Editorial

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.[1] 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.[2] The curriculum is vertically and horizontally aligned (Fig. 1).

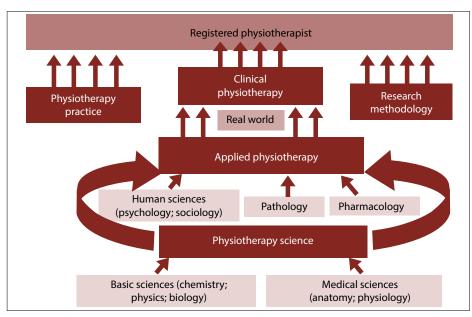


Fig. 1. Structure of the curriculum.

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

Editorial

Identifying the core content of a curriculum is a daunting task. Hanekom $et\ al.^{[3]}$ 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. 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. Statham $et\ al.^{[6]}$ compare the perceptions of students and staff to the success of a hybrid PB learning module using a theory-based evaluation approach. Inglis-Jassiem $et\ al.^{[7]}$ report on the lessons learned when implementing an EB approach to learning. Two examples of pedagogical innovation are included in this edition.

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^[9] 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.^[10] However, increasing student numbers hinder the immediate feedback, correction and reinforcement needed to cement the correct performance. Unger *et al.*^[11] 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.[12] Williams et al.[13] 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.[14] 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.[15] adds to the conversation around transitional issues experienced by students on entry to the clinical environment.[16] 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^[17] 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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- Thomas PA, Kern DE. MPH internet resources for curriculum development in medical education: An annotated bibliography. Gen Intern Med 2004;19(5):599-605. [http://dx.doi.org/10.1111/j.1525-1497.2004.99999.x]
 Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: Transforming education to strengthen
- Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. Lancet 2010;376(9756):1923-1958. [http://dx.doi.org/10.1016/S0140-6736(10)61854-5]
- Hanekom SD, Unger M, Cilliers F. Deriving criteria by which to determine core curriculum content: A high
 engagement process. African Journal of Health Professions Education 2014;6(2 Suppl 1):180-184. [http://dx.doi.
 org/10.7196/AIHPE.496]
- 4. Abela J. Adult learning theories and medical education: A review. Malta Medical Journal 2009;21(1):11-18.
- Colliver JA. Effectiveness of problem-based learning curricula: Research and theory. Acad Med 2000;75(3):259-266. [http://dx.doi.org/10.1097/00001888-200003000-00017]
- Statham SB, Inglis-Jassiem G, Hanekom SD. Does a problem-based learning approach benefit students as they
 enter their clinical training years? Lecturers' and students' perceptions. African Journal of Health Professions
 Education 2014;6(2 Suppl 1):185-191. [http://dx.doi.org/10.7196/AJHPE.529]
- Inglis-Jassiem G, Statham SB, Hanekom SD. What does an enquiry-based approach offer undergraduate physiotherapy students in their final year of study? African Journal of Health Professions Education 2014;6(2 Suppl 1):192-197. [http://dx.doi.org/10.7196/AJHPE.532]
- Graffam B. Active learning in medical education: Strategies for beginning implementation. Med Teach 2007;29(1):38-42.
- Burger M, Louw QA. Integrating evidence-based principles into the undergraduate physiotherapy research methodology curriculum: Reflections on a new approach. African Journal of Health Professions Education 2014;6(2 Suppl 1):198-202. [http://dx.doi.org/10.7196/A]HPE.516]
- 10. George JH, Doto FX. A simple five-step method for teaching clinical skills. Fam Med 2001;33(8):577-578.
- Unger M, Keiller L, Inglis-Jassiem G, Hanekom SD. Teaching my peers: Perceptions of tutors in physiotherapy practical skills training. African Journal of Health Professions Education 2014;6(2 Suppl 1):203-206. [http:// dx.doi.org/10.7196/AJHPE.497]
- McCallum CA, Mosher PD, Jacobson PJ, Gallivan SP, Giuffre SM. Quality in physical therapist clinical education: A systematic review. Physical Therapy 2013;93(10):1298-1311[http://dx.doi.org/10.2522/ptj.20120410]
- Williams L, Ernstzen DV, Statham SB, Hanekom SD. Evaluation of clinical service sites used for training undergraduate physiotherapy students in a resource-restricted environment: Identifying factors that may negatively impact on students' learning. African Journal of Health Professions Education 2014;6(2 Suppl 1):207-210. [http:// dx.doi.org/10.7196/AJHPE.528]
- Ernstzen DV, Statham SB, Hanekom SD. Learning experiences of physiotherapy students during primary healthcare clinical placements. African Journal of Health Professions Education 2014;6(2 Suppl 1):211-216. [http://dx.doi.org/10.7196/AJHPE.530]
- Ernstzen DV, Statham SB, Hanekom SD. Physiotherapy students' perceptions about the learning opportunities included in an introductory clinical module. African Journal of Health Professions Education 2014;6(2 Suppl 1):217-221. [http://dx.doi.org/10.7196/A]HPE.524]
- Le Maistre C, Pare A. Learning in two communities: The challenge for universities and workplaces. Journal of Workplace Learning 2004;16(1/2);44-52.
- Unger M, Hanekom SD. Benefits of curriculum renewal: The Stellenbosch University physiotherapy experience. African Journal of Health Professions Education 2014;6(2 Suppl 1):222-226. [http://dx.doi.org/10.7196/ AILIDE 101

AJHPE 2014;6(2 Suppl 1):178-179. DOI:10.7196/AJHPE.527