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# THE IMPLEMENTATION OF A FLEXIBLE LEARNING MODEL AT TECHNIKON SA (case study)

## Introduction

Technikon SA (TSA) strives to be a world-class, flexible learning, distance education institution. The vision statement of TSA makes this clear in as many words as well.

The need for flexibility in distance education, not only in South Africa, but also internationally, is ever increasing.

The students of TSA are diverse in various ways, of which I will mention only three:

1. Some students live in remote developing (or third world) areas, without access to technology. On the other hand, some students are in a developed (or first world) environment, with all the technological developments and aids within their reach.

2. Some students are studying full time and are jobless, trying to get a job by obtaining a qualification.

3. Some students have full-time jobs in senior positions in the companies that they work for. Study time is limited to after hours. This is the main reason for them enrolling at a distance education institution such as TSA, as they cannot attend classes like full-time residential students.

From the above it is clear that no single learning model CAN be acceptable for the diverse population of South Africa. The need for flexibility is therefore of the utmost importance.

The only problem is that very few education institutions (worldwide) make provision for flexibility.

TSA's challenge is to offer a flexible, but excellent, world-class learning experience to students. From 1993, various initiatives were implemented to realise this vision.

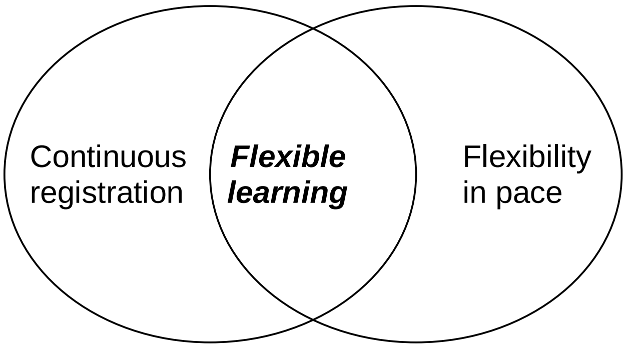
This presentation will be a brief summary of the processes used to implement a flexible learning model at TSA. Although the model has not been implemented throughout the institution, the concept has been piloted since January 2000.

Although there are more facets to flexible learning, only two concepts are highlighted within this model:

1. Continuous registration
2. Flexibility in pace

Each will be explained briefly, and the combined concept of flexible learning, as implemented at TSA, will also be explained.

***Schematically these concepts can be represented as follows:***




**A. Continuous registration:**

Consider the following scenario:

*A customer walks into a car spare-parts dealer and wants to purchase a certain spare (I'll use an indicator light bulb as an example). However, he is informed that, although the dealer has many of the specific light bulbs in stock, they cannot be sold, as the system was designed to sell the bulbs only during January and February of every year. The customer explains that he will pay in cash, but nonetheless, the purchase cannot be allowed.*

Ridiculous?

Isn't this what is happening in most education institutions? I accept that we are not really comparing apples with apples, but the principle still remains: The student cannot always register at a time suitable for him/her. The norm is that the student must wait until the next registration period, which is often once a year. However, that specific period might not suit the student. The result is that the student is turned away and either abandons the idea of studying, or searches for another institution that is more flexible in its approach.

## A1. Single Registration Model:

The "single intake per year" approach that TSA used to follow:

| | | | | |
|---|---|---|---|---|
| **Jan/Feb registration** | **Study period. Preparing for formative assessment tasks.** | Marking, yearmark processing | **Examination period** | |

(End of time allowed to prepare formative assessment tasks – 31July)

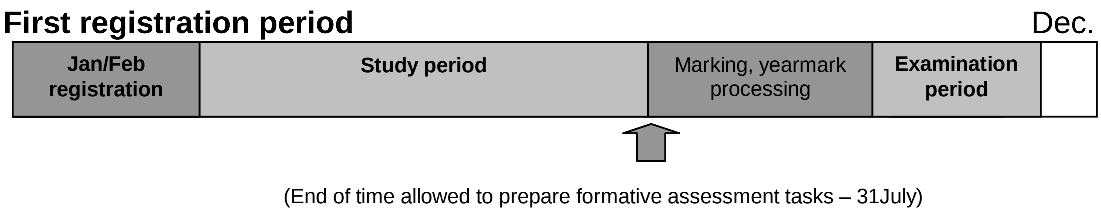
A few of the common problems were the following:

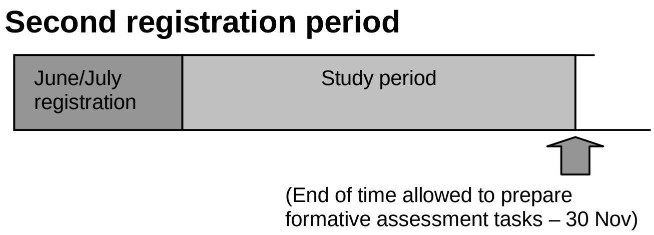
- The specific registration period did not suit all the students.
- By the end of the registration period, many students were still waiting in line, hoping to be registered.
- Many postal registration forms arrived after the closing date of the registration period. By then the study period had already started and these students were late in all respects, so registering them was actually doing them a disfavour.
- This resulted in extending the registration period by another week, which became two and eventually a month.
- This had a ripple effect on the whole system, in that the study material was posted later, resulting in a shorter academic year, formative assessment tasks were received late, many students phoned the lecturing staff requesting extension on the assignment due dates, assignment marks were entered late and yearmarks were calculated late.
- Some students simply did not have enough time to cover all the work and complete all formative assessment tasks on or before 31 July owing to their specific circumstances. This date could not be extended, as the time-consuming process of marking the assignments, entering the marks, calculating yearmarks, verifying them and posting admission permits to the students had to be done during this period, at least one month before the start of the examinations.

The knock-on effect was tremendous!

**A2. Dual intake model:**

***The first step was to implement a dual registration, with the first registration in January and February as usual, but another intake during June and July.***



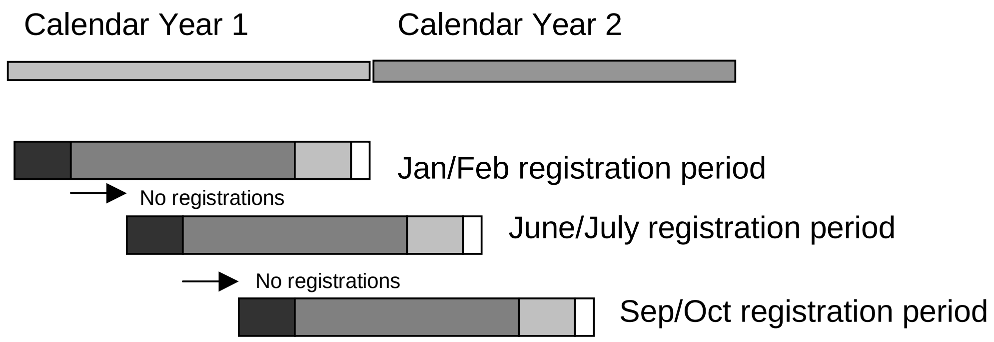




The idea was to refer all late registrations to the second intake, which worked to some extent, but the same problems were experienced as when there was only one registration period per year, with the added problem that now they happened twice a year! The lecturing staff's work also doubled for several reasons:

- Two more examination papers per subject had to be drafted (one main examination and one supplementary).
- Another complete set of formative assessment tasks had to be developed for the second intake.
- Another set of tutorial letters had to be developed for the second intake students.

**A3. Three registration model:**

***The second step toward a more flexible approach was to implement three registration periods during a year, the first being in January/February, the second during June/July and the third during September/October. There was about two months between registrations during which no registrations took place. Every registration period was an exact replica of the others, but with different dates.***

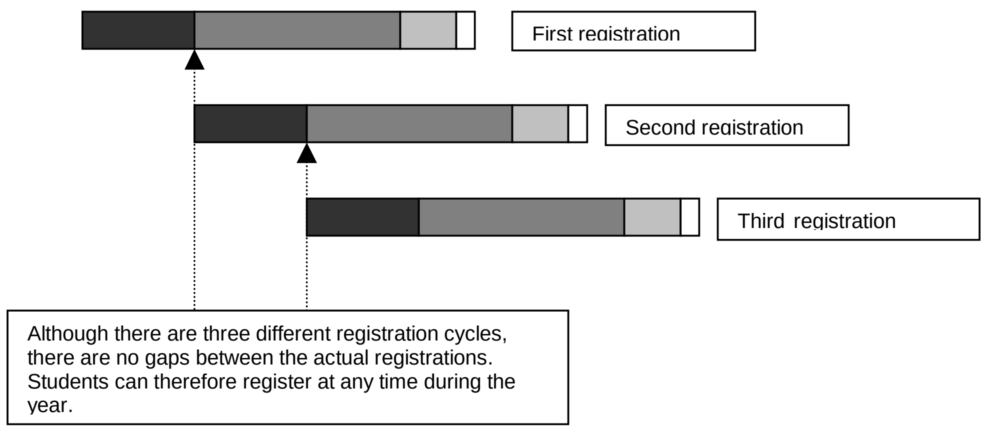



Although this approach met many of the needs of the students, new problems were experienced within the TSA system, a few of which I will mention:

- From the original single intake, the lecturing staff's work tripled owing to additional examination papers, formative assessment tasks and tutorial letters that had to be developed.
- The month gap between registrations was really too short to distinguish a clear break between the registration periods. Contamination resulted (applications for the first registration period were received during the second intake, etc.)
- The gaps between registration periods did not seem to fulfil their purpose, as late registrations were still processed during this period.

**A4. Continuous Registration Model:**

***At this stage it was decided to develop a flexible learning model that would address all of the above problems, but also address the concept of flexibility. The concept of <u>continuous registration</u> will be discussed first, as it can be implemented without including flexibility in pace.***



***It is important to note the following:***

- ***During the period between 15 December and 07 January, no registrations take place. It has been found that students do not want to register during the Festive season.***
- ***There are no gaps between registration periods. The end of one intake is the beginning of the next.***
- ***The only difference between this model and the normal three-cycle model is that there are no gaps between registration periods.***
- ***Every registration period is an exact replica of any one of the other two, except the start and end dates differ.***
- ***It was decided to include late registrations in the next registration period.***

**B**. **Flexibility in Pace:**

Together with the continuous registration model as above, the concept of flexibility in pace was developed to form a flexible learning model. The Engineering Programme Group piloted this combined model (Flexible Learning) from January 2000.

**Principles on which flexibility in pace is based:**

- No student must be in an advantaged or disadvantaged position owing to the date of registration. The same level of service should apply.
- The duration of the academic year should not be determined by time, but by outcomes, which will be determined by the ability and the specific circumstances of the student.
- The student must be in a position to either accelerate or extend the academic year, again depending on his/her ability and specific circumstances.
- The examination session should not be determined by the date of registration, but by the student's ability to master the work and successfully complete the formative assessment tasks. This will allow examination admission, but the student must also be able to choose the session that suits him/her the best.

These principles proved to be quite problematic for the current systems and also for the staff of TSA. The systems were not adapted for flexibility at all and the new concepts were a radical departure from the norm for some staff. The normal resistance to change was experienced. As the development of the flexible learning model cut across all departments of TSA, it was of the utmost importance that all systems and departments were integrated.

## Integration and buy-in

A Senate decision is critical! Continuous support from top-management is an absolute must! To obtain integration and buy-in from the rest of TSA, several work groups and a single Reference group was established.

*Work groups*

The first step was to form work groups within every department affected. It consisted out of a few (between three and six) staff members of that specific department that are knowledgeable about the department's procedures and are in a position to make positive contributions. The Head of Department, who, in some cases, also formed part of the work group, identified these members.

A broad concept of flexible learning was tabled and the work group then had to adjust their procedures to fit into this broad concept. Where this was not possible, the concept was adjusted to make it more workable for the specific departments.

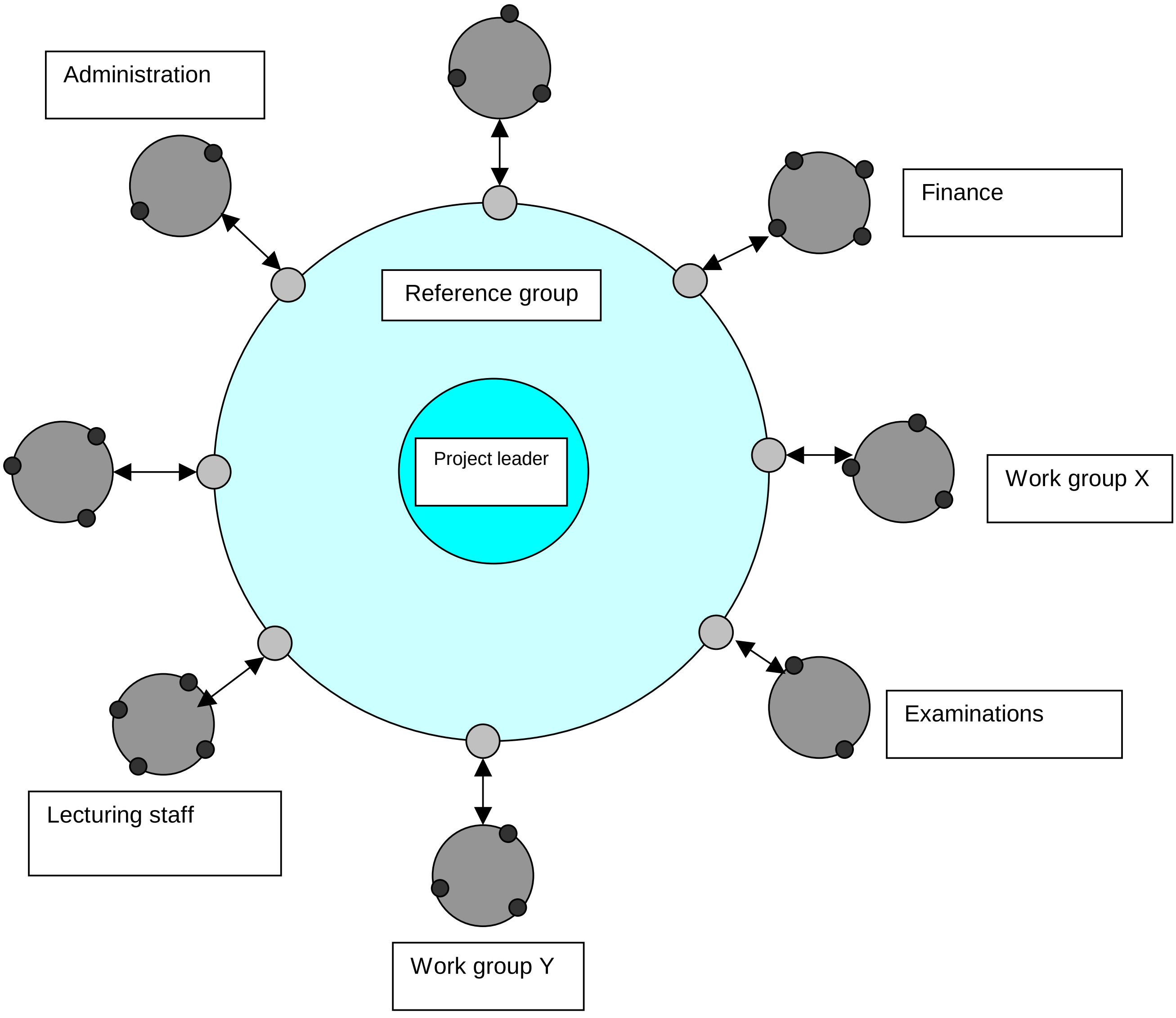
*Reference group*

Every work group then had to nominate one person that would represent their department on the reference group. It was the task of the reference group to ensure total integration of actions. If it was found that processes from one department could not be integrated with those of another, the work groups of the two (or more) departments had to get together and work out a feasible solution to the problem areas.

Certain staff members representing support departments (like Computer Services) were involved in almost every work group discussion, as the changes in procedures meant changes in the IT system.

Many creative and original ideas came from both the work groups and the reference group.

***Schematic diagram of the reference group and work groups***




By following this process, a large degree of buy-in was established.

**The flexible learning process summarised**

*1. Registration*

The student registers following the normal procedures, with the only difference being that the registration period's start and end dates differ.  To overcome this, different blocks had to be established on the IT system, with unique start and end dates.

*2. Finance*

The usual financial procedures are followed, with two minor exceptions:

- The procedure for adding a subject to an existing registration
- Cancelling a subject

*3. Distribution of study material*

The normal procedures are again followed, the difference being that there is no period of "no registrations" which can be used to do stocktaking, etc.  This is done during quiet times in the year.  A separate post-list had to be developed to manage postage to the flexible learning students.

*4. Study process*

The student must still work through the syllabus and complete formative assessment tasks.  However, a different approach to the formative assessment methods used was of cardinal importance, as the normal academic year is extended to 18 months maximum, but at the same time it can be reduced to six months.

The pace of handing in the formative assessment tasks merely determines WHEN the student can write the examination.  If the student does not pass the examination within the allocated 18 months, the registration is terminated.

To qualify for a certain examination session, the student must hand in the formative assessment tasks required before a certain date (about two months before the commencement of the examination sessions).  If the student cannot make that specific date, the formative assessment tasks are carried over to the next examination session.

*5. Examination and examination admission*

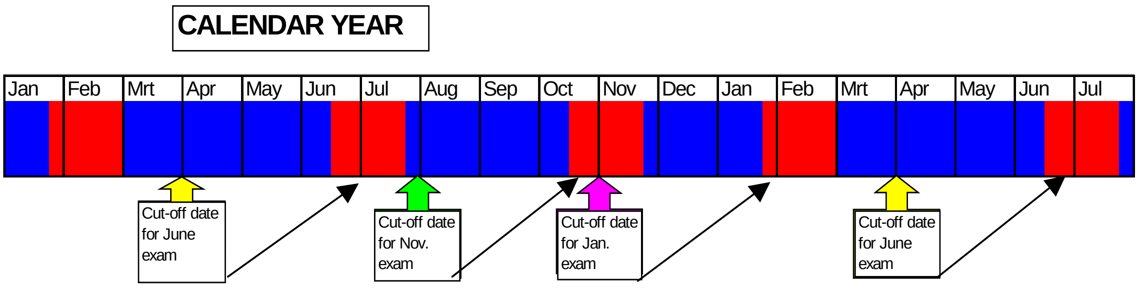
In order to gain admission to the examination, the student must obtain a minimum mark of 40% (on average) for a predetermined number of formative assessment tasks handed in.  The lecturer determines the number of formative assessment tasks and criteria/weightings are normally loaded on the IT system for certain tasks that is more important than others.

If the yearmark is not above 40%, no admission is granted, but rather than terminating the student's registration, as the normal system does, the flexible learning model merely rolls the marks on the system on to the next calculation date. The students then have the opportunity to add to, and even improve, existing marks in order to gain admission to the examination.

There are three examination sessions per year, each of which can be a main examination or a supplementary examination. Students are granted only two opportunities to write and pass the examination, but two aspects determine the first opportunity:

- Whether a valid yearmark is calculated (i.e. whether the student handed in the required number of formative assessment tasks AND passed them in order to obtain a 40% mark on average)
- The student's choice (which opportunity suits him/her the best)

***This is shown schematically as follows:***




The red areas indicate the three examination sessions per year.

***Cut-off dates are distributed as follows:***

| | | |
|---|---|---|
| For the Jan/Feb examination | = | 30 November |
| For the June/July examination | = | 31 March |
| For the Oct/Nov examination | = | 31 July |

Once a student decides to write an examination, the session directly following is the only supplementary opportunity available.

**Advantages of the flexible learning model**

1. It provides flexibility for a diverse group of students.
2. There is continuous registration throughout the year, with no penalties for "late registrations".

3. The extended academic year makes it possible for working students that are in professional positions to extend their study time without losing their money and having to register again, with the same results.
4. The concept of flexibility in pace allows students with the ability and circumstances to accelerate their study time.
5. There is less work for the academic staff than with the dual intake or three-registration cycle model.
6. It is more cost-effective in that government subsidies are based on students **passing**, and not on students registering.
7. Lecturing staff spends less time on the telephone discussing requests for extension of the due dates for formative assessment tasks.
8. Students have a fair opportunity to complete a subject.
9. Further developments from the above model are very possible!
10. Changing this model to an online process is easier than for the normal model.
11. This model supports the principles of the South African Qualifications Authority (SAQA).

**Disadvantages of the flexible learning model**

1. For some staff members, the concept is hard to accept, as we grew up following a calendar year as an academic year (i.e. the school year starts in January and ends in December every year!).
2. Students might find the concept to be unclear in the beginning. They will have to go through a learning phase as well.
3. Especially in the pilot phase, a lot of IT programming is necessary to accommodate the Flexible Learning system. You can expect that most systems that is based on the normal educational models do not make provision for many of the principles of Flexible Learning.

**Pitfalls:**

1. Without total commitment and support from top management, the development and implementation of a flexible learning model will not succeed.
2. A total changeover from the normal system to a flexible learning model should not be considered. A pilot programme should run for at least two years in order to “de-bug” the system, especially in the IT programming areas.
3. Total buy-in from all staff will never be achieved from the beginning. That is one of the main reasons for top-management’s commitment. Some members will support the model and some not. Do not be discouraged when this happens, but rather thrive on small successes and keep the ultimate goal in sight.
4. Selecting the work group members must be done in conjunction with the Heads of departments. The selected staff members should preferably also be positive about the model.

5. IT staff might claim that certain suggestions will be impossible to implement or the programming will be impossible to do.  Very often this is merely an excuse.  Get second opinions, even if you have to go to consultants for this.
6. A project leader that is totally committed to the successful development and implementation is critical.  This person should believe in the model and must stick to the project goals.

**Summary:**

Quality is a buzzword internationally today. Students (clients) will demand quality, flexibility and transparency more and more.  The flexible learning model addresses these requirements and it was found that, once the students were introduced to it, they do not want to go back to the old system.  I suspect that students will put more and more pressure on the old system to change-over to the flexible learning model, as there are still only about 375 subjects that run on the flexible learning model.

**"All men dream:**  but not equally.  Those who dream by night in the dusty recesses of their minds wake in the day to find that it was vanity;  but the dreamers of the day are dangerous men, for they may act their dreams with open eyes to make it possible."
(T.E Lawrence (Lawrence of Arabia).  *Seven Pillars of Wisdom*.