CURRICULUM TRANSFORMATION DRAFT FRAMEWORK: FACULTY OF HEALTH SCIENCES

Following the presentation of the draft Curriculum Transformation Framework at the Faculty Board all staff were invited to make submissions to the Deputy Dean: Education.
A notice was posted to the clickUP module for all students in the Faculty (Health Sciences Dean's Communication) with a copy of the framework and an invitation to make submissions.
In addition the Faculty Education Symposium held on 23 September had as its theme "Curriculum Transformation: Revisit, Rethink, Reimagine" and was attended by 50 faculty members and 10 students representing all the Schools in the Faculty. The students participated in a panel discussion on the topic of curriculum transformation and the afternoon was devoted to a "bootcamp" which provided an opportunity for interactive engagement with the four drivers of the framework.

The following captures the submissions received by email as well as individual and group meetings with students and those who participated in the symposium.

STUDENTS

The students expressed their thanks for being given a platform to be able to engage with issues around transformation, and especially around curriculum transformation. One indicated how impressed she was with the document overall.

1. **Responsiveness to social context**

   It can be agreed that a positive response to social context plays an important role in who we become later in society and our curriculum should facilitate that.

   Some of issues raised by the students were specific to the modules in particular programmes. For example in the BCur degree they highlighted modules which they felt were repetitions of content covered in previous years they believed was an impediment to intellectual growth and has the potential to stagnate the process of learning. Furthermore one student felt that they were paying for modules that do not contribute meaningfully to the degree. There was a recommendation for replacing a redundant module with one that would will address innovative findings within the particular field of study, one that that branches out to find subject inter-relatedness with other fields of study such as one module that teaches BCur students how to be "Economic Nurses, Innovative Nurses, Business-minded Nurses, maybe even "*Woke*" Nurses".

A second point was that they have been completely denied the chance of being Community Nurses for which there is a high demand in the country. There was a recommendation for the University to cater to that need by bringing back a Community elective for studies in the fourth year. Students requested not to be channelled to specific areas of study, but to be allowed to flourish in areas of particular interest. If it is a question of shortage of lecturers for teaching electives, the University should find means to ensure that these are made available.

One medical student suggested that if UP would like to create greater inclusivity of marginalized groups, she thought it would be wise to expose our students earlier on to those groups in society. Only in fifth year have they had a one week exposure to the LGBTI community and other marginalized groups.

To encourage more critical engagement as desired from the students the Longitudinal Clinical Attachment (LCAS) could be a very powerful tool. If done well, it could be a core theme to create the sustainable, positive change in society that UP wants for students. It also offers wide access to people from very diverse backgrounds, however some of the current management issues of the programme would have to be addressed. LCAS could go a far way to create greater exposure to more people, spaces and issues that will help our students to broaden their societal perspective.

The idea of a compulsory course for first years was enthusiastically received by one student. UFS has this and UP should probably tap into their curriculum for some insight.

2 **Epistemological diversity**

In order to make increase the scope of knowledge to medicine outside of Eurocentric practices an interesting option would be to incorporate some South African alternative medical therapies such as learning about traditional healers and homeopaths. Whilst current practicals do a good job of teaching students medicine for an African based context, the first three years are entirely first world medical theoretical knowledge. Perhaps students could start earlier with greater emphasis on African contextual medicine. The importance of learning about traditional African medicine – not to practice it, but to better understand the patient context – as well as rural health care was mentioned by several students.

3 **Renewal of pedagogy and classroom practices**

Part of this driver entails equipping students with skills to contribute to society and be efficient professionals. There exists a problem with time and particularly time to study and finish assignments. The challenge for BCur students in particular is the number of hours spent in the hospital, some of which they believe could better be spent in studying or preparing for lectures
The students suggest an increase in the amount of time spent in the Skills lab carrying out or practising
Clinical skills, with less time spent in the wards the academic hospital.
They suggest that creating more time for studying would addresses the failure rate and fewer students would drop out. Students would also have more time to participate in more activities such as transformational talks. If they are silent because of having to be at "work" in the hospitals it creates an impression that they have no grievances. This would also make them feel included. The practising of skills would lead to an increase in number of effective healthcare professionals.

Having a single lecturer presenting a series of modules begins to be a problem as it “defies the purpose of removing pedagogical and classroom hindrances in the way of diversification”. Students are not able to explore different teaching methods and any problems they may have encountered with a particular lecturer is not resolved during the year and the student is placed at a disadvantage.

Students suggested that more should be done to identify students with difficulties before they fail and put timeous interventions in place. Lecturers are often perceived as hostile and unhelpful but more can also be made of peer learning and “student-help networks”. Weak lecturers should be identified and supported to improve their teaching.

Medical students also reported unacceptable practices in the hospitals where they have been bullied by nurses and registrars and frequently witnessed a culture of intimidation, disrespect and unprofessional behaviour.

There was a strong view that to create greater inclusivity in our learning spaces there needs to be a platform through which first years are encouraged to tackle their backgrounds and diversity. THe fourth year medical students were exposed to such a session with facilitators from “Consciousness Café” and several students indicated how valuable this had been and suggested that if cost for a professional intervention was a problem perhaps the existing expertise in this area in the Faculty of Humanities might be used.

3 **<u>An institutional culture of openness and critical reflection</u>**

One student indicated that the process of certain formats assessment (such as the Objective Structured Clinical Examination or OSCE) needs to be regulated and more transparent and the student should be able to exercise their right of perusal. All faculties should operate on the same principles regarding students' rights.

There was a call for a review of the policy of contract that some students sign with the Gauteng Department of Health. (This practice is being revised). There was a request for greater transparency regarding university structures and opportunities, processes such as elections, how individuals are chosen to represent the University at forums and seminars as well as communication and the flow of information between students and university structures.

A medical student commented that a lot of this work needs to be done in the residences. This really requires some in depth sessions with house committees on the need for transformation and continual engagement on how to preserve the important traditions but adapt to the changing world. This issue has come up several times in discussion with students – some of the practices appear to be openly racist such as White students not wishing to share rooms with Black students or Black students being grouped together in certain areas of the residence.

FACULTY

The following was received from the School of Medicine, Department of Family Medicine:

What has been done so far?

- L-CAS (Longitudinal Clinical Attachment) programme to involve junior medical students (1st-5th year) in the clinics and expose them to the realities and social determinants of diseases and ill health.
- Training of Community Health Workers (CHW) and developing Community Oriented Primary Care (COPC) programme as part of re-engineering primary health care (PHC).
- Making a community diagnosis and assessment by visiting the homes in Mamelodi, Attridgeville, Tembisa, the inner city to assess the health needs of the people.
- Outreach programmes for registrars consulting in primary health care clinics for 3 months at a time as part of their training.
- Responding to the identified health needs by making more staff available to run the community projects eg students, registrars in Family Medicine and Family Physicians.
- Developing community projects with NGO's in the inner city for homeless, drug addicts, foreigners and sex workers. In collaboration with the city of Tshwane a programme of harm reduction for illegal drug users has been developed and approved for implementation.
- Providing medical care in all Tshwane clinics and outpatient departments including emergency units of Steve Biko, Kalafong, Mamelodi, Tembisa, Pretoria West and Tshwane district hospital.
- A COPC research unit has been established recently. Projects are developed with other departments in the University.
- Registrars doing research in the communities as part of their training
- The department has developed a teaching platform outside the academic hospitals that consists of about 30 clinical learning centres in Gauteng, Mpumalanga, KZN and Limpopo. District hospitals and CHC's serve as clinical learning centres (CLC's) for BCMP and MBChB students. All district and regional hospitals have been provided with a library both hardcopy as well as electronic books, computers, printers, data projectors and other teaching materials.
- Extensive use of ClickUp and E-learning, all BCMP students are provided with tablets and 3G cards for connectivity in rural CLC's.
- The class rooms for most of our students are not the lecture halls at the Prinshof campus but the clinical departments at the CLC's where authentic learning takes place and is facilitated by practising clinicians and Family Physicians.
- Student Intern Complex (SIC – i.e. 5th and 6th year) medical students (240 per year) do about 2500 deliveries per year in these CLC's and see 25 000 patients in clinics and district hospitals. All SIC students do quality improvement projects to improve the quality of patient care. Topics range from Mother and baby friendly hospitals (MBFI) to severe acute malnutrition, triage in casualty, rational use of laboratory tests and antibiotics, infection control, knowledge of high school pupils of HIV and STI's and many more.
- BCMP students (140) in their 2nd and 3rd year work in 20 different CLC's and are involved in clinical work for about 9 months per year. They do more than 100 000 consultations per year and spend 150 000 hours in clinical work (wards, outpatient departments, clinics and casualty). Each

final year BCMP student does a quality improvement project (QIP) that is SMART and can make a contribution to improved patient care.

- In the past five years 315 Clinical Associates have graduated and more than 50% work in the rural public health services and intend to stay there.
- The department is involved in a monitoring and response unit (MRU) in the Gert Sibande district which has some of the worst health indicators in the country. In the past three years the maternal mortality rate (MMR) has been halved from 36 maternal deaths in 2012 to 18 maternal deaths in 2015. The MMR has dropped from more than 200/100.000 to less than 100/100.000. Case fatality rates for pneumonia and diarrhoeal diseases in under-5 children has been halved in this district. Severe acute malnutrition in children is the next problem that is addressed presently in this district.
- Research projects focus on patient centeredness in the consultation, the role of QIP's on transformative learning and developing competencies of a medical expert (CanMeds), self-authorship of students, resilience of BCMP students, practice intentions of BCMP students, the role of digital story telling in reflection after district health care, COPC, the role of clinical associates in district hospitals and HIV management and the monitoring of the performance of the CLC's in the teaching platform(med Ed IQ).

Challenges and limitations

- Shortage of funds for lecturers and vehicles to transport health workers in the community.
- Delay in appointments of staff.
- Lack of joint planning and integration of projects eg with public health, paediatrics.
- Lack of office space.
- Lack of WI-FI facilities outside the University. With a very slow internet and students and lecturers need to use their own 4G modems
- Lack of printers, paper and ink. Currently lecturers need to use their own printers, papers and ink outside the borders of the University even with joint appointments.

How to transform the curriculum

- The curriculum of the BCMP programme is constantly reviewed and improved because it is a new programme. Innovative initiatives are the introduction of E-learning materials, apps and tablets.
- Faculty members participate actively in staff development and FAIMER. This leads to new ideas and management of resources.
- There are bi-annual staff development workshops where we evaluate our curriculum and reflect with staff and students on our achievement and the curriculum.
- Improvement of the curriculum is encouraged by feedback and acknowledging the performance of staff and CLC's. There is a floating trophy for the best CLC.
- The recommendations of the 2015 BCMP accreditation report by the HPCSA are being implemented eg the development of a handbook for the BCMP programme.
- The appointment of black clinical associates as lecturers in the BCMP
- Increasing number of black Family Physicians as senior lecturers and all CLC facilitators

Plans for the short term

- Expand the involvement in community based health programmes in the Tshwane municipality eg WBOT teams, drug addiction harm reduction project, training of more CHW's.
- Develop and improve an electronic patient record that links homes, clinics and hospitals.

- Develop a better integration of patient care for patient's that are discharged from Steve Biko hospital. A help desk has been set up by our department and a new patient retained booklet has been developed "Road to Linked Care".
- Respond to health needs in the community eg old age homes in Tshwane and improve home based care.
- Explore the possibility to develop more inter-professional learning of MBChB and BCMP in community projects.
- Appoint clinical associates in primary health care teams in the inner city projects.
- Appoint clinical associates at tertiary hospitals to help with primary care in these institutions and helping in the frontline patient care.

Plans for the medium term

- Initiate and develop an integrated palliative care service in Steve Biko and other hospitals in Tshwane and in the community.
- Increase the number of Family Physicians who are involved in community projects in all CLC's.

The following is a formal submission from the School of Dentistry.

A. SELF-REFLECTION: RESPONSIVENESS TO THE SOCIAL CONTEXT

INTRODUCTION

Social responsibility and accountability are core values underpinning the roles of health professionals and faculties of health sciences. This commitment means that, both individually and collectively, the latter must respond to the diverse needs of individuals and communities locally and globally[2].

A list of 10 recommendations to improve responsiveness to the local social context are considered to be universal to countries with a diversity of socio-economic, ethnic origins, customs, cultures and languages and will hence be used as the conceptual guide for the self-reflection, applied to the local social context[2].

1. Adopt a flexible scientific, competency-based approach, which is aligned to accreditation standards, to address individual patient and community needs

Oral health professionals (OHPs) must be able to put knowledge, skills, and professional values into practice. Therefore, OHP education must be based primarily on the development of core foundational competencies and complementary broad experiential learning. In addition to pre-defined curriculum requirements, OHP education should ideally also provide flexible opportunities for students to pursue individual scholarly interests in oral health[2].

The School is continuously addressing identified challenges to remain relevant in its response to societal needs as defined above. The exit-level outcomes/competency defined in e.g. the BChD and BOH curriculum, respectively, are perceived to be relevant and aligned with accreditation authority standards. The key challenge is however to implement the curriculum in an ideal way that would achieve the attainment of all the intended outcomes.
An outcomes/competency-based approach to teaching and learning is regarded as a valued educational instrument to ensure relevancy as well as the identification of key core

content/knowledge.

2 The hidden curriculum

The hidden curriculum is a set of influences that function at the level of organizational structure and culture, affecting the nature of learning, professional interactions, and clinical practice. Faculties of Health Sciences must therefore ensure that the hidden curriculum is regularly identified and addressed by students and educators throughout all stages of learning. The hidden curriculum encompasses what students learn outside the formal curriculum it is pervasive and complex and can be deeply instilled in institutional cultures. For these reasons, revealing the hidden curriculum will be a challenging yet critical move forward[2].

The rapid explosion of scientific knowledge inherently leads to curriculum and assessment overload that requires the careful identification of a relevant core curriculum.

3 **Identify the Core Curriculum**

Scientific knowledge in dentistry has significantly evolved during recent years, which potentially holds the risk of curriculum (cognitive) and assessment overload. This may subject students to undue pressure and therefore may result in student disengagement, strategic (selective) and surface learning.

The challenge is to establish a core curriculum for each module based on relevant exit-level outcomes, as proposed in reputable medical education literature[2].

4 **Build on the Scientific Basis of Health Sciences**

Dental education is rooted in fundamental scientific principles. Human and biological (basic) sciences must therefore be learned in relevant and immediate clinical contexts throughout the education experience. In addition, as scientific inquiry provides the basis for advancing health care, research interests and skills must be developed to foster a new generation of health researchers[2].

The challenge is *inter alia* that these complementary domains of basic sciences and clinical context be increasingly integrated so that students think about clinical applications as they learn basic sciences. By making these two domains mutually relevant, it is anticipated that the clinicians of tomorrow will draw on both as they practice evidence-based dentistry and engage in research.

5 **Advance effective collaborative governance in dental education**

To advance effective collaborative governance in dental education, the challenge is to improve collaborative, patient-centred care, OHP education must reflect on-going changes in scopes of practice and health care delivery[2].

Inter-disciplinary cooperation is inherently problematic in discipline-based teaching and learning environments. These concerns have been strengthened with the introduction of a matrix organisational/management system to direct the School's teaching and learning processes[3]. The challenge is to ensure that patient needs are being met through collaboration and cooperation. In order to improve collaborative patient-centred care, a Patient Management (PM) forum, represented by all disciplines, was recently established to improve patient management processes in the School.

6 **Value a generalist oral health care approach to ensure effective integration and transitions along the educational continuum**

Recognizing that "generalism[2]" is foundational for all OHP, undergraduate education must focus on broadly based generalist content, including comprehensive general Dentistry. Moreover, generalists must be integral participants in all stages of the education process[2].

The PM forum that was established in the School was mandated to strengthen cooperation and integration in the clinical teaching and learning environment. This challenge will further be addressed by developing a cadre of highly skilled "generalists".

7 **Create positive and supportive learning and work environments that would develop, support and value (recognize) undergraduate teaching, learning and assessment**

Recognizing that teaching, research, and leadership are core roles for OHP, priority must be given to faculty development, support, and recognition in order to enable teachers and learners to respond effectively[2].

To address this challenge the proposal is to strengthen faculty development in educational practices and to encourage scholarly activity in dental education.

8 **Development of relational skills and team building**
The aim is to equip learners with the competencies that will enable them to function effectively as part of inter and intra-professional teams[2].

In order to be successful with the development of relational skills and team building, leadership skills are needed. The objective is e.g. to develop the individual as leader through promotion of self-awareness and interpersonal skills.

9 **Foster Leadership**
Leadership is essential to both patient care and the broader health system. Leadership should be fostered among educators and students. This includes the management, navigation, and transformation of the health care system in collaboration with other role players[2].

The strategy for improvement will include strengthening of management and leadership skills in all undergraduate curriculums.

10 **Assessment practices**
Assessment practices should be fair, valid, reliable and of a high quality. Standard setting should be employed to accommodate for variance in difficulty of assessment.

The strategy will be to enhance assessment on a continuous basis and to implement standard setting in the School.

B. SELF-REFLECTION: EPISTEMOLOGICAL DIVERSITY

Diversifying epistemology means bringing marginalised groups, experiences, knowledges and worldviews emanating from Africa to the centre of the curriculum.
A strategy will be amongst others to engage in a needs assessment about student preferences of teaching and learning as well as customs and values.

C. SELF-REFLECTION: RENEWAL OF PEDAGOGY AND CLASSROOM PRACTICES

Curriculum transformation involves continuously rethinking and re-evaluating the ways in which to learn and teach. This includes being responsive to education innovation and appropriate pedagogical approaches.
The transformation strategy will be to engage in continuous scholarship of teaching, learning and assessment as well as educational research.

D. SELF-REFLECTION: INSTITUTIONAL CULTURE

Culture can be defined as a pattern of responses among members of a group which arises from interactions over time among and between its members and their environment. It is therefore imperative that universities constantly reflect on their internal culture and how it impacts on teaching, learning and assessment.
A strategy for transformation of institutional culture will include the development of value systems, cultures and practices that are accommodating to students and staff from diverse socio-economic and cultural backgrounds.

WAY FORWARD

The submissions received highlight that there are some discipline specific issues that should be addressed but that overall a Faculty response can be structured around the drivers of the draft framework. Until recently there has not been a single Teaching and Learning Committee in the Faculty and each School takes responsibility for driving its own curricular changes. This process will continue but in the light of the need for a consolidated overview of curriculum transformation a Faculty Teaching and Learning Committee under the Chairmanship of the Deputy Dean: Education will be in place to drive the process and play a coordinating role.

FACULTY CURRICULUM TRANSFORMATION PLAN

ACTION	RESPONSIBILITY	TIME LINE
PRIORITY 1 Awareness and consensus **SHORT TERM : 2016**		
Consultation with faculty members Invite responses to Draft Framework	Dean Deputy Dean: Education	On-going Report by October 2016
Consultation with students including expansion of Dean's Dialogue group and use of ClickUP	Dean Deputy Dean: Education Health House	On-going Report by End 2016

Faculty Education Symposium	Deputy Dean: Education Faculty EdCom	September 2016
Establish Faculty Teaching and Learning Committee	Dean Faculty Exco	November 2016
PRIORITY 2: Research **SHORT TO MEDIUM TERM: 2017-2019**		
Research into the desired attributes of the African health professional for the future: Already started as TDG collaboration project	Deputy Dean: Education	March 2017
Identify current SoTL research in the Faculty that provide insights to curriculum transformation	Deputy Dean: Education and EdCom	March 2017
Identify and initiate new projects for SoTL on curriculum transformation including curriculum mapping	Deputy Dean: Education School T&L committees Faculty T&L Committee	March 2017
Baseline study on student and staff perceptions of current curriculum including institutional culture and learning environment	Deputy Dean: Education EdCom School Change committees Health House	August 2017
PRIORITY 3&4: Strategies for change **MEDIUM TO LONG TERM (2017-2021)**		
Proposals to extend language competence in all programmes	School T&L committees Faculty T&L Committee	Proposal March 2017 Implement 2018
Curriculum mapping of all degree programmes	Deputy Dean: Education School T&L committees	December 2018
Introduce priority changes as identified by consultations and research	Deputy Dean: Education School T&L committees Faculty T&L committee	On-going

CONCLUSION

Both staff and students of the Faculty have engaged thoughtfully and seriously with the complexity of the issues related to curriculum transformation. It is seen as an on-going process rather than an activity with a defined end point.

What is clear is that the primary goal of the Faculty is to make a meaningful contribution to improving health and healthcare of the country through education, research and service and these goals are currently expressed in the structure and content of the curriculum. What is also clear is that there is

further work to be done in addressing certain aspects of the pedagogy, content and context in which learning takes place.

The Faculty is committed to on-going engagement between teaching and administrative staff, students and faculty executive to further advance the teaching and learning proposition and address the issues already identified as well as working towards an environment in which all have ownership and are able to contribute further to the process.

REFERENCES

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