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Is it possible to change the DNA of a Public TVET College?

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DNA

- Corporate DNA
- Organizational Culture
- Building the DNA for a Great College Experience
- The Double Helix A Purposeful Pathway to an Intentional and Transformational Liberal Education
- Desirable Characteristics of a College
- Indicators of A Model Functional College
- 21st Century Learning
- The Inside-Out Learning Model
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- What great Lecturers know about their students
- 20 Classroom Setups that Promote Thinking
- Lessons from Nature: The Lion
Corporate DNA (1)

Visions, values, sense of purpose, mission, challenges, culture, strategy, procedures, structures, history, corporate identity, institution-specific experiences,
Corporate DNA (2)

decision rights, motivating factors, information, actors, ideation, emotion, collaboration ability to innovate, culture is transmitted to generations of employees via that organization’s DNA
Corporate DNA (3)

- DNA can be transformed through the entrance of new people with new ideas and significant differences in organizational performance can be derived from small changes in organizational DNA.

- Preservation of organizational DNA is important to ensure business continuity and persistence, and to prevent control by external influences.

- Branding corporate work environments to clearly reflect the culture of an organization is also to protect the DNA.

- DNA describes the skills, properties, or qualities of an organisation that describe that organisation’s character.

- The set of architectural and spatial characteristics considered by the inhabitants of a city to be constituents of that city’s identity and may include materials and colours, a typical arrangement of scale and architectural forms, building lot size, roof lines, scale of public and semi-public spaces.
Organizational Culture (1)

- Values, behaviors, the unique social and psychological environment

- The collective values, beliefs and principles of organizational members and is a product of such factors as history, product, market, technology, strategy, type of employees, management style, and national culture; culture includes the organization’s vision, values, norms, systems, symbols, language, assumptions, beliefs, and habits

- Organizational culture is an emergence – an extreme complex incalculable state that results from the combination of employees (focus on engagement), the work waste (focus on elimination of waste and increasing value) and the Customer (focus on likelihood of referral)

- Brings leadership, their employees, the work and the customer together for focus without distraction, leading to an improvement in culture and brand.

- Organizational culture is a set of shared assumptions that guide what happens in organizations by defining appropriate behavior for various situations
Organizational Culture (2)

• The patterns of collective behaviors and assumptions that are taught to new organizational members as a way of perceiving and, even, thinking and feeling; It affects the way people and groups interact with each other, with clients, and with stakeholders. It may affect how much employees identify with an organization. Subcultures may be conflicting because each subculture is linked to a different management team.

• Organizational culture is something that characterizes an organization, it can be manipulated and altered depending on leadership and members. Culture is created through communication and symbols, or competing metaphors, is basic, with personal experience producing a variety of perspectives

• Cultures are viewed through objective things such as stories, rituals, and symbols (Traditionalism perspective); a network of shared meanings (interpretivism); and through a network of shared meanings as well as the power struggles created by a similar network of competing meanings (critical-interpretivism);
Organizational Culture (3)

- **Strong culture**, clear values – staff respond to *stimulus* because of their *alignment* or organizational values – well-oiled machines, outstanding execution, belief it is the right thing to do, “groupthink”;

- **Weak culture** – little alignment, *control* must be exercised through extensive procedures and bureaucracy;

- **Healthy culture**: *increase* productivity, growth, efficiency and *reduce* counterproductive behavior and turnover of employees (accept and appreciate diversity, fair treatment, respect, pride, enthusiasm, equal opportunity), strong communication, strong leaders with a strong sense of direction and purpose, ability to compete in industry innovation and customer service, price, lower than average turnover rates, investment in learning, training, and employee knowledge;
Organizational Culture (4)

- Management of culture: stories, rituals and ceremonies, metaphors, symbols, different kind of rites: rituals of passage (new roles), degradation (power taken away from employee), enhancement (public recognition), renewal (improving existing social structures), conflict reduction (resolve arguments), and integration (reawakening feelings of membership);
Organizational Culture (5)

- **Effects:** competitive edge; consistent, efficient performance; team cohesiveness; high employee morale; and strong company alignment towards goal achievement;

- Organizational culture is reflected in the way people perform tasks, set objectives, and administer the necessary resources to achieve objectives. Culture affects the way in which individuals make decisions, feel, and act in response to the opportunities and threats affecting the organization; it affects employee creativity, motivation, reporting of unethical behavior, recruitment and retention.
Organizational Culture (6)

• **Cultural change**: formulate a clear vision, new strategy, shared values and behaviours – the intention and direction for the culture change; display top-management commitment; model culture change at the highest level; modify the organization to support organizational change; select and socialize newcomers and terminate deviants; develop ethical and legal sensitivity;

• **Mergers** and cultural leadership: identity, communication problems, HR problems, ego clashes, inter-group conflicts = cultural differences – requires cultural leadership, cultural innovation and cultural maintenance;

• **Cultural innovation** – creating a new culture (acknowledge the old, set realistic new culture and replace old culture);

• **Cultural maintenance** – integrate new culture, reconciling difference, embodying the new culture (establish, affirm, keep)
Organizational Culture (7)

• **Corporate culture**: sum of the values, customs, traditions and meanings that make a company unique; the character of an organization which influence the ethical standards and managerial behavior;

• **A cultural web**: elements that influence organizational culture: the paradigm, control systems, organizational structures, power structures, symbols, rituals and routines, and stories and myths;

• External [adaptation](#) and internal [integration](#)

• multiple factors that [shape culture](#) is: external environment, industry, size and nature of the workforce, technologies used and the organization’s history and ownership;
Organizational Culture (8)

• Three general types of cultures:
  • Constructive culture: achievement, self-actualizing, humanistic-encouraging, and affiliative;
  • Passive/defensive cultures: approval, conventional, dependent and avoidance;
  • Aggressive/defensive cultures: oppositional, power, competitive and perfectionistic;
Building the DNA for a Great College Experience

• A total learning experience for the duration of studies that will intentionally and purposefully weave the formal lecture room experience into life’s larger laboratory;

• Design an intertwining of academic courses with a wide variety of service learning and other activities:

• Double-helix profile that students create are unique to themselves – weaving lecture room experience into campus, community, local, national and international connections (freshmen – leadership & communication skills;

• Double helix: coursework (curriculum major) and engaged learning (extra-curricular activities);
The Double Helix: A Purposeful Pathway to an Intentional and Transformational Liberal Education

• A truly transformational liberal education considers the totality of students’ lives as the broad palette on which the learning experience is fully realized.

• The academic major plays a central role, but the learning that takes place outside the lecture room is a critical player in this experience as well.

• A transformative education repeatedly exposes students to multiple opportunities for intentional learning through the formal academic curriculum, student life, collaborative co-curricular programming, community-based and global experiences.

• Learner-centric pedagogies means the complete learning environment includes not just the academic core but all learning experiences, especially those that happen outside the classroom. The entire campus is a learning environment that should be intentionally tapped for the total learning experience.
A robust partnership between academic affairs and student affairs is essential to fostering transformational learning – academic staff and SSS officers should work together to complete conceptual mapping of the student’s learning, collaboratively identifying activities inside and outside the lecture room that focus upon and contribute to specifically defined learning objectives;

Provide each student with a compass, a map, and a route through the vast array of available out-of-the-lecture room learning experiences. The final destination would be marked by the student’s achievement of the essential learning outcomes of a liberal education.
The Double Helix: A Purposeful Pathway to an Intentional and Transformational Liberal Education (3)

Metaphor of the double helix helps to visualize the proposed relationship between the major (traditional academic major) and the co-major; A ladder that the student ascends while progressing toward the desired learning outcomes. The “rungs” of the double helix ladder represent the programs shared by both the major and the co-major, and each rung is connected to the major and the co-major strands. An ascending spiral, the double helix also represents the expansion of experiences and an increasing level of cognitive complexity. At each turn of the spiral, students engage subjects in multiple ways.

The spiraling strands representing the academic major and the student co-major form the backbone to the transformational student learning totality, the rungs of the double helix critically represent the collaborative partnerships between academic affairs and student affairs.
The Double Helix: A Purposeful Pathway to an Intentional and Transformational Liberal Education (4)

- Student Innovation
- Tutoring
- Student Governance
- Student Employment
- Athletics
- Co-operative Education
- Community Learning
- Undergraduate research
- Academic Advising
- Study Abroad
- Student Club
- Developmental Advising
- Learning Community
- Orientation

To Institutional Learning Outcomes

Co-major
Theme-based

Major
Discipline-based
Learning Outcome Models (1)

- **Learning Reconsidered**
  - Cognitive complexity;
  - Knowledge acquisition, integration and application;
  - Humanitarianism;
  - Civic engagement;
  - Interpersonal and intrapersonal competence;
  - Practical competence; persistence and academic achievement
Learning Outcome Models (2)

- **College Learning for the New Global Century**
  - Knowledge of human cultures and the physical and natural world through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts;
  - Intellectual and practical skills, including inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork, and problem solving;
  - Personal and social responsibility;
  - Integrative Learning
Learning Outcome Models (3)

• **Wabash National Study of Liberal Arts Education**
  • Integration and Learning;
  • Inclination to inquire and lifelong learning;
  • Effective reasoning and problem solving;
  • Moral character;
  • Intercultural effectiveness;
  • Leadership;
  • Well-being;
Desirable Characteristics of a College

• What are the desirable characteristics (DNA) of a College?

• Why can’t education as a system, refashion itself as aggressively as the digital technology that is causing it so much angst? The fluidity of a given curriculum should at least match the fluidity of relevant modern knowledge demands. Maybe the first step in the pursuit of an innovative and modern approach to lecturing and learning might be to rethink the idea of curriculum as the core of learning models? Should we lecture content at all or should we teach students to think, design their own learning pathways, and create and do extraordinary things that are valuable to them in the place?

• Are we celebrating college success instead of people success?

• How can a college call it self “good” when it produces students that don’t know themselves, the world, or their place in it?
Desirable Characteristics of a College (1)

A Good College:
• Improve the community it is embedded within and serves;
• Adapt quickly to human needs and technology change;
• Produces students that not only read and write, but choose to do so;
• Sees itself;
• Has diverse and compelling measures of success – measures that families and communities understand and value;
• Is full of students that don’t just understand much, but rather know what’s worth understanding;
• Knows it can’t do it all, so seeks to do what’s necessary exceptionally well;
• Improves other colleges and organizations it’s connected with;
• Is always on and never closed;
• Makes certain that every single student and family feels welcome and understood on equal terms;
• Is full of students that not only ask great questions, but do so with great frequency and ferocity;
Desirable Characteristics of a College (2)

- Changes students; students change great colleges;
- Understands the difference between broken thinking and broken implementation;
- Speaks the language of its students;
- Doesn’t make empty promises, create noble-but-misleading mission statements, or mislead parents and community members with edu-jargon. It is authentic and transparent;
- Values its lecturers, administrators and parents as agents of student success;
- Favors personalized learning over differentiated learning;
- Lectures (teaches) thought, not content;
- Makes technology, curriculum, policies, and its other “pieces” invisible;
- Is disruptive of bad cultural practices. These include intolerance based on race, income, faith, and sexual preference, a-literacy, and apathy toward the environment;
Desirable Characteristics of a College (3)

• Produces students that have personal and specific hope for the future that they can articulate and believe in and share with others;
• Produces students that can empathize, critique, protect, love, inspire, make, design, restore, and understand almost anything – and then do so as a matter of habit;
• Will erode the societal tendency towards greed, consumerism, and hording of resources we all need;
• Is more concerned with cultural practices than pedagogical practices, students and families than other schools or the educational status quo;
• Helps students separate trivial knowledge from vocational knowledge from academic knowledge from applied knowledge from knowledge-as-wisdom;
• Will experience disruption in its own patterns and practices and values because its students are creative, empowered, and connected, and cause unpredictable change themselves;
Indicators of a Model Functional College (1)

- Institutional Management & Governance
- Financial Management, Human Resource Management & other Corporate Services
- Curriculum Delivery
- Professional Development of Academic Staff
- Student Support Services at pre-entry, on-programme and exit
- Infrastructure, Facilities and Equipment Management
- Partnerships, Linkages and Relationships

How will these indicators reflect the DNA of a College?
21st Century Learning

- Inter-dependent
- Learner-Centered
- Adaptable
- Data Rich
- Transfer-by-Design
- Increased Transparency
- Visibly Relevant
- Media-Driven
- Diverse
- Personalized
- Project, problem or enquiry-based

Teach Thought
21st Century Learning Model

- Interdependent
- Increased transparency
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- Adaptable
- Data Rich
- Transfer-by-design
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- Little is in isolation. Increased transparency between colleges and local communities. Media and assessment relate, content areas converge, technology supports learning, not simply instruction.

- Rethink traditional lecturer-learner roles. Learner as data-holder, designer and decision-maker. Nurtures role of play, internal learning and creativity. Support wide range of academic success. Defines success in terms that support learner. Learner benefits from flexible, diverse, differentiated support models.

- The opposite of scripted and homogenized. Ownership by a stakeholders – learners, lecturers, etc. Responds naturally and meaningfully to data and emerging best practices.

- Persistent and highly consumable data and planned data sources that allow for easy revision of curriculum, instruction and resources.

- Learner constantly adapt, revise and synthesize information using old learning in new unfamiliar, meaningful ways.

- Learning is personalized by platform, interest, assessment results, self-selected pace, etc.

- Causing personal or social change, socially collaborative, visible products/projects/artifacts, natural contexts.

- In terms of media, instructional/assessment strategies, audiences, collaborative approaches, technology use, data sources, etc.
What great Lecturers know about their students

Good

1. Home language
2. Critical medical needs
3. Giftedness and other services
4. Living situation
5. Grade average & academic strengths
6. Favorite subjects
7. Reading levels & reading habits
8. How they respond to accountability
9. Relative strengths and weaknesses as a student
10. Lecture room citizen habits
11. Their academic expectations
12. How to motivate them
13. Trend of general academic progress over last 1-3 years
14. Data from standardized assessments
15. How to help them to do well in class

Great

1. Critical thinking habits
2. Ideal learning environment & circumstances
3. Which challenges they’ll respond to most powerfully
4. Their personal histories
5. Personal strengths
6. Insecurities about college
7. How they respond to structure
8. How they respond to open-endedness
9. What college means to them
10. Digital citizenship habits
11. Intellectual and human affections
12. How to help them find their own motivation
13. View of self as a reader, writer, and a person
14. Progress towards mastery of personal goals
15. How to help them succeed as people
Lecture room setups that promote thinking

Learning is an ecology. Lecture room design impacts lecture room management impacts curriculum needs impacts lesson and unit design impacts lecturer personality impacts technology needs impacts literacy strategies and lecturing strategies, and so on. The lecturer have to adapt the way they plan instruction and design learning experiences.
20 Lecture room Setups that Promote Thinking

1. Maker Spaces
2. Geometric Mix
3. Differentiation Stations
4. Fishbowl
5. One Group & 4 Rows
6. Two Groups & 2 Rows
7. Function Pods
8. Google Room
9. Two Sides
10. Giant Oval
11. Lecturer in the middle
12. Standing Desks
13. Horseshoe
14. Two Circles
15. Rotating Groups
16. Middle Circle, Outer Circle
17. Learning Labs
18. A Learning Studio
19. Open Square
20. Fluid
Geometric mix
Two groups and two rows
Lessons from Nature: The Lion
Lion

• The fiercest and most magnanimous of the four footed beasts (Samuel Johnson’s Dictionary of the English Language, 1755)

• Latin (Leo), Ancient Greek (leon), Afrikaans (Leeu), Swahili (Simba), isiNdebele (Indua), isiZulu/isiXhosa (Ingonyama), seSotho/seTswana (Tau), Shona (Shumba), Shangaan (Nghala), Venda (Ndau), Nama/ Damara (Xamm), Herero (Shitona), Ovambo (Shinga)

• Late Pliocene (5.0-1.8 million years ago) – fossil evidence of earliest lion-like cat – Laetoli (Tanzania, East Africa)

• Middle Pliostocene (800-100,000 years ago) – migrated out of Africa into Europe, Asia, North America as far as Peru – most widespread large terrestrial mammals during the Late Pliostocene (100-10,000 years ago) – recent genetic studies two distinct lineages of lion – Holarctic cave lion and the modern lion – inhabited western Eurasia

• Modern lion population replaced older population in Africa & south-western Eurasia (ca 55-200,000 years)

• Twenty-four sub-species of lion based on external morphological difference in different geographical regions: body size, coat thickness and colour, mane size and colouration as well as the extent of retention of juvenile spots into adulthood.
Lessons from Nature: The Lion
Conclusion

1. Change the DNA (culture, physical layout, etc.) of TVET Colleges;
2. Renew the DNA (culture) of TVET Colleges;
3. Take time to introduce and orientate new entrants (students and staff) into the DNA (culture) of TVET Colleges;
4. Ensure that the DNA (culture) strategy is in place;
5. Review the understanding and commitment to the DNA (culture) regularly and change/adapt when and where needed;
6. Introduce new DNA (culture) into the TVET College;
7. Embrace contributions to improve the DNA (culture) of the TVET College
Thank you