Managing Multi-Discipline Extended Programmes

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Abstract

The Vaal University of Technology (VUT) has been offering a multidiscipline Extended Programme since 2009 and even though this Programme is made up from different faculties, the entire Extended Programme is overseen by one unit director. Due to the diversity of the unit and the variety of subject offerings, the unit simply cannot follow the same managerial approach that is applied when managing one specific discipline. That is why it requires a completely different and unique approach. The Extended Programme consists of students who are enrolled in different disciplines, i.e. Engineering, Human Sciences, etc., who all learn in different ways and have different needs, but are all managed in one specific unit. Therefore, to ensure that all needs of staff and students are catered for, it is crucial that an alternative managerial approach is applied. The success of a multidiscipline Extended Programme is dependent on the successes of the students, who in return are dependent on the dedication of both academic and administration staff. More so, the positive influence lecturers have on students and the invaluable role they play. It is undeniable that without the guidance and motivation of the lecturers it would be very difficult for the students to succeed. In order for the lecturers to be kept motivated and content, it is important to provide them with equal workloads and ensure transparency at all times. Staff, which is irrefutably guided and kept motivated by a suitable managerial approach. Applying this approach when managing a multidiscipline

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1. Introduction

The Vaal University of Technology (VUT) has been offering multidiscipline Extended Programmes since 2009 and even though these programmes are offered from different faculties, only one unit is responsible for managing all the extended subjects on offer.
The Unit for Preparatory Programmes (UPP) consists of a Director and a Manager, both who are full-time personnel with the VUT. The Director manages the academic part of the work, whilst the Manager implements and performs all the administrative duties within the unit. All other staff members are on contract and contracts are renewed on an annual needs analysis. The Extended Programmes on offer are from all four (four) faculties on the Vanderbijlpark campus. The faculty of Applied and Computer Sciences offers the Extended Diploma in Information Technology, while the Faculty of Engineering and Technology offers the following extended engineering diploma programmes; Chemical, Civil, Electrical: Computer Systems, Electrical: Electronics, Electrical: Power, Electrical: Process Control, Industrial, Mechanical as well as Metallurgy. The Faculty of Human Sciences offers the following extended diploma programmes: Fashion, Fine Art, Graphic Design, Photography, Labour Law, Legal Assistance, Policing, Safety Management, Public Relations Management, Ecotourism Management, Tourism Management and Food Service Management. The Faculty of Management Sciences offers the following extended diploma programmes: Cost and Management Accounting, Financial Information Systems, Internal Auditing, Marketing, Sports Management and Retail Management. As can be seen, this includes a vast majority of diploma programmes, hereafter referred to as the multi-discipline extended diploma programmes.

Table 1 illustrates the programme outline for the four-year extended diploma in Information Technology offered by the Faculty of Applied and Computer Sciences (Sutherland, 2016, p. 3).

**TABLE 1:** First-year Extended Programme outline - Duration of Diploma is four years

The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are General
Mathematics, Keyboard Skills, Language Literacy, Computer Literacy and Entrepreneurial Skills.

Table 2 illustrates the programme outline for the four-year extended diploma in various Engineering disciplines offered by the Faculty of Engineering & Technology (Sutherland, 2016, p. 3).

**TABLE 2: First-year Extended Programme outline - Duration of Diploma is four years**

| Semester 1       | Module 1                  | Module 2                  |
|------------------|---------------------------|---------------------------|
|                  | Mathematics 1.1           | Applied Mathematics 1.2   |
|                  | NTMAT1B                   | NTMAT2B                   |
|                  | Science 1.1               | Science 1.2               |
|                  | NTSCI1B                   | NTSCI2B                   |
|                  | Language Literacy 1.1     | Language Literacy 1.2     |
|                  | VTLAN1B                   | VTLAN2B                   |
|                  | Inter Literacy 1.1        | Inter Literacy 1.2        |
|                  | VTCPT1B                   | VTCPT2B                   |
|                  | Entrepreneurial Skills 1.1| Entrepreneurial Skills 1.2|
|                  | VITRPR1B                  | VITRPR2B                  |

| Semester 2       | Module 3                  | Module 4                  | Module 5                  |
|------------------|---------------------------|---------------------------|---------------------------|
|                  | Applied Mathematics 1.3   | Applied Mathematics 1.4   | Applied Mathematics 1.5   |
|                  | NTMAT3B                   | NTMAT4B                   | NTMAT5B                   |
|                  | Science 1.3               | Science 1.4               | Science 1.5               |
|                  | NTSCI3B                   | NTSCI4B                   | NTSCI5B                   |
|                  | Language Literacy 1.3     | Language Literacy 1.4     | Language Literacy 1.5     |
|                  | VTLAN3B                   | VTLAN4B                   | VTLAN5B                   |
|                  | Inter Literacy 1.3        | Inter Literacy 1.4        | Inter Literacy 1.5        |
|                  | VTCPT3B                   | VTCPT4B                   | VTCPT5B                   |
|                  | Entrepreneurial Skills 1.3| Entrepreneurial Skills 1.4|
|                  | VITRPR3B                  | VITRPR4B                  | VITRPR5B                  |

The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are Applied Mathematics, Science, Language Literacy, Computer Literacy and Entrepreneurial Skills. The following extended diploma programmes are on offer: Diploma in Chemical Engineering; Diploma in Civil Engineering; Diploma in Electrical Engineering - Computer Systems; Diploma in Electrical Engineering - Electronics; Diploma in Electrical Engineering - Power; Diploma in Electrical Engineering - Process Control; Diploma in Industrial Engineering; Diploma in Mechanical Engineering and Diploma in Metallurgical Engineering.

Table 3.1 illustrates the programme outline for the four-year extended diploma in certain Human Sciences disciplines offered by the Faculty of Human Sciences (Sutherland, 2016, p. 4).
**Table 3.1:** Group 1 first year extended programme outline - Duration of Diploma is four years

The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are Business Studies, Visual Arts & Design, Language Literacy, Computer Literacy and Entrepreneurial Skills. The following extended diploma programmes are on offer: Diploma in Fashion, Diploma in Fine Art; Diploma in Graphic Design; Diploma in Photography.

Table 3.2 illustrates the programme outline for the four-year extended diploma in certain Human Sciences disciplines offered by the Faculty of Human Sciences (Sutherland, 2016, p. 4).
**TABLE 3.2:** Group 2 first year Extended Programme outline - Duration of Diploma is four years

The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are General Mathematics, Legal: consisting out of Law, Quantitative Techniques and Basic Finance, Language Literacy, Computer Literacy and Entrepreneurial Skills. The following extended diploma programmes are on offer: Diploma in Labour Law; Diploma in Legal Assistance; Diploma in Policing; Diploma in Safety Management.

Table 3.3 illustrates the programme outline for the four-year extended diploma in certain Human Sciences disciplines offered by the Faculty of Human Sciences (Sutherland, 2016, p. 5).
The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are General Mathematics, 1) Tourism: consisting out of Law, Tourism, and Basic Finance or 2) Public Relations: consisting out of Law, Public Relations and Basic Finance, Language Literacy, Computer Literacy and Entrepreneurial Skills. The following extended diploma programmes are on offer: Diploma in Ecotourism; Diploma in Food Service Management; Diploma in Public Relations Management; Diploma in Tourism Management.

Table 4 illustrates the programme outline for the four-year extended diploma in certain Management Sciences disciplines offered by the Faculty of Management Sciences (Sutherland, 2016, p. 5).
The one-year curriculum is divided into five modules. All the modules need to be completed successfully before the student can proceed to the following year. Students have to complete five subjects, as prescribed by the faculty. The subjects are General Mathematics, Accounting, Language Literacy, Computer Literacy and Entrepreneurial Skills. The following extended diploma programmes are on offer: Diploma in Cost and Management Accounting; Diploma in Financial Information Systems; Diploma in Internal Auditing (Sutherland, 2016).

It is clear from the different programme outlines that staff members with various qualifications are needed to educate the students. This leads to one very diverse unit consisting of staff members with various personalities, characteristic and qualities. The unit as a whole is guided by the management style and leadership skills of the unit director.

2. Leadership Styles

The responsibility falls on the leader to delegate tasks to staff and furthermore supervise the tasks which were allocated to staff members. The style of the leader can be interpreted as the behavior of the leader towards the unit, staff members and outsiders (Luthans, 2002). Although there are many leadership styles, the most common styles evolved through the last centuries are Directive, Autocratic, Authoritarian, Democratic / Participative, Delegate (Laissez-Faire), Bureaucratic, Affiliative, Pacesetting and Coaching (Khan, Khan, Qureshi, Ismail, Latif and Tahir, 2015, p. 87; Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 4-30).

2.1 Directive style of leadership

The leader orders the staff members around, disciplines them if they do not comply with their tasks and as a leader set high standards. However, when the leader leaves the room everybody stops working. This style needs full-time management and can
be described as high maintenance (Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 4). The unit director only applies this style when crisis management is needed and not as part of the daily operations.

2.2 Autocratic style of leadership

The leader keeps as much possible authority and decision-making power to him/herself. This has been identified as a classical approach, but staff members are usually highly resistant to this style of leadership, even though there are usually rewards attached to the completing of the tasks (Khan et al., 2015, p. 87-88). However, this leadership style is never followed by the unit’s director and no rewards are awarded for the completion of tasks by staff members.

2.3 Authoritarian style of leadership

The leader is perceived as a dictator, bossy, autocratic and controlling individual, as the tasks are allocated with specifics. Specifics in the sense that no inputs are required from the staff members, as the leader will already provide specifics on exactly how, when and where the tasks should be completed. According to Lewin (1939) staff members are very productive with leaders applying this leadership style (Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 1-18; Changing Minds. 2016. “Lewin’s leadership styles,” para. 1-5). However, the unit director only implements this type of leadership style when uniformed standards are required in the unit, for example, examination front pages, university logo usage, and forms used by the unit’s staff members.

2.4 Democratic / Participative style of leadership

The leader will always keep the staff members up to date regarding any important information pertaining to the unit. Responsibilities of problem-solving and decision making are open and staff members’ participation is coached by the leader (Khan et al., 2015, p. 88-89). Due to the fact that the unit consists out of highly skilled staff members, this type of leadership is typically applied by the unit’s director. Lewin (1939) found that staff members were less productive with a democratic leader than with an authoritarian leader, but on the other hand, the contributions of staff members with a democratic leader were of much higher quality (Khan et al, 2015, p. 89; Changing Minds. 2016. “Lewin’s leadership styles,” para. 1-5). That is why the combination of the two above mentioned leadership styles, makes the unit extremely productive and contributions of staff members are of a high quality. The director of the unit participates in the workload distribution. Experienced and credible staff, together with the unit director, all contribute to the completion of tasks, but ultimately the unit director makes the final decision to ensure the successful completion of the tasks (Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 1-18; Khan et al, 2015, p. 89).
2.5 Delegate (Laissez-Faire) style of leadership

The leader does not participate in decision-making exercises. Staff members are the ones deciding on what should happen and when it should happen (task-related). Therefore, little or no direction is given by the leader. Lewin (1939) proved that although the staff members are highly skilled, educated and show pride in their work, they feel insecure without a direct leadership style available and are overall not very productive (Khan et al, 2015, p. 89-90; Changing Minds. 2016. “Lewin’s leadership styles,” para. 1-5). This leadership style is never utilised by the unit’s director, even though the staff is highly skilled and educated, it is imperative that they always receive some form of coaching from their leader.

2.6 Bureaucratic style of leadership

The leader follows rules and regulations precisely. If a task is not prescribed somewhere in a policy or procedure, the leader will first consult with his/her line manager for guidance. This indicates that staff members are performing routine tasks on a daily basis, staff members get bored and work habits that are difficult to break are formed (Khan et al, 2015, p. 90). This leadership type is only followed by the unit director when compiling the teaching and learning schedules for staff 2

2.7 Affiliative style of leadership

The only time this leadership style is used is when the unit director manages conflict, either between a specific student group and their lecturer or amongst staff members themselves. During meetings with staff members, the unit director presents staff with a topic for discussion and or allocates tasks. These meetings can sometimes lead to conflict between staff members, especially when stronger personalities start to dominate the discussion or some staff members may ask for guidance when they are experiencing difficulty in coping with tasks and need assistance from other staff members. The unit director encourages individuals to speak their mind and motivates them to come up with solutions to the problems that have been identified. Cardinal (2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 1-18) opines that in times like these it is important that the unit director creates harmony and controls the discussion while encouraging staff members to speak their mind. However, regardless of the discussion outcome, the unit direct still has the final decision making power.

2.8 Pacesetting style of leadership

The leader does most of the work and expects staff members to follow suit. However, the staff members have to be motivated in a positive manner and staff should not be in any need of assistance regarding the direction the unit is moving towards with its goals (Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 1-18). Only a few tasks are specifically set out for the unit’s director and most of them are due to quality and security restrictions. Tasks are allocated specifically to the unit’s director to ensure that they are properly performed.
2.9 Coaching style of leadership

The leader is always positively influencing staff members to develop themselves academically and motivating them to engage in lifelong learning. However, it is important that the leader stays in touch with what is new and also has to be experienced enough to apply this leadership style correctly (Cardinal, 2013, “6 Management styles and when best to use them - The leaders tool kit,” para. 1-18). Although the unit’s staff members are well educated, new developments are always rising and it is important to stay in touch with what is happening in the real world. Education has to progress and grow with the new developments, and even though the basic rules and regulations within the various teachings stay the same, it is necessary to identify how the basics can develop into something new and different.

Though the majority of these leadership styles are currently applied by the unit’s director, it is important that the leadership of the unit stays authentic. Authenticity as a construct has been debated for centuries, therefore, the concept of authenticity is not new (Walumbwa, Avolio, Gardner, Wernsing, Peterson, 2008, p. 89-90). According to George (2003) as well as George & Sims (2007), there is evidence that the authentic approach by an individual leader is prominent to a desirable and effective methodology for advancing individuals and achieving positive and enduring outcomes in an organisation. In order to obtain an authentic management style and unique leadership style, the unit director developed a curriculum framework for the engineering programme which has been adapted and then applied throughout the different faculties and disciplines. This has finally lead to the development of the managerial theoretical framework.

3. Theoretical Framework

The curriculum framework aims at providing structured guidance, in the form of a skeleton profile that provides strength to the inner sub-structures. Hence, the curriculum framework can be described as a sustainable practice that comprises of a methodology, technique, and an innovative use of resources that has a proven record of success in providing continuous improvements in academic performance, quality performance or other measurable factors. Furthermore, it enables the higher education institution to deliver the best value to their prospective students and therefore, positively impacting the overall success of the institution. A curriculum framework providing introductory learning experiences for students in the study field of engineering at the VUT is depicted in Figure 1 (Sutherland, 2009, p. 178).
**FIGURE 1:** A curriculum framework for Extended Programme students (Sutherland, 2009, p. 178)

It is from this curriculum framework that the director developed the managerial framework applicable to the UPP. The managerial framework (Figure 2) depicts the UPP as the focus of the framework. On the periphery of the frame (External development) and impacting all the other layers in the frame, are the contextual role players responsible for legislation and regulations, as well as statutory bodies and providers of education. National and international trends that have an impact on teaching and learning are of importance and provide a backdrop to the managerial activities within. The main role players within this layer are the Department of Higher Education and Training (DHET), Higher Education Quality Committee (HEQC), Council on Higher Education (CHE), the Engineering Council of South Africa (ECSA) and the industry, while the legislative changes within the Higher Education Qualifications Sub-Framework (HEQSF) and the South African Qualifications Authority (SAQA) have to be taken into consideration before the next layer (authentic management) can be attempted.

The next layer in the framework represents the authentic management styles applied by the unit director. These activities were determined from the literature. The subsequent layer in the framework represents the institutional managerial hierarchy. Higher education institutions have basically the same institutional management hierarchy. The central layer of the framework represents the unit’s development activities, all directed at prospective staff members and their activities as the focus of the framework.
FIGURE 2: A managerial framework applicable to the Unit for Preparatory Programmes

The two-way arrows are implemented to indicate integration and reciprocal functioning. The openness of the layers represents flexibility and the ability to allow for a diversity of programme offerings and staff members but also depicts that external development influences managerial styles, institutional management, and staff member development. In the end, all these factors have a direct influence on the success rate of the participating students.

4. Success of the Extended Programmes

The success of a multidiscipline Extended Programme is dependent on the successes of the students, who in return are dependent on the dedication of both academic and administration staff. More so, the positive influence lecturers have on students and the invaluable role they play. It is undeniable that without the guidance and motivation of the lecturers it would be very difficult for the students to succeed. In order for the lecturers to be kept motivated and content, it is important to provide them with equal workloads and ensure transparency at all times.

This method supports and contributes to the success of the students because they are being equipped with the proper tools and guidance, which is ultimately provided by motivated and dedicated staff. Staff, which is irrefutably guided and kept motivated
by a suitable managerial approach. Applying this approach when managing a multidiscipline Extended Programme has proved to have significant and satisfactory results (91% success rate) in the success of a multidiscipline Extended Programme.

5. Conclusion

Even though the unit consists of self-managing teams, comprising of subject experts and very knowledgeable individuals, leadership in the form of a unit director is still crucial. In fact, Cohen & Bailey (1997) found that self-managed cross-functional project teams are less likely to be successful if they do not have a leader.

A programme was specifically designed, developed and implemented for the engineering students of the university by the unit director and because the proven success rate of the students, was to such an extent, the VUT finally decided to extend the programme and apply it throughout the university and its various faculties. Though not all diploma programmes on offer at the university have an extended programme, the majority do offer this option for students, who do not meet the intake criteria for the diploma programmes.

The director binds the unit together and ensures that all parties communicate with one another throughout the various disciplines in the unit. The unit, also consists of a wide variety of unique individuals, who each contribute their own unique style and individualism to the unit. Therefore, the combination of leadership styles which are utilized and implemented by the unit director, is appropriate to the nature and diversity of the unit and plays a vital part in the success of the Extended Programme. In addition, the confirmed success rate of the Extended Programme students enrolled in mainstream programmes, proofs that the Extended Programme was indeed well managed and successful in its operations.

Unit logistics can become very problematic, due to the large amount of students participating in the programme. Venues becomes problematic, as the mainstream programmes are also running parallel to the extended programmes. Management has to ensure that the required resources for the extended programmes are available. In the university, managerial set-up factors, such as acquiring resources for the teams and team member behaviour, such as encouragement to take control of their own activities, is the directors solely responsibility (Nygren & Levine, 1996).

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