

## Mapping of a curriculum renewal journey: Lessons learned

*If students can't learn the way we teach, maybe we should teach the way they learn. (Ignacio Estrada)*



A curriculum is described as an expression of educational ideas in practice.<sup>[1]</sup> It is a living document which should be adaptable to a changing environment. When faced with specific contextual challenges that required curriculum renewal, we took a phronetic approach. The process was predominantly based on craft knowledge and relied in most part on the insightfulness of staff. The curriculum renewal provided a unique opportunity to evaluate both the content and the mode of delivery. In this edition of *AJHPE* we share the valuable lessons learned along the journey of curriculum renewal. We started with the end in mind by defining the profile of the Stellenbosch University physiotherapy graduate (Table 1).

The curriculum aimed not only to assist the development of physiotherapy-specific knowledge and psychomotor skills but also to develop generic skills (graduate attributes), which would equip our students to practise as first-line practitioners within the South African healthcare context. This

is in line with an editorial in the *Lancet* which states that curricula should be designed to think

globally but to act locally.<sup>[2]</sup> The curriculum is vertically and horizontally aligned (Fig. 1).

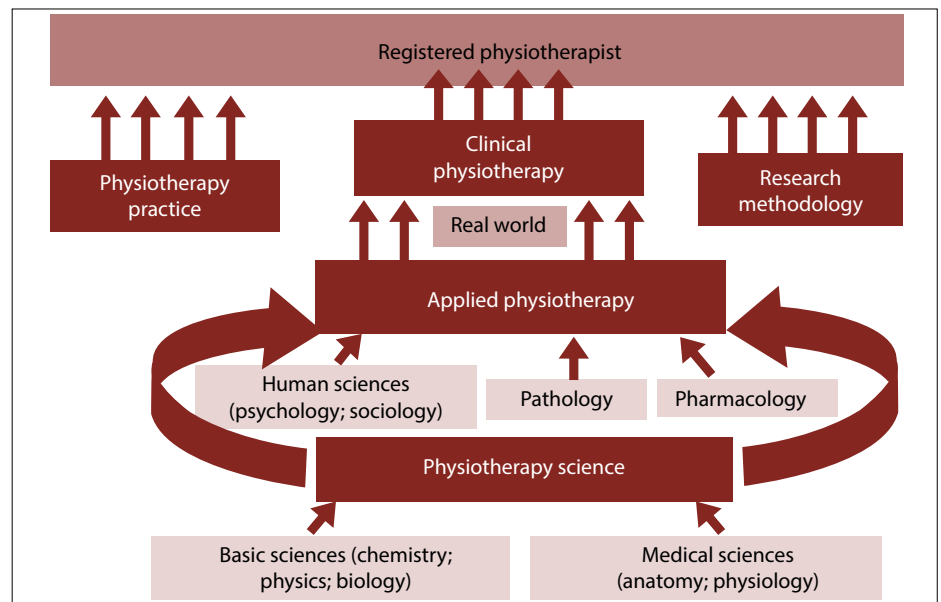


Fig. 1. Structure of the curriculum.

**Table 1. Profile of the Stellenbosch University physiotherapy graduate**

The recently graduated Stellenbosch University physiotherapist will have the basic knowledge and skills to function in the South African health context as a reflective practitioner within the philosophy and values intrinsic to the physiotherapy profession

This philosophy and the values of the physiotherapy profession are encapsulated in three domains, namely professional accountability, client management and the organisation of services. The qualities of the recently graduated physiotherapist are reflected as follows within the three domains:

### Professional accountability

- Be ethically accountable towards the profession, client and community
- Execute a safe, effective and professional practice
- Demonstrate a positive attitude in terms of continued professional development
- Develop interpersonal relationships
- Comprehend the importance of involvement with professional organisations
- Communicate appropriately and effectively with clients, family members as well as with other healthcare team members

### Patient management

- Demonstrate knowledge of the normal and abnormal functioning of the human body and psyche
- Show insight in terms of the impact of cultural environment on the outcomes of health services
- Possess the necessary skills to evaluate a client's status (physical, functional and psychological), to analyse his/her needs and be able to formulate a physiotherapy diagnosis and prognosis
- Be able to develop an outcomes-based intervention plan and to implement it based on evidence-based practice
- Should be able to re-evaluate the effectiveness of this intervention and incorporate the findings in future practice

### Organisation of services

- Should be able to plan, implement and evaluate appropriate, cost-effective physiotherapy services within the South African health context
- Use appropriate technology to support, analyse and improve physiotherapy services

Identifying the core content of a curriculum is a daunting task. Hanekom *et al.*<sup>[3]</sup> describe the use of a high engagement methodology to determine the core content within the context of an expanding professional knowledge base. In addition to defining the content, curriculum designers have lobbied for the inclusion of a variety of didactic strategies to optimise learning and adequately prepare students to function in a dynamic environment.<sup>[4]</sup> Student-centered approaches were explored which could provide learning opportunities to facilitate the development of professional and generic skills. Despite a body of work describing the use of problem-based (PB) and enquiry-based (EB) approaches to learning, these two pedagogical approaches remain controversial.<sup>[5]</sup> Statham *et al.*<sup>[6]</sup> compare the perceptions of students and staff to the success of a hybrid PB learning module using a theory-based evaluation approach. Inglis-Jassiem *et al.*<sup>[7]</sup> report on the lessons learned when implementing an EB approach to learning. Two examples of pedagogical innovation are included in this edition.<sup>[8]</sup>

Evidence-based practice (EBP) is widely recognised as a key skill for health professionals. Developing competent evidence-based practitioners on entry to the profession is a cornerstone of an undergraduate programme. Burger and Louw<sup>[9]</sup> explain the rationale for adopting a secondary research approach as a vehicle to teach the principles of EBP as part of the undergraduate physiotherapy research module. In addition they share implementation strategies and lessons learnt on this path of restructuring. The five-step model has been offered as a simple and an efficient model for clinical skills training.<sup>[10]</sup> However, increasing student numbers hinder the immediate feedback, correction and reinforcement needed to cement the correct performance. Unger *et al.*<sup>[11]</sup> describe an innovative strategy using near-peer-assisted tutorials to address this challenge. The data reflect the added value of this strategy to the professional development of tutors.

The primary aim of the undergraduate programme is to produce competent physiotherapists who can function as first-line practitioners on entry to the profession. The importance of providing authentic learning opportunities in this process is widely acknowledged. Three papers in this edition focus on clinical education. While much has been written about the social aspects of clinical environments there is a paucity of data on the physical requirements of clinical placements.<sup>[12]</sup> Williams *et al.*<sup>[13]</sup> describe the clinical sites and exposure of students based on a self-developed site evaluation tool. The importance for academic institutions to develop partnerships with health service providers is evident from the data. They argue for a more active role of universities in the development of clinical education sites. Ernstzen *et al.*<sup>[14]</sup> explore whether the learning experiences of the primary healthcare clinical rotation was appropriate to enable students to reach the learning outcomes for the rotation. The data highlight the need for programme designers to evaluate and align learning opportunities that are offered at clinical sites. A second paper by Ernstzen *et al.*<sup>[15]</sup> adds to the conversation around transitional issues experienced by students on entry to the clinical environment.<sup>[16]</sup> The clinical learning opportunities perceived by learners to assist in the transformation from classroom to clinical practice are presented.

While curriculum renewal in health education is not novel, Unger and Hanekom<sup>[17]</sup> reflect on the impact of the process. The reflection is based on data comparing the perceptions of students from the 'old curriculum' with the revised curriculum.



It is hoped that by sharing our experiences of a curriculum renewal process, debate can be stimulated: (i) within the physiotherapy profession regarding future curriculum content and design; and (ii) among educationalists regarding strategies to optimise the training of healthcare professionals in a resource-restricted environment.

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