



ZIMBABWE

MINISTRY OF HIGHER AND TERTIARY EDUCATION, INNOVATION,
SCIENCE AND TECHNOLOGY DEVELOPMENT (**MHTEISTD**)

TALKING POINTS

MINISTER OF HIGHER AND TERTIARY EDUCATION, INNOVATION,
SCIENCE AND TECHNOLOGY DEVELOPMENT

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**“Towards revitalising the roles of Universities in development
[Zimbabwe]”**

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1. Any nation can never develop faster than the development of its education system. I mean a real Education system! That education that means something for human well being, for the well being of Africans. Real Education by nature must lead to industrialisation and modernisation through the **production of goods and services.** This means University education by design must have **a purpose and a benefit.** It follows that time has come for us to ask whether African Universities are playing this role in the development of Africa.

2. Development means an improved way of fulfilling basic human needs - 6 human needs: (1) Food (2) Water (3) Shelter (4) Sleep (5) Connection (physical or emotional) (6) Novelty/ Innovation (Forbes Magazine (<https://www.forbes.com>)). This is time to ask whether our Universities are providing an environment where skills and knowledge and consciousness are geared for the provision of these human needs. Do our University Education Courses respond to the needs of the people as we know them?

- 3.** To me, any curriculum review can only be meaningful if it is undertaken on the basis of the extent to which it improves the fulfillment of human needs.

- 4.** The current fact today is Africa is relatively less industrialised compared with other parts of the World, despite having encouraged mass University Education post-independence. However, this has to change. My story is about how this is changing. Education must cause industry in its most basic forms (1) Growing crops and rearing animals-Agriculture (2) Mining minerals and (3) Manufacturing based on the raw materials from the Mining and the Agriculture.

- 5.** Now, I will detail the Zimbabwean Education journey and how we are transforming our University Education so that it is central to National Development. Several activities were carried out in our transformation journey: (1) National Skills Audit (2) Design Analysis and (3) Philosophical Analysis.

6. Our hypothesis on the critical skills audit was that our low levels of industrialisation could be a result of low skills levels and that developing and improving skills would be the basis of us leapfrogging our economy. Indeed our average skills levels are at 38% while our average literacy is well above 94%. In normal circumstances, skill levels and literacy levels must be at the same level. Zimbabwe has one of the highest literacy rates in Africa and the World. But the question is why is it that the industrialisation levels are low? The level of knowledge and skills and consciousness are key determinants of the level of industrialisation.

7. We then carried out an Education System Design Analysis. Our premise was that Education must produce goods and services. Therefore, we had a thorough look at our University missions. The traditional University missions have been (1) Research (2) Teaching and (3) Community Service (Workshops, Contact leave, Sabbatical and Consultancy). We coded this Design as Education 3.0 because of its characteristic 3 missions.

9. By design Education 3.0 produces a worker not a person that produces goods and services. This is a colonial design which served its purpose and cannot be used by a nation that wishes to industrialise. So, although Africa did well by encouraging mass University Education, it was carried out in the Education 3.0 design and this explains the low levels of industrialisation emanating from this design.

10. So, for many years in Africa and in Zimbabwe, there has been a disjunction between University Outputs and Industry. This disjunct has been our cry for so long and we now know that it was a **DESIGN** problem. It means the industry was not resulting from our education but an education from elsewhere!. The task was then to develop an appropriate **DESIGN**. We therefore asked ourselves the following questions as we examined our Education Design in order to make it respond to the national expectations, (1) Is our education designed to create jobs through skills and knowledge? (2) What are the educational roots of our industry?

11. Education 3.0 was designed to just feed employees into existing Colonial industries. In fact, our HTE system was designed to feed a colonial economic system and in such a system it perfectly served its purpose. Remember, it is not about the subjects we study but it is about how the whole study process is organised and the type of outputs expected.

12. We thus, Redesigned our University Education so that it has 5 missions (1) Research (2) Teaching (3) Community Service (4) Innovation, and (5) Industrialisation. This is **Education 5.0**. We are creating ecosystems for **Innovation** for purposes of **Industrialisation and Modernisation**. We have so far built 5 Innovation Hubs.

13. As you can deduce, we have started creating **innovation hubs at all HTE institutions, as well as Industrial Parks** linked to these institutions, in order to create a collaborative community of forward-looking private and public players and academics with the objective of developing cutting-edge products for the marketplace. Innovation hubs shall be sources of our new technology. Innovation hub is where technology will be born.

14. In Innovation Hub, processes involved include: (1) legal services (2) marketing services and (3) Product specific technical services.

15. So far more than 60 patents have been filed from the Universities within a matter of months. Chinhoyi University of Technology (CUT) has successfully launched an Artificial Insemination Programme with potential revenue of **USD140 million**. Harare Institute of Technology (HIT) has successfully launched several IT based solutions including the BUS tracking system and Tap Card system.

16. We have also designed our Higher Education to follow a heritage based philosophy that simply states that we must have advanced scientific knowledge from anywhere in the World but apply it to our environment for producing a competitive industry.

18. For example, Agriculture in most parts of Africa has not been heritage based and is thus dominated by crops that are not ecologically suited to Africa, explaining most of the food deficit problems we have. In fact, when our education is removed from the environment it is supposed to transform, then it diverts from the heritage philosophy and it leads to no development at all. Now it has to work for us.

19. As a way to promote heritage based science for industrialisation, University of Zimbabwe has started the Future Grains for Africa programme, to develop novel products (food, feed, non-food product) from Finger millet, Pearl millet and Sorghum (the future grains of Africa) as way to promote consumption of these cereals for food security and economic growth. MSU has embarked on a Research programme on the Value of Indigenous Trees and Herbs in pharmaceuticals and other products. The Government of Zimbabwe is funding all these initiatives.

21. Additionally, we are implementing the Zimbabwe National Qualifications Framework to make sure we streamline the vertical progression of our students from different systems, as well as the horizontal comparability of same qualifications. We have thus, directed our Universities Programmes conform to The National Qualifications framework where bodies of knowledge and Skill are harmonised, thus ensuring horizontal comparability of programmes with 70-80% overlap and a clear pathway is mapped for vertical progression by recognising prior knowledge in the vertical pathway.

22. Ladies and Gentlemen, what we know is that, No matter how much we are able to calculate the most complicated equation, as long as we are in a wrong design (**Education 3.0**), we will and cannot produce industrialization and modernization. But when, we calculate within the right framework (**Education 5.0**), Industrialization will happen. One Pan Africanist WEB Du Bois said: "When you have mastered numbers, you will in fact no longer be reading numbers,.... You will be reading meanings". That is what we intent to happen with **Education 5.0**.

23. Ladies and Gentlemen, we have all wanted our University Education System to produce Industry for us for years, but Education 3.0 is **NOT DESIGNED** to do the same. We concurrently were either not realising it or we were just ignoring this mismatch.

24. We have to understand the consequences, nature and philosophy of defeat and conquest of a people- The consequence can be summarised as **Stripping!** You are stripped of your type of food, your type of clothes, your values and ultimately your confidence. Sometimes, you are deceived to think that its OK to laugh at yourselves and your people and your heritage in general. That is the sign of a defeated people. We have endured over 500 years but lets prevent ultimate annihilation.

25. Africa has had the tragedy of being made to read the wrong manual for a long time and this has to be stopped by Africa herself. Thus, Education 5.0 is our own design manual. Heritage Philosophy is also our own design manual. The fact that Africa is relatively less industrialised compared with other parts of the World is changing and we are changing it.

26. We know “[People are] born ignorant, [but] not stupid. They are made stupid by [a bad education design].”-Bertrand Russell. Lets take our University Education to the level that will make our ancestors proud, ourselves proud, and our unborn children proud through making it the centre of our industrialisation and modernisation agenda.

27. Remember, Liberation by nature and design is an act of culture (Amilcar Cabral). Lets liberate our University education to make it central to development. The infamous Ivory Tower label put on African Universities was a result of mismatch between national needs and our University output. **We are therefore, re[vitalising] the role of Universities in development.**

28. I thank you. Siyabonga, Tatenda