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Challenging Culture through Transformation: A case study of a University of Science and Technology in Namibia

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Abstract
Academic institutions exhibit complex relational structures with distinctive cultures and work climates. Transformation in these institutions is triggered by internal development, and adaptation because of changing environmental conditions. When culture is especially viewed as an internationalization posture, it requires a highly articulate leadership to carry the institution through the change process. Consequentially, the change process has to be supported by institutionalized strategic planning that is representative, in order to optimally utilize the environment within which it occurs (Mirvis, 1990). This paper explored factors that were employed by a Polytechnic to change to a more academically enhancing culture, of a University of Science and Technology (UST). It looks at the extent to which strategic planning and re-aligned faculty articulation accelerated cultural change. Using the first, second and third tares schematically, in which: classes are nested within departments, departments are nested within faculties and faculties nested in the institution, this paper suggests that an overall integration at a broader level is required to sustain superior performance during and after transition. Because institutions of higher learning exist as conglomeration of autonomous subunits with a high degree of specialization in disciplines (Becher 1981; Clark 1983; Dill &Sporn 1995b; Clark 1995), a highly spirited leadership is necessary to effect a landmark culture change. A greater purpose was to demonstrate that accelerated culture change is attainable in an academic institution. Whereas the significance of such change comes out of spirited leadership, a bigger potential impact is that academic institutions can learn and transform.

Keywords: university culture, transformation, multilevel, poly, integration

INTRODUCTION

Transforming academic institutions exhibit myriad scenarios in terms of perceived impact on culture change and relational experiences between leaders, administrators, academics and students. Maasen (1995) noted specifically that, culture in higher education management was an important area of research recognised only by a few authors. This is probably because tertiary organizations have unique academic artefacts, characteristics and beliefs through which culture develops (Dill, 1982). Culture in tertiary institutions is shaped by complex relationships among and between students, lecturers, administrative and support staff. Becher (1981), one of the few authors on education organization argued that discipline was however, the core dimension for differentiation and for the development of such specific set of cultures. Although culture is multidimensional, it is the predominant values and practices that ultimately define the strength of a culture. A strong culture is open to debate and discussions and often seeks alternative views in order to improve. On the contrary, a weak culture is more inward looking, internally oriented and suitable in high environment stability.

To effect change in a tertiary institution is complex and often compounded by systemic multilevel academe structures in which change has to permeate. For instance, at a micro level, students are influenced by a lecturer, who is in turn influenced by a department's culture. At a macro level, departments are influenced by faculties which are in turn influenced by the top management echelon of the institution. Although the degree of command in terms of duty assignments, job expectations and work satisfaction is similar to industries such as manufacturing, academic institutions have in addition, academic freedom which compels them to exist as relevant knowledge hubs in which learning is primary. They are people oriented in which culture dimensions are hard to evenly access. Even at the very basic level1 class ,"of lecturer-student relation", effecting culture change can either be accelerated or easily confounded by complex interpersonal or environmental factors which may be completely latent to both. The underlying point here is that, a level 1 class relationship goes beyond provider-client association. It is based on stewardship and mentorship in which benefits cannot be adequately defined in terms of profits. Hence, any proposed culture change would have far-reaching consequences on teaching and learning which, in this case, is the core and basic business of any tertiary institution.

This paper focused on the transformation strategies employed by Polytechnic (Poly)to convert into a University of Science and Technology (UST). First, it explored the existing cultures and norms of the Poly and second, discussed emergent cultural dimensions using a three thronged approach centred on teaching and learning, institution operations and expected culture outcomes. Teaching and learning was paged at level 1 class, institution operations at level 2 class while expected culture outcomes at level 3 class. The definition of culture in this paper emphasizes values and beliefs of the Poly members: heads of departments, deans and senior management who were the custodians of institutional power.

In line with Deal & Kennedy (1982), we believe that values and beliefs are developed in a historical process and transmitted by language or symbols but they can also be unsystematically constructed. Like any other academic institution, the Poly operated on the duality of accumulative (corporate memory) as well as paradigm (constructive) knowledge. Accumulative knowledge is explicit and exists in systems and is developed over time whereas paradigm knowledge is largely tacit, and rapidly constructed (Random House Dictionary of the English Language). The later mirrors a learning organization in which there is constant renewal and the organization readily taps into the potentials of its employees. Consequently, weak cultures rely mostly on accumulative knowledge while strong cultures depend largely on constructive knowledge. However, irrespective of the predominant culture, the change context is critical in order to remain focused, because cultural shifts are expected to cause random effects within the hierarchical structures, capable of accelerating, slowing and or dissuading a transformation process.

Problem Statement

Academic institution cultures are difficult to assess and change. This problem stems largely from institutional hierarchical structural orientations which develop against a backdrop of numerous courses, research aspects, class groupings and many support programmes. For instance, classes and even courses have their own climates and influence students and lecturers in their own right. This is expected as the dominant academic practices differ among institutions, faculties, departments and classes. However, identifying common critical factors which underlie superior success and types effective management practices which mirrors loftier university culture remain a challenge. Although vast and seminal literature can point to general academic cultures and management frameworks, little or nothing discusses their actual instances schematically. For example, the instance of adapting a culture that is more academically enhancing and at the same time attaining management etiquette to underpin corresponding change requirements in the face of social and economic complexities has been a daunting problem. When seen in the context of multilevel analysis, discussing university culture uniformly becomes even more delineated from existing literature.

This paper attempts to analyse the culture change strategies used by the Poly to transform from a Technikon – type of institution to a University of Science and Technology (UST) as an instance and a case study. Although culture change was not a prerequisite to becoming a university, the Poly utilised the transformation to accelerate the change philosophy while taking advantage of its fourth strategic plan. Most important, the change strategy targeted all the three tares, suggesting a schemata approach: from class to departments and faculties as well as top institution management echelon.

Multilevel Academic Structures

Multilevel structural hierarchies are layered between complex interpersonal relationships. Such hierarchical structures assume, in this case, that data are nested in a way that students are members of classes, classes are members of departments which are members of faculties and these are in turn members of the institution. A simple level 1 class would define students in class associated with a lecturer, conditioned to a subtype of learning typology. At level 1 class only, strong interpersonal characteristics can be uncovered which can form part of the visible institution work climate and culture. Thus universities articulate certain characteristics that need to be contextually understood (Birnbaum 1988; Baldridge *etal.*1977) which individually constitute the underlying culture type.

First, at level 1 class, there may be differences in objectives, standards of teaching and research approaches which may make the goal achievement ambivalent. Kotter&Heskett (1992) however noted that, a strong culture portrays a high degree of congruence between the values and goals of organization members, the hierarchical integration and the strategies. Strength implies the degree of fit between cultural values, structural arrangements, and strategic plans (Bleicher 1991; camera 1991). Weak cultures are characterized by loosely linked subunits or groups with diverse subcultures that can be contradictory to each other. For sectors such as manufacturing, it is easy to define segmented and routinized procedures while in academic institutions in which diversity is encouraged,it is difficult to have one adequate standard for delivering services. We however, believe that a larger integration is required at the top management level to manage context. .

Second, university professionals and professors are experts with strong desire for autonomy and freedom. This often builds another level of complex task to make coordinated initiatives at governing and managing through the different tares. Dension 1990; Kotter&Heskett 1992 noted however that, in a long term, specific kinds of organizational culture are more enhancing but culture must however, fit its context.

Third, university decision making processes are often long and complicated, largely, due to academic and administrative interest groups. Conflicts may arise simply because administrators may tend to extremely concentrate on policy and thus overlook critical faculty needs. At the same time, faculty may concentrate too much on content and therefore, would have less experience with management decision-making procedures.

For administrators as well as researchers this work can help to explain the implications of university culture for managing change.

A level 2 class can be depicted by department type while level 3 classes could be faculty type. Academic culture is thus not easily defined and change is governed by strong common focus and intense communication of internal development as well as adaptation processes. Cameron (1984) pointed out that organizational development is change that is motivated through internal environment whereas adaptation focuses on the external environment. Adaptation is often premised on finding new and more competitive opportunities, less public funding and evaluation of self-effectiveness (Dill &Sporn 1995a). While both changes aim at positioning institutions for internationalisation, superior performance requires effective strategic planning and tactical changes along with expected practical cultural outcomes. In the absence of strategic planning, shared vision and constant renewal, universities become vulnerable to their own environments, especially withpervasive and rapidly changing external demands. For instance, acute changes in political, economicor technological conditions can have a strong knockdown effect on university performance. Hence, institutions of higher education should monitor and use such anticipated changes for tactical and strategic planning.

Culture Analyses

In general, culture can be analysed by observing behaviour patterns, listening to organizational stories, or conducting in-depth interviews (Masland 1985; Cameron & Freeman 1991). Studies on culture are usually conducted within a context of a typology. This research adopts but further instantiates the Schwarz (1989) and Schein (1985) which illustrates relationships between university culture and strategic management as depicted in the figure 1 below. The basic assumption is that, universities are complex social organizations that are dependent on external environments and that culture plays a crucial role for strategic management.

The impact of external environments and internal university structures are strong influencers of university culture. *This paper however, suggests that it is the academic class layers and relational schemas that ultimately define cultures*. An effective strategic management process would thus seek congruency between the influencer variables and class factors. This in turn defines the congruency approach and is based on feedback process between culture and management (Schwarz 1989; Schein 1985).

Ulrich (1984), Kotter&Heskett (1992) further noted that productive cultures in institutions of learning are based on the following functions:

- Identification (who are we?)
- Motivation, legitimization (why do we do the work?)
- Coordination (with whom do we work?)
- Development (what are the perspectives?)

This is supported by Dension (1990); Kotter&Hesketthat(1992) who stressed that if all or most of these functions are supported by culture, an organization can easily adapt to environmental changes and attain quality innovation.

Like other institutions of higher learning, the Poly operated on a multilevel academic structure. Its cultural orientation stemmed from its values, beliefs and historical norms. Although little or no research had been conducted to showcase the predominant culture orientation of the Poly, the institution had had a strong teaching background (at level 1), supported by centres of excellence such as the "centre for teaching and learning (CTL)", a unit which facilitated seminars and workshops on best practices in teaching and learning. Separately, the Poly completed its fourth strategic plan(PSP4) in 2013. The CTL was one of the conduits that were strategically and viciously used by the Poly to pass on the change mantra to staff members.

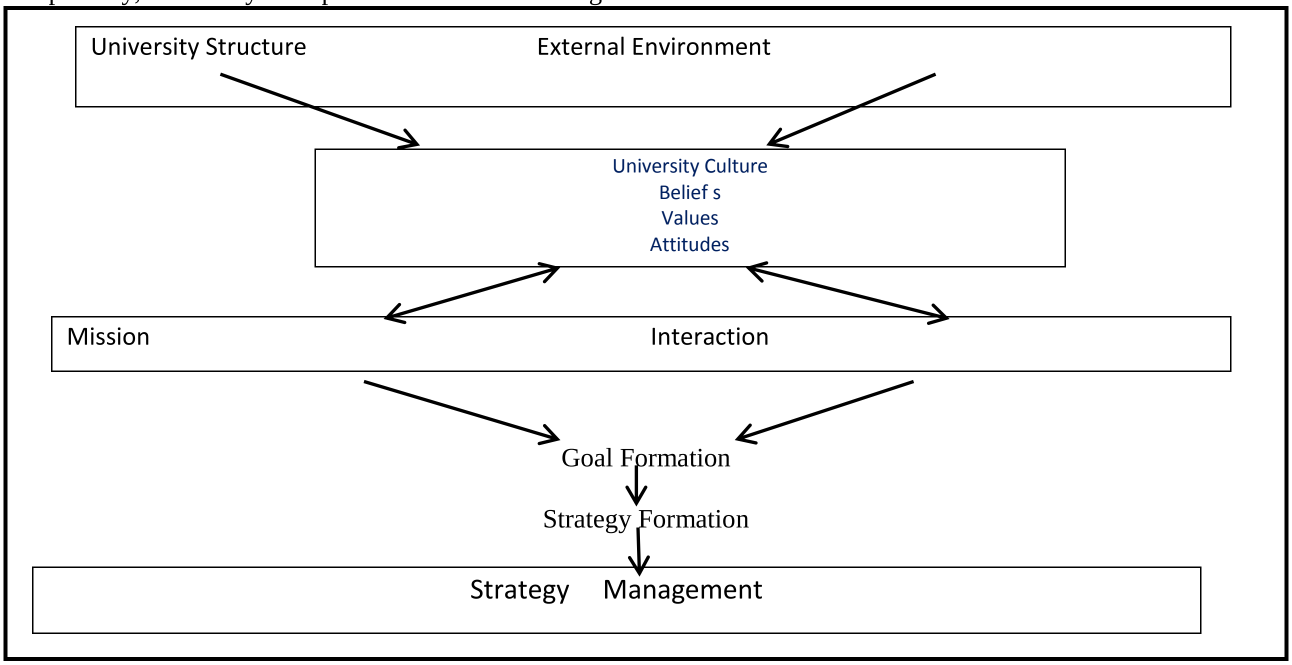

Figure 1. Relationship between university culture and strategic management (Schwarz 1989; Schein 1985)

METHOD

The cultural change process at Poly was triggered by the need for institutional growth as well as external factors such as inadequate funding and the affinity for internationalization. These challenges were met with two factors; the fourth institutional strategic plan (PSP4) and transformation from Poly to UST. Culture in this research was largely measured through observing patterns, surveys, as well as success stories. Data were collected stepwise, through questionnaires and interviews. The planning department facilitated all the meetings and distribution of the questionnaire instruments, both online and hard copies. In conformity to the multilevel nesting structure outlined earlier, data collection targeted heads of departments, heads of schools (Deans), and extended management. To further cater for level 1needs, a different questionnaire instrument was constructed which focused mainly on teaching and classroom management.

Atlas Ti software was used to analyse the data qualitatively. Qualitative data provide *labels*, or *names*, for categories of like items, i.e. a set of observations where any single observation is a word or code that represents a *class***.** Initially, documents containing the data were formatted as primary documents from which the coding was done. Frequency analyses were then conducted and the output captured in Tables.

Additionally, code co-occurrence analyses were conducted to explore associations in meaning of the variables under the study.

Questionnaire Instrument 1

Primary questions in the first questionnaire instrument indicated how extended management viewed change [*P1*], whether there was a change process [*P2*], what else could be done to improve change [*P3*], the main components of change [*P4*], whether change had started [*P5*], how centres/schools could transform [*P6*], necessity for change [*P7*], preparing leaders [*P8*], staff awareness of change [*P9*], how school's visions could contribute to UST vision [*P10*], leading by example [*P11*], support needed [*P12*]. All these are captured in the change artefacts concept in figure 1.

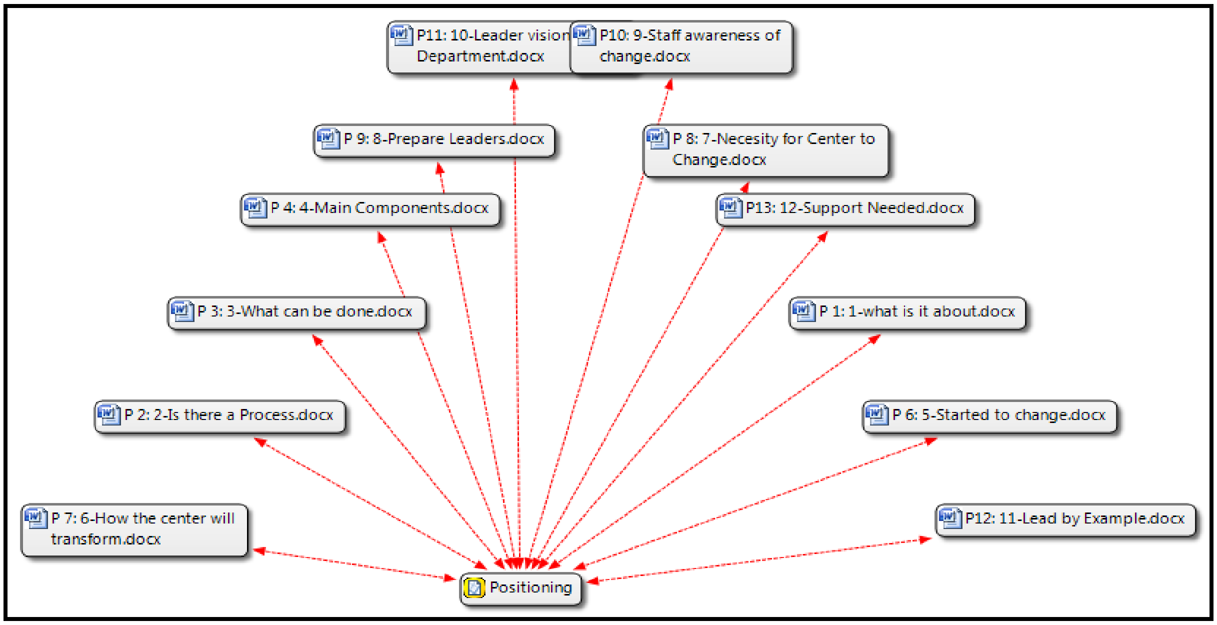

*Figure 1*Main codes for change concept at Poly

Questionnaire Instrument 2

Questionnaire instrument 2 focused on progress made on the change management process and areas of improvement. Snippets from the 12 questions were extracted which formed the basis of the primary documents (PD) listed as *P1-P12* and described the progress envisioned by **extended management**.
Code occurrence of words, focused on **activities**, meaning and the context in which reasoning followed. The main themes included: *maintaining facilities***,** ***setting examples***, *more benchmarking, continued communication, increased student support, demonstrating change, improving academic qualifications, efficiency, more coordination,* ***group tutorials***, ***more focus***, ***awareness campaign***, *staff development, promote professionalism,* ***increased research clusters***, *more staff involvement in research and* ***full engagement***. Activities define climate which shape spirits in the work environment.

Questionnaire Instrument 3 (Teaching and Learning)

The third questionnaire focused on the methods employed by lecturers in classroom teaching and learning. The main themes included: state of the class room facilities, interactions, teaching, class sizes, tools used in class, level of students, feedback, shared materials and shared experiences.

Limitations

The research did not segment lecturer respondents based on rank. The rank element could have highlighted the differences in teaching methodologies based on seniority and experience. The results are thus premised on the assumption that seniority and experience did not have significant influence on the learning outcomes from the teaching methodologies that were employed.It would also have been more informative to conduct a longitudinal research and truck successes but this can be considered for future work.

RESULTS

The results regarding what needed to change, what culture orientation defined the Poly and what teaching approaches existed and how this could be changed are described. Further, the improvements as a result of the change process are discussed. Results in figure 3 revealed that management viewed change as mandatory and was centred on change of philosophy. This included transforming and reforming from Poly and charting a more academically enhancing culture. This can be seen in most of the snippets in figure 3. The emphasis was on complete change and detailed findings are tabulated in table 1 and consequently explained.

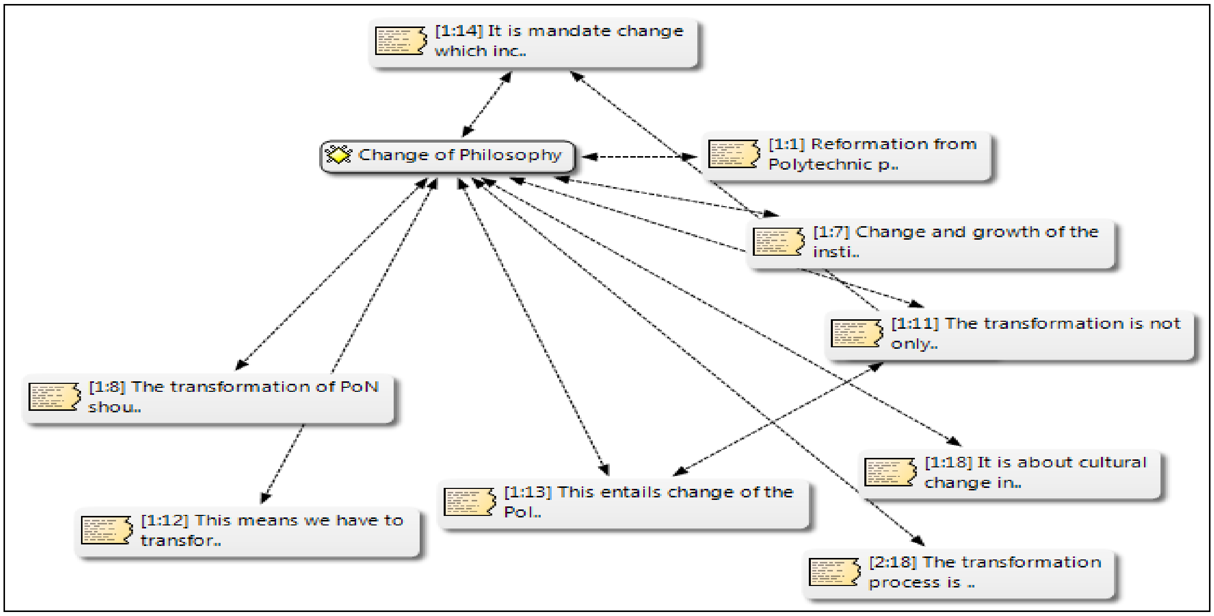

Figure 3 change of philosophy

Code co-occurrences [This establishes relationships between perceptions]

In **table 1** below, code co-occurrences occurred between: **Change is visible** and { Change of Philosophy, Changing valiantly, Information not reaching Staff, Needs More Coordination and Systems Change}. This implies that extended management members who believed **change was visible** also realised that the philosophy of the Poly was actually changing and noted that change was a process and the institution was changing valiantly. They also believed that information was not reaching staff member as much as they would have desired. As such more coordination was needed and that the entire system was to be involved. **This addressed the question of how the institution was transforming "is there a process?"**

Extended management believed that **changing philosophy** was about {**governance**, **improved performance** and **ultimately transforming individuals}**. This is reflected in the code occurrence in row 2 in table 1 below. There was code co-occurrence between **Clarity** (5) and {engaging the entire community; clarity and focus; clarity and Market culture (Open); clarity and need more coordination and clarity and research}. This could mean that with a **clearly defined culture**, community engagement could be expanded but coordination was vital. It would also imply that clear focus can facilitate transition into a more market oriented culture.

The link between **engaging the entire UST community** (9) and {clarity, continued communication, focus, lack of student involvement, market culture, research} can imply that UST community engagement is about clarifying and continued communication. It is also about focus and getting students on board and doing research. **This addressed a question "what can be done to improve the change process".**

Focus (11) was related to {clarity, information not reaching staff, market culture, needs more coordination, research}. This implies that in the transformation, there is focus on coordination and research. But there is emphasis on information not reaching staff adequately. This again calls for more coordination.

Team building is related to (21) {enforced delegation framework}. This is very critical to system change and is a definite way of making change visible. Extended management believed in team building through delegation framework as a way of changing schools, centres and departments. **This addressed the question "what is necessary for your centre or school to transform".**

Table 1: code occurrence on cultural factors

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Change is continuous	0	0.13	0	0	0	0	0	0	0	0	0	0	0	0.06	0	0	0	0	0	0	0	0	0
2 Change is visible	0.13	0	0.04	0.06	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0.05	0	0.06	0	0	0
3 Change of Philosophy	0	0.04	0	0	0	0	0	0	0	0	0	0.14	0.09	0	0	0	0	0	0	0	0	0.14	0
4 Changing valiantly	0	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Clarity	0	0	0	0	0	0	0	0	0.07	0	0.27	0	0	0	0	0.05	0	0.07	0.06	0	0	0	0
6 Continued communication	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Culture Change	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0	0	0	0	0	0	0
8 Enforced delegation Framework	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17	0	0
9 engaging the whole community	0	0	0	0	0.07	0.1	0	0	0	0	0.14	0	0	0.08	0.17	0.07	0	0	0.1	0	0	0	0
10 Expectations Have Changed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.33
11 Focus	0	0	0	0	0.27	0	0	0	0.14	0	0	0	0	0	0	0.08	0	0.14	0.13	0	0	0	0
12 Governance	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0
13 Improved Performance	0	0	0.09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Information not reaching Staff	0.06	0.04	0	0	0	0	0	0	0.08	0	0	0	0	0	0.1	0	0.1	0.08	0	0	0	0	0
15 Lack of student involvement	0	0	0	0	0	0	0	0	0.17	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
16 Market Culture	0	0	0	0	0.05	0	0.08	0	0.07	0	0.08	0	0	0	0	0	0	0	0.07	0	0	0	0
17 More departmental meetings	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
18 Needs More Coordination	0	0.05	0	0	0.07	0	0	0	0	0	0.14	0	0	0.08	0	0	0	0	0	0	0	0	0
19 Research	0	0	0	0	0.06	0	0	0	0.1	0	0.13	0	0	0	0	0.07	0	0	0	0	0	0	0
20 Systems Change	0	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Team Building	0	0	0	0	0	0	0	0.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Transforming Individuals	0	0	0.14	0	0	0	0	0	0	0	0	0.08	0	0	0	0	0	0	0	0	0	0	0
23 Yes to leading by example	0	0	0	0	0	0	0	0	0	0.33	0	0	0	0	0	0	0	0	0	0	0	0	0

Teaching and Learning

Captured in table 2 below are the super code frequencies of how lecturers responded to teaching and learning questions.

Table 2: Teaching and learning (TL)

	TL1		TL2		TL3	
Super Codes	Occurrences	Frequency	Occurrences	Frequency	Occurrences	Frequency
Demonstration	6	8%				
Facilitation	15	20%				
Interaction	16	22%				
Teaching	24	32%				
Class size			6	12%		
Tools			13	26%		
Level of students is low			9	18%		
Infrastructure			7	14%		
Lack of Feedback			5	10%		
Materials are shared					11	58%
Shared Experiences					7	37%

Super Codes	TL4 Occurrences	Frequency	TL5 Occurrences	Frequency
Group Discussions	24	61%		
Interactions	9	23%		
Scenarios	4	13%		
Language Barrier			5	29%
Level of Student is Low			3	18%
Infrastructure			4	24%

Under TL1 (**What teaching approach are you using**), results revealed that teaching was still the most predominant method of conducting classes at the Poly (32%). There was however, a tremendous shift as lecturers were moving towards interaction (23%) and facilitation modes (20%). This can be explained partly by the emphasis on student centeredness in presentations by CTL. A large number of lecturers were however, caught in between **facilitation and teaching** (interaction) which can be partly explained by the lack of a common teaching methodology.

Under TL2 (**What are the impediments in your delivery of cause material**), results revealed that the lack of channels to deliver knowledge in classrooms is an impediment (26%). These included projectors, **access to internet by students** etc.

Level of students {*prior knowledge*} (18%) was perceived to be low, meaning that students who were admitted in some courses could not comprehend the lectures due to their poor education background. This is common in Sub Sahara Africa, especially in countries where the study of science and mathematics was not encouraged.It could also mean that the courses were not paged at the right level and therefore the content was overwhelming for the students. This may have led to the factor such as: (lack of **feedback from students** (10%) which indicates that there was generally lack of response from students. This can further highlight the causes of high failure rates in certain courses.
Infrastructure (14%) was also a strong indicator of some of the impediments faced by lecturers in certain course. Some lecture buildings were far-spaced and students walked from one campus to another resulting in loss of time. Smaller classes with large number of students (12%) were also an impediment because students often run out of sitting space. When students are divided into smaller groups and taught by different lecturers, it can again cause problems because **coordination becomes difficult**, in terms of fair setting of tests and exams as well as inconsistencies in content delivery. This problem is however, being addressed by the construction of more lecture buildings.

Under TL3 (**What methods do you employ to manage bigger classes that are shared**) results revealed that lecturers shared materials (58%) and to a less extent individual teaching experiences (37%). This is however very difficult if they (lecturers) had huge workloads.

From Table 2 above: under TL4 (**The best ways to handle large classes**), results revealed that lecturers relied mostly on group discussions (61%). They also somehow interacted with students (23%) and further used scenarios (13%) in lecture presentations. Table 3 under TL5 (**Some of the major problems lecturers faced in their classes**) revealed that **language** was the greatest barrier to knowledge delivery (29%). This means that a lot of students had difficulties in writing constructive English and hence they were unable to express themselves accurately. Infrastructure (24%) and the level of students (prior knowledge) (18%) were the other predominant challenges on this construct.

It should be noted despite the low percentages in most scores the Poly was very competitive compared to other higher academic institution in the region.

Table 3 reveals that there was code co-occurrence between “agriculture” and “practical” which simply implies that students taking agriculture courses are required to do practices.

There was an interesting code co-occurrence between “bad-timetabling” and “non-functioning tools”. This reveals that there were classes which were timetabled in rooms without properly working lecture aids such as boards and projectors. This would make it very difficult for the lecturers to deliver the courses effectively. For example students seated at the back of a huge lecture room may not see what is being written in front. The lecturer may also not be able to go round the lecture room if he or she was busy writing the most of the time.

Teaching by giving “examples” had a code co-occurrence with “teachers” seem to imply that lecturers who gave example were more of teachers than lecturers. Giving “scenarios” had code occurrence with “group discussion” which could mean that lecturers who presented scenarios were likely to encourage group discussions in class. This is more likely to happen in large classes.

Table 3 Code occurrence on teaching and learning

	Agriculture	bad timetabling	Examples	group discussions	Infrastructu re	Interaction	Non functional tools (equipment)	Practical	Practice	Scenarios	Teaching	Tools
Agriculture	0	0	0	0	0	0	0	0.06	0	0	0	
bad timetabling	0	0	0	0	0	0	0.5	0	0	0	0	
Examples	0	0	0	0	0	0	0	0	0	0	0.07	
group discussions	0	0	0	0	0	0	0	0	0	0.04	0	
Infrastructure	0	0	0	0	0	0	0	0	0	0	0	0.0
Interaction	0	0	0	0	0	0	0	0.03	0	0	0.12	
Non functional tools	0	0.5	0	0	0	0	0	0	0	0	0	
Practical	0.06	0	0	0	0	0.03	0	0	0.06	0	0.05	
Practice	0	0	0	0	0	0	0	0.06	0	0	0	
Scenarios	0	0	0	0.04	0	0	0	0	0	0	0	
Shared experiences	0	0	0	0	0	0	0	0	0	0	0	
Teaching	0	0	0.07	0	0	0.12	0	0.05	0	0	0	
Tools	0	0	0	0	0.07	0	0	0	0	0	0	

The code occurrence Table3 indicates the association between codes. A zero entry is an indication of the lack of association between two constructs being compared.

It is more likely that lecturers who had a teaching approach often interacted with students and to some extent gave practical examples as well. Finally, "tools" had co-occurrences with "infrastructure". This can be explained by the fact that, usually, poor infrastructure is associated with non-functioning tools. On the contrary, it would mean that equipment was simply not maintained although the infrastructure was in excellent condition.

DISCUSSION

Institutions do not only represent past experiences through institution memory but also emergent values and practices, especially in transitioning time, which collectively shape future cultures. Regarding the dimension of culture, the Poly embarked on a *strong culture* during and after the transformation. This was evidence from the forums and meetings conducted, in which the current survey questionnaires were used. The forum drew on the expertise within the institution to assist management with the formulation of the new academic structure, the formulation of research niches, establishing the nexus between teaching and research, and defining the institution's rationale and approach to internationalization. The forum met on a monthly basis.

Areas of concern were identified around inconsistencies in teaching methodologies, dysfunctional teaching aids in some lecture rooms, and the lack of prior knowledge in some students. However, the institution acted swiftly to address some of these challenges, for example by reinforcing tutorial systems, setting a student reporting system and introducing an education certificate course to staff members, to strengthen pedagogy.

This research reveals that, in principal, academically enhancing cultures at Poly were centred on, *promoting professionalism*, increased *student support*, efficiency, *enhanced research*, student feedback, enforced delegation framework, *coordination and strengthened partnerships*. It is evident that the culture change was precipitated mostly from the momentum around the PSP4 which might have created an even higher expected academic standard. Wischnevsky (2004) argued that organization leaders are more likely to act if they perceive a gap between the actual level of performance and internal or external benchmark or if there are changes that require their action. Prior et el, (2008) similarly argued that the knowledge of mismatch, between the actual and desired states, tend to increase the likelihood that leaders will engage in major organizational change initiatives.

It can be observed that the open discussions and increased communication was encouraged through heads of department and steering committee forums. Having adopted a proactive approach, the Poly preempted certain issues that may have presented challenges to staff during the change process. For example, at the heads of department forum, participants discussed and agreed to solutions from the anticipated challenges, mostly at level 1. Unresolved challenges were presented to the extended management at level 2 and sometimes taken to the steering committee at level 3. The extended management met three times a month to discuss and clarify issues pertaining to the planning process and the strategic direction while the steering committee met every fortnight.

At level 2, the change of philosophy appeared to have been the central drive to the transformation process. This was reflected in the snippets that strongly supported a holistic and complete shift. In order to carry the change philosophy, factors such as **professionalism**, **efficiency**, ***enforced delegation framework and increased feedback*** emerged as critical. The factors further, included ***engaging community***, continued communication, ***strengthened partnerships***, and **increased financial support.** Transformational change can be intentional (Kristi & Branch, 2004). Beer &Nohria (2000) argues that the goal of the intentional organizational change, typically, is to make rapid improvements in economic value while simultaneously creating an organization whose structure, processes, people, and culture are tailored appropriately for its current mission and environment and positioned to make the next round of needed change.

To achieve meaningful change, coordination and communication were critical. The mission and vision of the institution was central to the change success. Staff members needed to internalise institutional values and find meaning in their day to day activities.

The fact that tremendous successes were achieved within a short period of time provided evidence that systemic and highly spirited leadership can accelerate change. This can also be attributed to the Poly having a more integrated leadership style that supported shared success by providing space for individual improvement and growth, team building and rewards.

CONCLUSION

Poly used name change and the 4th strategic plan PSP4 to propel its transformation process. Since the transformation plan (PSP-4) was developed in a highly participatory process, the staff members that were driving the change process had a common understanding of the strategies and anticipated outcomes. This was extremely beneficial as it provided abilities to penetrate deeply into the change-challenges, engage with, and amend plans and handle the subtle dynamics of change. Understanding context was prelude to effecting culture change. This was because of the complexities at every level of governance in the hierarch. The planning procedures in the change management at Poly used a schematic approach to cater for all the levels. Although, this approach posed challenges, especially in terms of organising discussion forums, constant reinforcements of the change process and reaching out to everybody, at least even the worst cynics got involved in many ways. It was in fact to a large extent, the discussions forums which provided a base for integration at a broader level and this was best achieved through highly spirited leadership.

REFERENCE

Baldridge, J.V., Curtis, D.V., Ecker, G.P. and Riley, G.L. (1977).Alternative models of governance in higher education', in Riley, G.L., Baldridge. J.V (eds), Governing Academic Organization. Berkeley: McCutchen Publishing Corporation, pp. 2-25.

Becher, T. (1981).'Towards a definition of disciplinary cultures', *Studies in higher Education* 6, 109-122.

Birnbaum, R. (1988). 'How Collages Work: The Cybernetics of Academic Organization and Leadership. San Francisco: Jossey-Bass.

Bleicher, R. (1988). 'ZumVerhaltnis von Kulturen und Strategien der Unternehmung (About the relationship ‚between culture and strategy of corporations)' , in Dulfer, E. (eds) Organisations kultur (Organizational culture). Stuttgart: C.E. Poeschl, pp. 98-120.

Cameron, K. (1984). 'Organizational adaptation and higher education' , Journal of Higher Education 55, 122-144.

Cameron, K.S. and Freeman S.J. (1991). 'Culture congruence, strength, and type: relationships to effectiveness' , Research in Organizational change and development 5, 23-58.

Clark, B. (1983). The Higher Education System: Academic Organization in Cross-National perspective. Berkeley: University of California Press.

Clark, B. (1995). 'Complexity and differentiation: The deepening problem of university integration', in Dill, D. and Sporn, B. (eds), Emerging Patterns of Social Demand and University Reform: Through a Glass Darky. Oxford: Pergamon, pp. 159-169.

Deal, E. and Kennedy, A. (1982). Corporate Culture: The Rites and Rituals of Corporate Life. Reading: Addison-Wesley.

Denison, D. (1990). Corporate Culture and Organization Effectiveness. New York: McGraw-Hill.

Dill, D.D. (1982). 'The management of academic culture: Notes on the management of meaning and social integration', Higher Education 11, 303-320.

Dill, D.D. and Sporn, B. (1995a). University 2001: 'The implication of a post-industrial environment for the university: An introduction' ,in Dill, D.D. and Sporn, B. (eds), Emerging Patterns of Social Demand and University Reform: Through a Glass Darky. Oxford: Pergamon, pp. 1-99.

Dill, D.D. and Sporn, B. (1995b). University 2001: What will the University of the twenty-first century look like?, in Dill, D.D. and Sporn, B. (eds), Emerging Patterns of Social Demand and University Reform: Through a Glass Darky. Oxford: Pergamon, pp. 212-236.

Kotter, J. and Heskett, J. (1992).Corporate Culture and Performance. New York: The free press.

Mirvis, P. (2008), 'Executive Development Through Consciousness-Raising Experiences', *Academy of Management Learning & Education*, Vol. 7, No. 2, pp. 173-188.

Maassen, P. (1995). The Concept of culture and Higher Education. Zurich: Paper presented at the 17th Annual EAIR Forum.

Masland, A.T. (1985). 'Organizational culture in the study of higher education', Review of Higher Education 8(2), 157-168.

Random House Dictionary of the English Language (1971), Random House, New York, NY.