



Prof Siebert Benade (left) lectures in engineering management and project management at the Graduate School of Management at the University of Pretoria and Dr Chris Heunis heads the Team Building Institute.

Management development: more right brain skills required

For whatever reason, we seem to be living at a time in South Africa when institutions are increasingly under pressure to provide training tailor made to the requirements of specific industries.

Prof Amadi-Echendu of the University of Pretoria holds the opinion that the concept, management, appears in many training programmes, but these courses still fail to adequately address management and leadership skills development.

We get the impression that training institutions are always on the lookout for 'the next best thing.' If you are looking for a training solution which accommodates all the recent bright ideas as well as those of the past and create new insight, the training strategy under discussion will surely grab your attention.

The core assets of the modern business are not the corporate buildings, machinery, office equipment or real estate, but the values, skills and experience of employees. With a clear shift from a production economy to a knowledge economy management development programmes should focus on how to harness the capabilities and commitment of knowledge workers.

If we seriously want to create an awareness of 'knowledge' rather than just 'production' we have to challenge our approach to managing and management training.

We are all familiar with the following practices: "Bureaucratic systems that exclude rather than include; governance systems and incentive programmes are still

firmly planted in our most 'progressive' companies," according to Manville.

The heart of the problem lies with a command and control management system initiated by Frederick Taylor, the 'father' of scientific management in 1889.

When one brings *The Principles of Scientific Management* by Taylor in context with research by Ned Herrmann it becomes clear that Taylor tried to solve right brained problems with left brained solutions.

This dilemma has taken on many forms in the past and still today is presented with added flavour in our management development programmes. We do not say Taylor was wrong, but he definitely lacked a bal-

anced approach to management training.

For the purpose of understanding brain dominance and the whole brain model created by Herrmann it is helpful to think of the brain as existing of four quadrants. These quadrants relate metaphorically to our thinking styles.

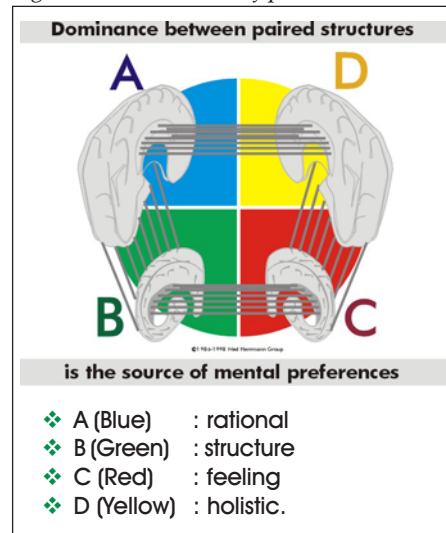
Herrmann's research suggests that we display a certain degree of preference for each of the four quadrants (blue A, green B, red C and yellow D). This can be determined by our relative attraction to, or aversion for each of the descriptors in that quadrant.

It is essential to consider the uniqueness of the needs a training programme has to meet. With the use of the HBDI (Herrmann Brain Dominance Instrument) model as a diagnostic tool, it is possible to gain a critical understanding of the right methodology or approach one can adapt to address a specific issue which relates to a specific thinking style.

If Taylor had access to the HBDI he most probably would have designed the *Principles of Scientific Management* in a far more balanced way by not omitting the red (C) and yellow (D) quadrants (Figure 2). This could be why some authors describe his contribution as 'dehumanising' possibly because of his mechanistic (blue quadrant) approach.

The design of management development programmes clearly calls for students with the ability to equally access all four quadrants. However, this profile only occurs in 3% of the population! If the student's brain profile indicates otherwise,

Figure 1: Dominance of paired structures.



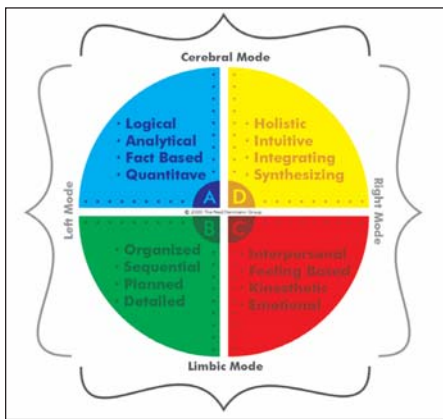


Figure 2: The whole brain model.

the specific quadrant(s) where the necessary skills are lacking, should be rigorously developed.

When the unique learning styles associated with each quadrant are contextualised with the training requirements of managers, it becomes clear that traditional approaches to design and delivery of management training frequently fall short of desired results.

Wolfgang Grulke's book, *Future World*, recently published results of a Global Flash Survey on what's keeping global executives awake at night. The results of this survey in which 412 business executives took part, confirms the need to develop more right brained managers.

Table 1 clearly indicates that the key competencies required to differentiate business in the next two to five years are right brained skills (red and yellow quadrants).

Assessment of two composite profiles of management courses

The class of 2005 masters degree in engineering management (MEM) and the masters degree in project management (MPM) were selected for this study. We believe that the profiles of most of the students studying engineering or qualified engineers would indicate a dominance in the A (blue), quadrant.

Prof Henry Mintzberg pointed out that managers can be smart and dull at the same time. This observation applies to all of us and when we look at the two groups under discussion, one can detect that their thinking style favours the blue quadrant.

HR is a vital asset that goes home every afternoon and hopefully returns the following morning, if the business is to survive and grow. This asset we refer to is made up of knowledge workers. Our highly competitive business environment demands optimal performance; therefore the mental demands of the work is greater than ever.

The only way in which we can manage this vital asset is by understanding the value of diversity in thinking styles. Man-

aging effectively hinges on the ability of the manager to understand, motivate and communicate with every knowledge worker about:

- ❖ job design,
- ❖ job placement,
- ❖ management communication,
- ❖ team development,
- ❖ organisational design,
- ❖ motivation and recognition,
- ❖ organisational strategy,
- ❖ manpower planning and
- ❖ execution.

Can you imagine how difficult it must be to optimise management of the above from only one quadrant? How can one possibly motivate a person by being analytical and critical, but void of feeling, sensitivity and emotion?

In other words, if management interprets and administers programmes from just one quadrant, typically left mode, A

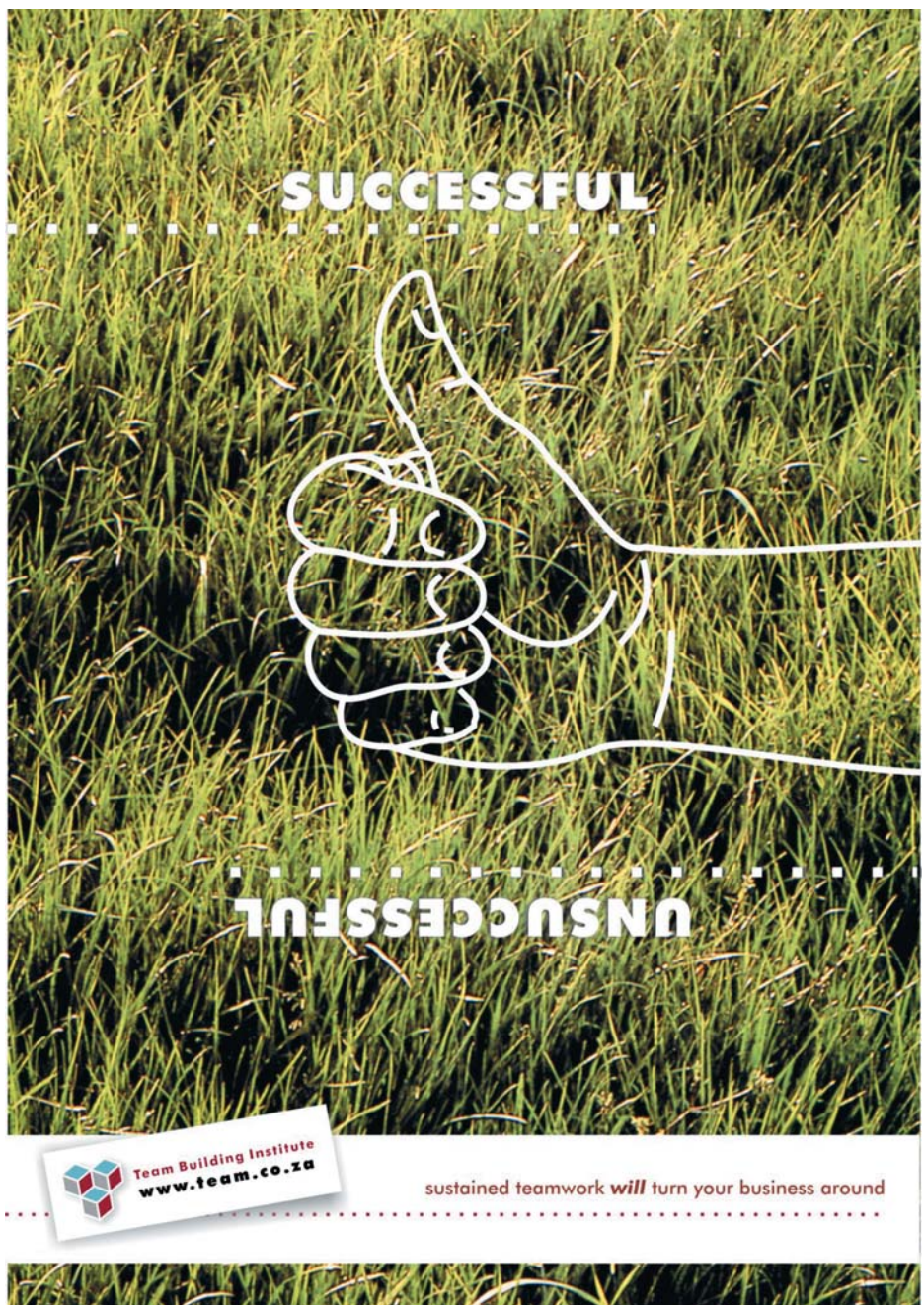
plus B quadrants, the productivity and overall effectiveness of the organisation will be discounted.

The profiles presented by both MEM and MPM groups suggest a slant towards the A (blue) quadrant (Figure 3 MEM max 126; MPM max 126). This student cadre will communicate best in the A quadrant mode. They might miss connecting with three-fourths of their human resource assets or knowledge workers if the training programme doesn't adequately address this need.

Interpretation (Figure 3)

The composite profiles is an overlay of each student's HBDI profile on a profile grid.

- ❖ Each profile consists of four numbers, a four digit code in the order: A, B, C, D : 1, 1, 2, 1.
- ❖ With each quadrant:



2E: Strategic business issues	Europe	USA & Canada	Asia, Australasia & S. America	South Africa
Competitive differentiation, staying ahead of the global pack, making services a bigger differentiator	18%	18%	24%	21%
Maintaining future business relevance/Business adaptability/Keeping pace/Strategic decay	12%	31%	15%	14%
Innovation, developing a growth culture, acting on ideas (doing new things plus maintaining cost leadership in the core business)	29%	21%	5%	13%
Understanding the impact of new drivers (technology, consumer needs etc) – finding The Next Big Thing	14%	7%	20%	22%
Achieving sustained, profitable growth	16%	17%	10%	12%
Focused or mass-market? Small or big? M&A?	0%	0%	16%	3%
Strategic thinking - Strategies that deliver results	2%	3%	5%	0%
Develop 3rd world market viability; use 1st world tech	2%	3%	0%	5%
See opportunity in China and Asia, not just a threat	4%	3%	0%	3%
Develop networks of business partners	0%	0%	0%	6%
Global change management/Project management	2%	0%	0%	2%

Future World
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Table 1: Competencies required for the future.

- 1 corresponds to a strong preference (a score of 67 or above),
- 2 corresponds to an intermediate preference or thinking mode that is comfortable and available as needed (a score of 34 to 66),
- 3 indicates a low preference or a lack of interest and for some even an avoidance (a score of 33 or below).

Thinking preference scores (Figure 3)

MEM group: 1, 1, 2, 1 and MPM group: 1, 1, 2, 1.

Both groups have access to a certain flexibility that comes from the multi-dominant nature of their thinking process. This allows the individuals to move through their three dominant modes somewhat seamlessly, looking at all of the perspectives before making a decision.

Such multiple preferences also facilitate interaction with others which should be regarded as positive when one considers their managerial function.

Due to the triple nature of their data, they are likely to share at least one preference with those with whom they interact. On the other hand, this multiplicity of preference can slow down the decision making process due to the need to really check out all options.

Another potential challenge may be the multitude of options these preferences pro-

vide when they are confronted with syndicate assignments.

We hold the opinion that their occupation (engineering) will lure them into blue quadrant dominance (analytical).

The composite profiles of both the MEM and the MPM groups indicate the following:

- ❖ The MEM group shows a very strong preference for the left mode (left side of the brain) at 61% as it relates to their

right mode (right side of the brain) at 39% (A+B).

- ❖ The MPM group shows a very strong, but slightly less than the MEM group for the left mode (left side of the brain) at 57% as it relates to their right mode (right side of the brain) at 43% (A+B).
- ❖ The MEM group shows a very strong preference to the upper mode (upper half of the brain) at 59% as compared to the lower mode (lower/limbic half of the brain) at 41% (A + D).
- ❖ The MPM group shows a very strong preference to the upper mode (upper half of the brain) at 57% as compared to the lower mode (lower/limbic half of the brain) at 44% (A + D).

A 'mode' represents the combined mental processes of two adjoining quadrants of the brain, (A + B (left), B + C (lower), C + D (right) and A + D (upper)). This data provides relevant information about the team's degree of preference for each mode as it compares to its opposite mode.

The above interpretation of the comparison of the left or right mode and the comparison of the upper mode to the lower mode suggests a sequence of preference when both groups are in a 'decision making' mode.

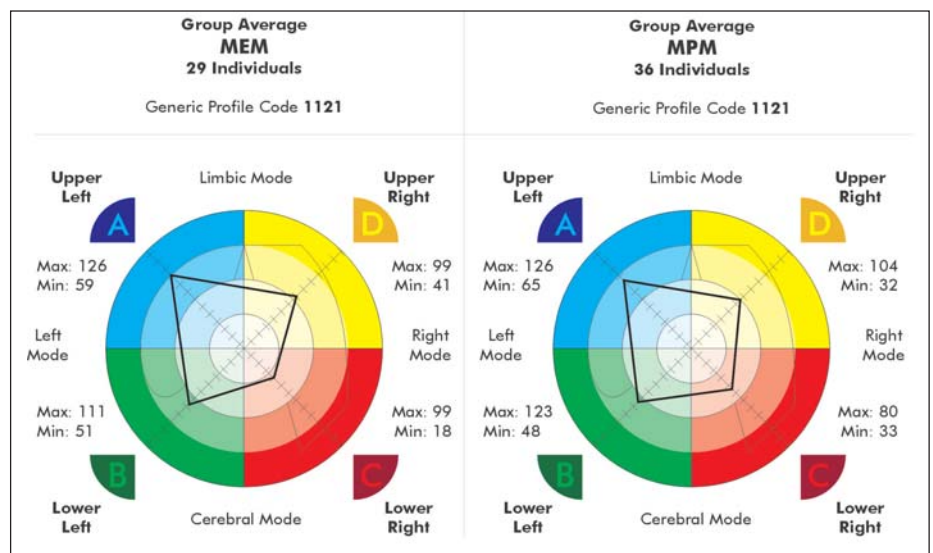
The average quadrant scores (Table 2 and 3) for the two groups are:

- ❖ MEM Group (1): A/98 B/76 C/43 D/72,
- ❖ MPM Group (2): A/94 B/74 C/56 D/70.

Figure 4 illustrates the rank order of all preferences for both the MEM and MPM groups in descending order from the most to the least. The arrows reflect the direction of the team's thinking under normal working conditions.

A problem will first be assessed in the blue quadrant (analyse), the green quadrant (organise) will follow, then the yellow quadrant (visualise) and this problem solving process will intuitively end addressing the red quadrant.

Figure 3: Competencies required for the future.



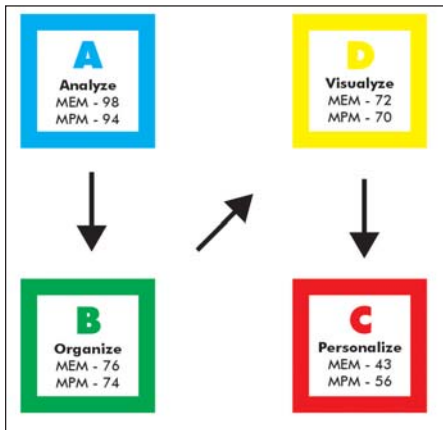


Figure 4: Normal quadrant preference flow chart.

This pattern, however, can only successfully be followed if the process of thinking is facilitated because a physiological link between the B and D quadrant does not exist (Figure 5).

The detailed name list (names not provided due to confidentiality of data) of MEM and MPM student groups provide comprehensive profile information in numeric form, listing the A, B, C and D scores for each participant.

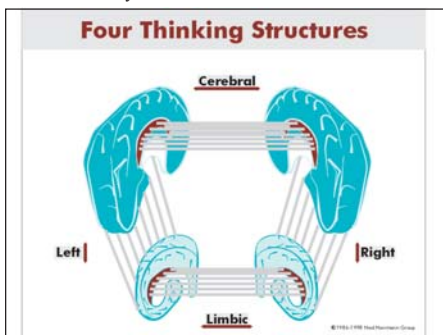
This list is organised by quadrant preference by colour, going from the scores of the left (cerebral and limbic) to the scores on the right side of the brain: whole brain model (Figure 2). The list also provides maximum and minimum average scores.

Execution under stressful circumstances is indicated under the adjective pairing sections on the HBDI data sheet. This section reveals the thinking style distribution (Tables 2 and 3) that is most 'instinctive' for the MEM and MPM groups. This distribution may or may not be the same as indicated by the overall preferences.

The adjective pair data could be understood as a 'back-up' style of preferred thinking. The highest score typically reveals the thinking styles favoured in 'pressured' situations. There are 24 pairs and therefore 24 points distributed between the four quadrants.

When one compares the quadrant which indicates the highest score in the composite profile with the highest score indicated

Figure 5: Dominance between paired structures of the brain.



HERMANN BRAIN DOMINANCE INSTRUMENT, ALPHABETICAL REPORT													
MEM Group March 12/03/2005													
Individual's Name	Quadrant Scores				Adjective Pairs				Mode Scores				
	A	B	C	D	A	B	C	D	Lt	Rt	Upr	Lwr	
2122	59	101	62	62	3	8	6	7	56%	44%	43%	67%	
1122	119	81	36	44	10	9	3	2	71%	29%	58%	42%	
1121	93	84	39	71	8	9	3	4	62%	38%	57%	43%	
1221	96	65	44	93	6	3	4	11	54%	46%	63%	37%	
1122	111	69	57	41	8	7	7	2	65%	35%	65%	45%	
1132	126	83	20	50	10	9	0	5	75%	25%	63%	37%	
1231	117	54	32	86	11	5	0	8	59%	41%	70%	30%	
1122	68	111	60	63	6	9	7	2	59%	41%	43%	57%	
1231	113	59	24	71	9	5	1	9	64%	36%	69%	31%	
1132	116	81	32	63	10	6	2	6	67%	33%	61%	39%	
1221	77	66	60	89	5	5	11	3	49%	51%	57%	43%	
1221	92	51	42	99	9	3	3	9	50%	50%	67%	33%	
1222	117	59	39	59	8	4	8	4	64%	36%	64%	36%	
1122	110	87	44	48	7	5	7	5	68%	32%	55%	45%	
1231	119	57	30	80	7	4	3	10	62%	38%	70%	30%	
1122	99	93	48	56	5	6	7	6	65%	35%	52%	48%	
1131	104	74	21	86	8	6	1	9	62%	38%	67%	33%	
1122	89	83	50	63	10	6	3	5	60%	40%	53%	47%	
1132	107	78	23	59	7	6	4	7	69%	31%	62%	38%	
1121	122	80	42	71	11	6	2	5	64%	36%	61%	39%	
1121	69	84	47	93	7	7	2	8	52%	48%	55%	45%	
1132	120	90	26	47	8	10	1	5	74%	26%	59%	41%	
1131	96	74	33	84	6	7	6	5	59%	41%	63%	37%	
2111	59	87	99	72	4	8	9	3	46%	54%	41%	59%	
1221	90	60	56	95	8	5	5	6	50%	50%	61%	39%	
1231	93	63	24	87	7	5	2	10	58%	42%	67%	33%	
1121	90	74	44	95	8	4	4	8	54%	46%	61%	39%	
1131	116	89	18	72	11	7	0	6	69%	31%	64%	36%	
1211	69	65	92	83	7	6	5	6	43%	57%	49%	51%	
Averages	1121	98	76	43	72	8	6	4	6	61%	39%	59%	41%

Table 2: MEM alphabetical report.

under the adjective pairs section the preferred mode of thinking under stress is indicated:

- ❖ MEM: Highest profile score: A 98
Highest adjective score: A 8
- ❖ MPM: Highest profile score: A 94
Highest adjective score: A 7

In both the MEM and MPM groups we can see that the preference mode of both teams do not change under pressure or stress. When under stress both teams will resort to deeper analysis. This aspect should be taken into account when designing a training curriculum for the target groups.

Both the MEM and MPM groups indicate the lowest score in the C quadrant when performing under pressure. The Team Growth™ strategy to which the MEM and MPM groups are exposed, creates an opportunity to establish an awareness of this tendency.

This is especially important to the MPM group because of its specialised training as project managers where human resource forms the main focus.

Team growth strategy

The Team Building Institute follows a Team Growth strategy to grow teams to become balanced thinking teams. The adventure related experiential learning (AEL) methodology sensitises participants to access the right side of the brain.

The experiential nature of AEL brings participants physically closer to one another. This part of the programme does stretch left brained thinkers somewhat. When this occurrence is explained in HBDI context the value of the methodol-

ogy is appreciated.

The Team Building Institute tailor designs programmes to mobilise the required thinking style of teams. This explains the involvement of the two groups under discussion in team building.

Communication

- ❖ Preferred communication style of both the MEM and MPM groups:
 - brief, clear and precise info,
 - well articulated ideas presented in the logical format,
 - step by step unfolding of the topic,
 - providing an overview,
 - using visuals.
- ❖ Areas of communication which the two groups may overlook:
 - eye to eye contact,
 - personal touch and informality.
- ❖ Problem solving.
- ❖ Preferred problem solving strategies would include:
 - re-engineering (change),
 - factual analysis,
 - incubation (take time to decide),
 - well planned step by step unfolding of the process,
 - plan might include time lines,
 - simulations/modelling.
- ❖ Areas of a problem solving process, both the MEM and MPM groups may overlook:
 - team based processes,
 - involving others,
 - considering the feelings of others.
- ❖ Decision making.
- ❖ To make a decision both the MEM and MPM groups may focus on the following aspects:

HERMANN BRAIN DOMINANCE INSTRUMENT, ALPHABETICAL REPORT													
MPM Group February 12/03/2005													
Individual's Name	Quadrant Scores				Adjective Pairs				Mode Scores				
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1121	108	84	44	68	9	8	3	4	63%	37%	58%	42%	
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1212	95	48	71	59	6	6	9	3	52%	48%	56%	44%	
1113	71	123	68	32	6	10	5	3	66%	34%	35%	65%	
1121	99	84	50	84	10	6	2	6	58%	42%	58%	42%	
1122	102	78	51	63	7	11	1	5	61%	39%	56%	44%	
Averages	1121	94	74	58	70	7	6	5	6	57%	43%	56%	44%

Figure 2: The whole brain model.

- do we have all the facts?
 - is the information reliable?
 - is the information accurate?
 - do we understand the rules and procedures?
 - do we all understand our different roles and responsibilities?
 - what is the bigger picture?
 - how will our decision affect our vision/goal?
- ❖ When taking a decision both teams may overlook the following and therefore

this should be included in their training curriculum:

- the value of open and informal discussions,
- sensitive to others expressing their feelings through body and voice,
- being sensitive for their impact on those around them,
- understanding others.

Stretch and growth

The Team Building Institute has been con-

tracted by the Graduate School of Management at the University of Pretoria to implement a team growth programme. The purpose of these interventions is to enhance C quadrant growth and balanced thinking.

Adventure related experiential learning
 Adventure related experiential learning is an interactive event oriented process whereby a participant constructs knowledge, skill and value through guided reflection by participating in experiences which result in an adventure experience to the participant.

We have found the HBDI and AEL methodology to be the ideal match. The strong preference displayed by both the MEM and MPM groups for the D quadrant (explore, imaginative, risk taking, metaphoric language, etc.) acted as an ideal point of departure for C quadrant growth and development.

Personal and syndicate (team) growth plans have been designed by Verkuyll from TBI. These growth plans contributed 20% to MEM and MPM academic evaluation.

In conclusion, when one views Prof Amadi-Echendu's concern regarding management training and the advancement of leadership skills in the above context, there is sufficient reason to be optimistic.

The unique combination of AEL with HBDI in team growth as a part of the MEM and MPM curriculum, an awareness of the importance of a whole brained approach to management training and development has been created.

It is important to note that balance in management and leadership must be pursued.

The fact that both the MEM and MPM student cadre indicate a low thinking style preference for the red quadrant does not mean that technological know-how does not remain important, they are after all still engineers! ■