
- What tools could be used to collect data and provide evidence for reflection? (Here the focus was on a range of tools, practices, and procedures for reflective practice, with an emphasis on the use of video.)

5 | DISCUSSION

The group discussion focused on the extent to which reflective practice has attained a status of orthodoxy in many professional contexts, including dentistry, without a corresponding data-led description of its value, processes, and outcomes. Recent research has highlighted the fact that reflective practice is often described in ways that are elusive, general, and vague, which may not be particularly helpful for practitioners. This is largely due to the lack of concrete, data-led, and linguistic detail of reflective practice in context. It is also largely due to its institutional nature, lack of specificity, and reliance on written forms.[23]

Much of the workshop focused on how reflection is carried out, and what tools, practices, and procedures might be used to ensure that practitioners learn how to integrate reflective practice into their professional lives. There was consensus that reflective practice needs to be rebalanced, away from reliance on written forms, and take more account of spoken, collaborative forms of reflection. In sum, the proposal is for a more dialogic, data-led and collaborative approach to reflective practice.

5.1 | Evidence-based and data-led reflection

To ensure the value of learning through reflective practice, we need data to show it is effective. Gathering such data will, in many cases, mean a change to current pedagogic

practice—the way in which students and teaching staff interact, as well as how data are collected. While large aspects of professionally regulated curricula take a scholar-academic or socially efficient form,[26] reflective learning is viewed very much as a social process. It can be argued, therefore, that there should be well-defined parts of curricula that are truly learner-centred. With this in mind, social interaction and the formal recording of contact, and its outcome, needs to be given greater prominence.

Workshop participants also discussed what constitutes data in evidence-based reflection. At a basic level, student performance was highlighted, meaning assessment data might be one form of evidence. Some participants suggested there was too much reliance on students' own evaluations as evidence when there are many other types of evidence that could be used. An interesting and related suggestion was the notion of "mapping" reflective practice over time. By studying how students' use of language changes over time, it is possible to measure their progress and learning. It also shows how their reflections change and become more sophisticated. The authors would advocate greater use of this kind of longitudinal data.

For many participants, "data" meant spoken and written observations. Some highlighted video-based recordings as a valuable tool. There was, however, considerable concern that asking students to formally reflect, verbally and in writing, after every clinical or professional encounter (perhaps, as many as three or four per teaching session) might be excessive, and it was recognized that the students often become "passive," failing to engage with any meaningful deeper or more critical reflections. Nonetheless, some also pointed out that written reflections, based on notes made after clinical sessions, had enormous potential and could be analyzed using corpus linguistics.

In summary, participants agreed that data means anything that we, as educators, use in our day-to-day practice; for example, materials, curriculum, test scores, lecture material, conversations with students, interactions, and diary entries. Importantly, participants agreed that there is a need to move away from rather subjective accounts of what happened ("this went well … this didn't") to more reflective commentaries where we describe and consider alternatives, and then make some decisions about what constitutes best practice and future development. Overall, an attention to gathering a much wider array of different types of data will also help avoid a tick-box approach, passive engagement, and a general professional apathy to reflective practice.

5.2 | Dialogic reflection

Dialogic reflection highlights professional development as a social process involving dialogue.[23] Dialogue is key; almost any learning involves language and interaction. A key element is the way in which new understandings arise: they don't just happen; they are emergent and often co-constructed.

Understanding is often mediated by tools, artifacts, practices, procedures, and language. Of central importance to dialogic reflection is the use of video, which has enormous and untapped potential. Examples cited within the workshop included:

- Use snapshot recordings of distinct dialogic scenarios, such as very short episodes with signposting that can be replayed and reviewed several times. Participants felt this would be most useful in preclinical settings when developing critical reflection. This maps to the concept of storytelling, which is outlined within *The Graduating European Dentist Curriculum* documents.[20]
- Employ video-record standardized patient encounters, created with role players and a carefully narrated script, that can be reviewed by students.
- Challenge students to identify from a video different elements of a reflective dialogue.
- Make video-enhanced observations of discussions between clinicians and their students to help students understand reflective dialogue, or to help teachers understand the impact of their interactions with students. This method was developed and reported by Field.[27]
- Record Objective Structured Clinical Examinations (OSCEs) to provide students with objective, hard evidence of performance and interaction, from which to base a reflective dialogue (stimulated recall).

For 21st century students who are comfortable in digitized social environments, there is significant dialogic potential in an online community of practice where trainees and educators post their reflections and can comment on others'. In terms of practical form, this could be something as simple as a WhatsApp or Facebook group, or a complex as a shared online portfolio space; for instance, in the form of a Wiki. Participants said that although students on professional programs may be encouraged to contribute to social media groups and discussions, they should do so while also being mindful of their professional responsibilities. For example, in the United Kingdom, the General Dental Council publishes guidance on the use of social media, setting clear expectations in terms of student and professional conduct and offering warnings regarding the misuse of sensitive and confidential patient data.[21]

5.3 | Other appropriate tools

Aside from using video as a facilitator for developing reflective practice, other tools and procedures were discussed and evaluated. These included:

- Using interprofessional group discussions before and after students' clinical or laboratory work;
- Employing graduated scenarios when teaching reflective learning[15];
- Using clear and objective criteria for grading reflective writing to facilitate faculty and student understanding[28];
- Instituting video-enhanced observation during the peer-review process, either between students or faculty, to facilitate a reflective dialogue;
- Using nonlinear reflections that are prompted by images, diagrams, and so on (for example, the work of Jade Blue, (https://jadeblueefl.wordpress.com/2016/05/14/mind-mapping-learner-generated-visuals/) who uses mind-mapping);
- Writing reflections, such as clinical logs, can be collected together and analyzed using corpus tools, such as Wordsmith Tools, (lexically.net/wordsmith/) that allow large databases to be studied in terms of key themes, language, etc.;
- Using instant feedback through minute papers and the app, Mentimeter, (www.mentimeter.com/) provides a useful springboard for reflection;
- Co-producing learning materials with students to help secure student confidence and buy-in; and
- Including learning materials and approaches drawn from pedagogical literature and robust data can help secure faculty confidence and buy-in.

Recommendations from the workshop (Table 1) focus on the recognition that reflective practice needs to be rebalanced, away from a reliance on written forms, and take more account of spoken, collaborative forms of reflection. Consideration should be given to:

- Using more dialogic tools focusing on the importance of video-enhanced observation and the use of key tools such as snapshot recordings, stimulated recall and video capture
- The use of data, as evidence, is likely to lead to a more engaged approach to reflection; this should reduce the use of mechanical, rote approaches, passive engagement and a general professional apathy to reflective practice
- Continuing collaboration to identify and share proven best approaches for reflective practice and applying them in our institutions.

6 | CONCLUSION

Transprofessional education and learning promises to help close the gaps between classroom activities and clinical care, particularly in collaborative contexts. Dialogic modes of learning used in a range of disciplinary contexts, both within and beyond dentistry, have much to offer in this regard. Success will require key resources, such as institutional infrastructures, attention to inclusivity, student cognitive and temporal loads, as well as faculty time and buy-in. The latter will be more easily secured with robust data showing what works and why.

TABLE 1 Summary of emergent themes and recommendations from the workshop

The Need for Faculty Involvement
- Students need to see faculty engaging with reflective practice.
- Faculty need to be trained effectively in teaching reflective practice.

Resources
- Time must be ringfenced for the reflective process.
- Clinical time should be refocused to allow more dialogic reflection.

Inclusivity
- Given the disparate nature of students' backgrounds, and the fact that reflective practice is a threshold concept, educators should be encouraged to co-create resources and activities for teaching reflective practice.
- Systems should be in place to ensure that *all* students have the opportunity to engage in dialogic reflection, taking into account language and social barriers.

The Need for Deliberate Practice
- Educators should be mindful of cognitive load during clinical sessions.
- Tasks should be broken down deliberately into manageable chunks—not just from a practical, operative and temporal perspective, but whilst also considering the capabilities of the student to fully reflect dialogically on their experiences.
- Faculty should be reassured that it is okay to redress the balance between student output and clinical supervision, in favor of more time for collaborative teaching, with appropriate opportunities for reflection.

Longitudinal Teaching
- Longitudinal teaching and assessment of reflection.
- Comparisons of language use over time to demonstrate learning.

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