

Working in Classrooms

Teaching, Time and Space

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Working in Classrooms

Teaching, Time
and Space

Learning Guide

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SECTION THREE

School time and space

*How school teaching is shaped by
arrangements of external time and space*

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School time and space

A schematic story of Section Three

How school teaching is shaped by arrangements of external time and space

Arrangements of external time and space at a school can both enable and constrain teaching

Case study 1: Emma's case:

Limited or poorly allocated time and space can constrain teaching and make systematic learning difficult.

But:

Teachers' work is always structured by time and space.

Also, teachers' work always imposes a structure on time and space.

(SECTION 3.2; PAGES 43 - 47)

Orderly arrangements of external time and space are important for teaching and learning

The case of a disorderly school.

In an orderly school, teaching and learning time and space are systematically allocated.

In a chaotic or disorderly school, they are not.

(SECTION 3.3; PAGES 48 - 50)

Regulative rules are used to structure time and space in social institutions

Example 1: Factory time and space

Example 2: Prison time and space

Example 3: School time and space

Rules for institutional time and space relate to the purpose of the institution.

(SECTION 3.4; PAGES 51 - 53)

School space is constructed in different ways for different reasons

School buildings and layout are part of the *physical construction* of school space.

School space is also constructed by *rules* for when space may be used and by whom.

Classrooms are allocated in different ways, for different reasons. (See *Case study 3: A staff meeting.*)

Spaces with special purposes (e.g. the hall and the library) also need rules for allocation and use.

(SECTION 3.6; PAGES 61 - 68)

School time is constructed in different ways for different reasons

Government regulations provide the framework for school teaching and learning time.

Schools use timetables for structuring school time. (See *Case study 2: Mr Speelman drafts the Grade 12 timetable.*)

A viable and appropriate timetable structures school time to enable systematic teaching learning.

(SECTION 3.5; PAGES 54 - 60)

3.1

What can you hope to achieve by working through this section?

Section Three focuses on external arrangements of time and space and how these affect teaching and learning. By the end of the section you should be able to use the following concepts to help you think about different ways of arranging time and space at schools and to understand how these arrangements both help and hinder teaching:

- external time and space;
- structuration;
- order and chaos;
- allocated and prescribed time and space;
- regulative rules;
- contractual rules;
- discretionary time;
- preferential time.



You should also be able to use these concepts to help you think about which arrangements of school time and space are appropriate for promoting systematic learning.

On the previous page you will find a map of the main concepts and key points in Section Three.

School time and space – introduction

3.2

Section Two looked at school teaching as a highly specialized practice in which considerations of time and space play a major role. As we saw in the examples of activities like soccer and choir-singing, external time and space set the boundaries within which the participants shape the internal time and space of the activity. In a game the players have no control over the external time and space during the game, but they do control the internal time and space of the game. The same goes for teaching – external time and space set the boundaries within which teachers may shape the internal time and space of their practice.

Here we will look at how external time and space are arranged at schools, and we will think about how these arrangements help or hinder teaching and learning at schools.

To begin, let's consider the case of Emma, a Geography teacher who is committed to helping her students to learn systematically. Committed though she is, Emma is struggling to fulfil her teaching intentions in the time and space that have been allocated to her at Columbia High School. The case study that follows illustrates a typical period in her teaching day.

We will return to Emma's case several times throughout the module. On your first reading, try to focus on the question: What are the spatial and temporal constraints on Emma's teaching? In other words, how do arrangements of time and space limit or hinder her teaching? You might find it helpful to skim-read the case study first to get an overview and then to reread it with the focal question in mind.

“
External time and space set the boundaries within which teachers may shape the internal time and space of their practice.
”

Case study 1: Emma

Emma is a Geography teacher at Columbia High School, a co-ed school in an urban area. She is waiting for her Grade 10 class to arrive. It is the last double lesson on a Thursday afternoon in February. Her classroom, which she shares with the History teacher, is right at the end of the corridor so she has to wait a while before the class arrives. In the meantime, she finds that the overhead projector she needs for the lesson has been borrowed by one of the other teachers, and so she asks Joseph, the first to arrive, to fetch it from the staffroom. Because of the heat, Emma opens the windows, but they open only a little way and they do not provide much ventilation. Because it is nearing lunchtime, the noise of the traffic has increased, but it seems better to have the windows open with the traffic noise, rather than to close the windows which would make the classroom too hot.

Emma sighs. She too is tired at the end of the day and feels that the heat is making her sluggish, but she knows that she needs to summon her energy and enthusiasm for the last lesson of the day and so inspire her learners. Slowly, the learners start arriving in pairs and small groups. Nomsa and Karin are as usual among the first to arrive – they greet Emma with smiles and settle themselves into the front desks and start taking out their books. Andile, who fancies Karin, joins them and squeezes into the single seat next to Karin. There are not enough desks in the classroom for all the learners, so they are forced to share – something Andile is very happy to do. Slowly the class fills up. Joseph has still not returned with the overhead so Emma uses the time to start introducing the topic of the lesson. As she is about to start, Mac, Tlhako and Alfred come sauntering in, causing a big disruption as they move to the back of the class, stepping over bags and pushing their way through the narrow spaces in between the rows. When Emma asks why they are so late, they tell a long complicated story about having to see Mr Olamini about soccer practice

that afternoon.

Instead of pursuing their story and wasting even more time, Emma decides to continue with her introduction of the lesson. But in order to write down the main points on the blackboard, she needs to clean it - it still has the writing of the previous teacher's history lesson on it. Just as she finishes with the cleaning, Joseph arrives with the overhead projector. Emma first has to set up the projector, rearrange the small table on which to place the projector, and draw down the screen. At last, she is ready to begin. Already fifteen minutes of the lesson have gone by. As she projects the transparency onto the screen, the group at the back complains that they can't see properly because the sun is shining directly into the classroom, creating a glare. But there isn't much Emma thinks she can do to darken the room or to make the transparency more readable. She decides to read what she has written slowly, so that those who can't see properly can copy down the text in their books.

As she is proceeding with the lesson, there is suddenly a scuffle at the back of the class. Mac and Alfred seem to be at the centre of it again. Alfred mutters under his breath something in Tswana, which prompts an angry response from Mac in Xhosa. Some of the Xhosa speaking girls in the class express their disapproval of Mac's response and tell him not to swear like that. Because of the narrow spaces in between the desks, Emma can't get to the back of the class to sort out what threatens to become a physical fight between Alfred and Mac. Raising her voice above the others, she suggests that Alfred swaps his seat with Yusuf and that whatever disagreement there is between Mac and Alfred, they must sort it out after school and not in her class. With angry looks and mutters, the two settle down and Emma can pick up from where she left off. But the momentum of the lesson has been broken, and she struggles to recapture the class' attention.

The heat seems to be getting worse and she has to speak louder and louder to make herself heard above the traffic noise. She had hoped to cover quite a bit of work during the double period, but when she asks some questions about the work she has just covered, she realizes that many of the class haven't yet understood the main points she was trying to explain. So she needs to go over them again. As she starts to explain again, she notices that Karin and Andile who are usually very quick to understand new work start to look bored. They begin a conversation among themselves and Emma gives them a pleading look. She knows that they are quick learners, but she doesn't want their talking to distract others.

In the hot crowded classroom it is difficult to maintain the learners' interest. She knows that this section of the syllabus needs to be covered in time for the assessment scheduled for next week. So Emma starts to talk a little faster, trying to get through this unexpected revision of the work. She's hoping that there will be enough time to fit in the exercise she has planned.

Because there isn't much space for movement in the crowded classroom, she can't call learners to the front to write things on the board, and it is also difficult to rearrange the desks into clusters to enable learners to have small group discussions. The last time she did this, it took quite a long time and it was a very noisy affair to get the desks rearranged. Mr Dlamini, who shares the classroom, wants the desks in rows for his classes, so the desks have to be put back into rows after group work. So, Emma has planned an exercise where the two learners sharing a desk can work together as a pair, without having to rearrange the desks. She has tried to pair a quick learner with one that might not have understood the work as well, but her attempts to pair certain learners has been met with great resistance. Jamil refuses to sit next to Portia whom he accuses of smelling bad. So Emma has left the learners pretty much to choose their own partners. Thlako and Mac share a desk, but although they have their heads down, she suspects that they are not talking about the work at all, judging from their muffled giggling. But Emma can't

get to the back of the class to check whether they are doing the work. A few of the groups put up their hands to ask her advice and she has to step over bags and squeeze in between the desks to get to them. She can't always get there. Some of the groups have finished the exercise and are starting to talk more and more loudly about their plans for the afternoon. Together with the traffic noise, this noise is making it more difficult to concentrate.

At last most of the groups have finished and Emma is about to start on the group feedback when two junior learners interrupt with a notice from the principal which Emma has to read out to her class. The notice calls for all players in the soccer team to meet immediately with the coach before the end of the day. That means that six of the learners in Emma's class have to go. By the time they have noisily packed their bags and manoeuvred their way through the narrow rows, another ten minutes have been wasted. Emma thinks that there might just be enough time to get feedback from two or three of the groups, but she finds it very difficult to get the class to settle down. Their thoughts are already on the afternoon and most of them are starting to pack away their books. Emma thinks that the only way to get through this section of work that she has planned for the day is to give it to the class for homework. As she tries to quieten the class and give them their homework tasks, the bell rings for the end of the day and with an instantaneous goodbye, the class starts to move loudly to the door.

As the last learner disappears, Emma sits down at her table and heaves a great sigh. How is she going to catch up with the work that she didn't manage to do today? And what about all that marking that is still waiting for her at home? Will she have enough time this evening? Emma looks at her watch. She has half an hour to eat her sandwich for lunch and drink a cup of tea in the staff room before taking the girls' volleyball team for their weekly practice. That means that she'll only get home after 4 this afternoon and then there is still the shopping to do before going home to cook the evening meat. Suddenly Emma feels very tired. It seems as though there just aren't enough hours in the day to do everything.

Now let's try to get a clearer idea of what is going on in Emma's class.

ACTIVITY 8

In your workbook:

- 1 List the ways in which you think Emma's lesson is constrained or limited by arrangements of time and space.
- 2 Now list all the aspects of time and space over which you think Emma herself has no control. For each item on your list write a sentence explaining why you think this is something over which Emma has no control.
- 3 Lastly, list the arrangements of time and space that you think are under Emma's own control and, for each item, explain why you think this.

On your list of the arrangements of time that are beyond Emma's control, you probably included the school timetable. Since she is teaching in a high school, Emma is unlikely to have drawn up the timetable herself (although if she had been teaching in a junior primary school she may have done so). Part of Emma's problem in this lesson, it seems, is that the class is scheduled to meet for the last double period on a Thursday afternoon. Near the end of the school day and near the end of the week, this is not an ideal time for working with a group of boisterous adolescents. Both Emma and the learners are tired and distracted.

Emma's allocated teaching space compounds her problems with time.

The classroom faces onto a noisy highway and is poorly ventilated. What is more, the room is neither a dedicated Geography classroom nor a room that Emma can call her own. She shares the room with a History teacher and has little time to prepare it



Set aside about 30 to 45 minutes to reread Emma's case and complete the task in your workbook. Once again, we suggest that you read and assess what you have written before proceeding.

for her planned activities. To make matters worse, the size of the classroom is not suited to the size of the class. Desks are so crammed in that Emma can't even get to the back to stop a fight. Clearly, Emma is struggling to work within the constraints of *allocated time* and *allocated space*, arrangements of external time and space are limiting her teaching possibilities.

Working within the constraints of allocated time and space

Stop. Think.

Here are two questions for you to think about:

- 1 What can Emma do about her situation?
- 2 In your view, would she be justified in saying that it is not her responsibility to do anything about it?

Perhaps you think that Emma is not responsible for solving the problem. You may want to argue that the responsibility lies with the school principal or the provincial Education Department. After all, if Emma had been given a decent timetable, if she had been allocated a properly equipped and spacious Geography room of her own, and if she had not been given such a huge group of students, she would not be struggling to teach. It is tempting, but misleading, to argue in this way. This is because while it is true that a scarcity of resources has made Emma's job more difficult, it is false to think that any of us can ever escape the constraints of time and space.

All schoolteachers, no matter where they teach, work within the constraints of time and space. Part of a teacher's responsibility is to exercise her agency in finding appropriate ways of working within these constraints. Emma's success in promoting systematic learning depends crucially on how she works *with* and *within* her allocated time and space.

Time and teachers' work

Andy Hargreaves, a Canadian educational researcher, has made an extensive study of the relationship between time and teachers' work. Here's an extract from his book *Changing Teachers, Changing Times* (Hargreaves, 1994). As you read the extract, notice the different ways in which time is related to teachers' work.

Teachers take their time seriously. They experience it as a major constraint on what they are able and expected to do to achieve their ends in their schools. 'No time', 'not enough time', 'need more time' – these are the verbal gauntlets that teachers repeatedly throw in the path of enthusiastic innovators.

The relationship of time to the teacher runs still deeper than this. Time is a fundamental dimension through which teachers' work is constructed and interpreted by themselves, their colleagues and those who administer and supervise them. Time for the teacher is not just an objective, oppressive constraint but also a subjectively defined horizon of possibility and limitation. Teachers can take time and make time, just as much as they are likely to see time schedules as fixed and immutable. Through the prism of time we can therefore begin to see ways in which teachers construct the nature of their work at the same time as they are constrained by it. Time, that is, is a major element in the structuration of teachers' work. Time structures the work of teaching and is in turn structured through it. Time is therefore more than a minor



In Section Five you'll have an opportunity to reconsider the first question. In the meantime, make some brief notes on your response to the question and keep them for reconsideration when you have worked through Section Five.

The extract comes from a chapter entitled 'Time: quality or quantity? The Faustian bargain' from Hargreaves, A. *Changing Teachers, Changing Times* (Teachers College Press, 1994), p. 5, which is included in the reader for this module.



If you are interested in a deeper, sociological understanding of the relationship between time and teachers' work, you might like to read the whole chapter by Hargreaves in the reader. This is optional reading for the module.

organizational category, inhibiting or facilitating management's attempts to bring about change. Its definition and imposition form part of the very core of teachers' work and of the policies and perceptions of those who administer it.

Structuration of teachers' work

For the moment, let's focus on only a few of the many interesting ideas in this extract. Did you notice that Hargreaves describes time as being a 'major constraint', and as 'a major element in the structuration of teachers' work'? Elsewhere in the same chapter, he describes time as 'central to the formation of teachers' work'. The concept of structuration is probably the most important idea in the extract. Structuration is a sociological concept that captures a two-way relationship between time and human activity: just as our activities are structured by time, so time is structured by our activities.

You are already familiar with this idea. Think about the various examples in Section Two – soccer, cricket, choral singing, and so on. All these are examples of how an activity structures and is structured by time.

What have we learnt so far?

Applied to the practice of school teaching, the concept of structuration helps us to see that:

- 1 Teachers' work is always structured (and so constrained and enabled) by time.
- 2 Teachers' work imposes a structure on time.

ACTIVITY 9

- 1 Reread the case study about Emma on pages 43 to 45.
- 2 Then, in your workbook, write one paragraph briefly describing an incident from the case that you think exemplifies or illustrates the concept of structuration.

From Section Two, you are already familiar with the idea that time (and space) may be structured *internally* (through the constitutive rules and definitive aims of the activity or practice) or *externally* (through regulative rules and circumstantial conditions). Hargreaves draws a different but related distinction. In the extract from Hargreaves, you will see that he distinguishes between the construction and interpretation of time *by teachers themselves* and the construction and interpretation of time *by those who administer and supervise teachers' work* (for example, school principals). He also talks about the construction and interpretation of time *by policy-makers* (for example, the provincial department of education and its officials). This suggests that teachers' time is structured at three different levels:

- by teachers themselves;
- by the principals who administer teachers' work; and
- by the government departments that make the policy for schools.

How policy-makers and school principals arrange and allocate time and space has important consequences for teachers and learners. Let's look at an example of what happens when school time and space are very poorly organized.



You will need about 30 minutes for this task. To make systematic use of your time, it's a good idea to complete the task before proceeding.

3.3

Order and chaos in schools



Week 5 begins.

In 1984 Elizabeth de Villiers, a South African teacher, began work at a school where time and space were not systematically allocated. As you read the following extracts from her book, *Walking the Tightrope*, notice how the poor organization of time, space and teachers' work affects teaching and learning at the school. The extracts describe the state of affairs at different times during the first few weeks of the school year.

A disorderly school

These extracts are taken from De Villiers, E. *Walking the Tightrope: Recollections of a Schoolteacher in Soweto* (Johannesburg, Jonathan Ball, 1990), p. 60 (Extract 1); p.62 (Extract 2); p. 65 (Extract 3); p. 66 (Extract 4); p. 72 (Extracts 5 and 6).

Extract 1

'You have wasted a week,' the principal tells wide-eyed children in assembly on Monday morning. 'You have wasted a whole week!' The blatant injustice of this accusation is jolting, and I look around at the other members of staff for confirmation of my thoughts. But they gaze at the gravel and show no sign of having heard anything but the undeniable truth. My thoughts whirl over the events of the past week. It is certainly not the children's fault that time has been wasted. If administrative pre-term preparation of the timetable and allocation had been enforced, the pupils would be now have made a start on the year's work. Instead they have been forced, along with the staff, to chat and eat away the waiting days. The staff, moreover, have had the advantage of mobility, while the pupils have been forced to remain in stifling classrooms, becoming steadily more bored and irritable.

Extract 2

'Do you have pencils or pens?' I ask and am met by a chorus of 'No, mistress. We did not know you were coming today. No one told us!' I am incredulous and feel a bit like a strolling player who has dropped in to perform for an impromptu and hastily gathered audience. 'Are you aware of your timetable?' I ask. 'No, we are waiting for it,' they replied in unison.

Extract 3

I return to the staffroom to check on my timetable before setting out for the next class, and discover that the gremlins have been at work. With the dreadful feeling that my anticipation of eventual order has been short-lived and things once more started to fall apart, I discover a brand new sheet of paper pinned on the noticeboard. Beautifully presented in italicized script, it now offers me five instead of the previously ordained six English classes to cope with – the missing class being the one I had anticipated teaching in the next period.

Extract 4

Problems continue throughout this day and the rest of the week. Clashes of specified classes and inconsistencies are frequent. We simply have to soldier on, adapting and changing continuously in order to achieve any lessons with the children. Sometimes I am in luck, finding that I have prepared for and am teaching the right class at the right time. Still, it takes me until Thursday to meet all the classes allocated to me.

Extract 5

The teachers are not often seen congregating in the staffroom anymore except during breaks. Their appearances in the classrooms, too, are remarkably infrequent and I often pass teacherless groups of pupils waiting disconsolately at their desks. The explanation for the latter is evidently still the confused nature of the timetable. A typical scenario is: two teachers arrive simultaneously at a class, each prepared to deliver a lesson. After an exchange of bitter words as to who has the official right of way, they both flounce off, leaving the class unmanned. The reason for the empty staffroom is to be found in the terror campaign that Dlamini is waging among us. The pinning of the timetable on the noticeboard was for him tantamount to a declaration of war. 'A timetable is a work order,' he says, waving away the innumerable complaints about its almost total unworkability.

Extract 6

The second week lurches into the third and the third into the fourth. Nothing has changed, nor does any change seem likely.

Stop. Think.

You may be shocked at the chaos depicted here or you may be all too familiar with schools that have no clear planning and few consistent rules – either for teachers or for learners. What are the causes and effects of such disorderliness and could it have been prevented? What do you think?



Take some time to reflect on the issues that are raised here.

ACTIVITY 10

In your workbook:

- 1** List the main causes of disorder at the school described in these excerpts from Elizabeth de Villiers' book.
- 2** List your suggestions for how the chaos at the school could have been prevented.
- 3** Briefly discuss the similarities and differences between the situation described by Elizabeth de Villiers and Emma's situation, described in Case study 1.



You will need about 30 minutes for this task. To make systematic use of your time, it's a good idea to complete the task before proceeding.

As difficult as Emma's situation is, she is not working at a chaotic school. Columbia High, where Emma teaches, seems to be fairly orderly. It is orderly because teachers know *what* subjects they will be teaching *to whom* during the year. They also know *where, when, how long, and how often* they are required to teach different classes or subjects every week of the school year. Similarly, students know *where* they should be when for each period of the school day and *who* will be teaching them *what*. Of course, there are still problems at Columbia High. It certainly does not run like clockwork. Some learners have a habit of arriving late for class, others interrupt lessons with messages from the principal, the classrooms are overcrowded and not properly equipped, and so on. But teaching and learning time and space have been systematically allocated at Emma's school.

By contrast, Elizabeth de Villiers describes a chaotic or disorderly school. The school is so chaotic that it can barely function. At the start of the school year, there is no timetable. Later, when a timetable has been drawn up, it is so haphazard that two teachers arrive simultaneously at the same class and then, after 'a bitter exchange of words' leave the class 'unmanned'. By the fourth week of term, there is still confusion about teaching times and spaces. I think you will agree that under such conditions of chaos, it is difficult - perhaps impossible - for systematic teaching and learning to take place. Haphazard arrangements of time and space impede teaching and learning, rather than enable them.

What have we learnt so far?

From our discussion so far we can draw some conclusions.

- 1 Our analysis of Emma's case, together with Hargreaves' account of teachers' time, have helped us to see that arrangements of external time and space constrain teaching and learning.
- 2 Hargreaves' account of teachers' time has helped us see that time structures teachers' work and teachers' work structures time.
- 3 Elizabeth de Villiers' descriptions of a disorderly school have shown, by way of contrast, that orderly arrangements of external time and space play an important part in enabling teaching and learning.

Orderliness doesn't just happen by chance. It results partly from how time and space are structured in schools and other social institutions, as well as from rules that regulate the uses of institutional time and space. This is what we will think about next.

Regulative rules and the structure of time and space in social institutions

3.4

All social institutions have rules relating to time and space. Sometimes these rules are explicitly stated, sometimes not. Let's begin by thinking about school time and space in relation to time and space at two other kinds of social institution – factories and prisons. Although you may have no first-hand experience of factories and prisons, you probably have a rough idea of what it would be like to work in a factory or to be incarcerated in a prison.

Stop. Think.

Use your rough idea to make some notes in response to the following questions:

- Should school time and space be constructed and regulated like factory time or prison time?
- Why or why not?

Of course, if you wanted to give a substantial and well-grounded answer to the question, you would have to give an account of how factory and prison time and space are constructed and why they are constructed in these ways. Then you would have to comment critically on whether these ways of structuring time and space are appropriate to the purposes of schools and to the practice of teaching. So let's look at some of the regulative rules that structure time and space in factories and prisons, and then come back to the question about schools.



Although this is not a set activity, you might like to make these notes in your workbook so that you can refer to them later.

Factory time and space

If you have ever visited a well-run factory, you may have noticed a book that the workers have to sign when they arrive at work and, again, when they leave. Some factories have a clock for 'clocking in' rather than a book for signing in. Time is strictly allocated and controlled in a well-run factory. Rules regulating work time cover not only starting and finishing time but also lunchtime and other breaks. There are rules to restrict time-wasting activities, such as talking to fellow workers or constantly leaving the work area, and rules about output per work period. There are rules for working overtime and working short time, as well as rules for time off. All these are regulative rules because they regulate the workers' time at the factory. They also structure the activities of the factory.

Have you noticed that several of these regulative rules about time are also rules about space? This is because they regulate who may be where and when. They also regulate what may and may not be done within different parts of the factory. Some rules about uses of space and equipment will be to ensure the workers' safety; others will be to enhance productivity. Productivity is important, since the purpose of a factory is to produce goods – furniture, motor vehicles, steel rods, fabric, clothing, and so on – and to do so without financial loss. A factory's proper functioning, its productivity and its economic viability depend on how its working time and space are arranged. In other words, the functional coherence of a factory depends on a fairly rigid set of rules relating to time.

Although factory rules are fairly rigid, these days they are usually the outcome of negotiation between workers and management. In South Africa, and many other countries, the procedures and parameters for negotiation have been established by

a set of laws and regulations passed by government. Within these parameters, rules are agreed to by workers and management as part of a contract between these two parties. Contractual rules, in this case, belong to the broader category of regulative rules.

Of course, rules on their own are not enough to ensure the orderly and productive use of time and space in a factory. From your own experience, you know that rules can be broken. This is why a framework of factory rules also incorporates details about the consequences of breaking the rules. For example, the rule dealing with work starting-time is linked to a rule on punctuality which, in turn, is linked to a set of procedures to be followed when someone is late. For a first offence there may be no more than a warning. For persistent late arrival, the procedures may allow for wage deduction or even dismissal. Because these rules have been arrived at after a process of negotiations, they generally represent the interests of workers and management. In this way, the rules play an important part in shaping activities in the factory and in promoting an understanding of the requirements for its success.

Prison time and space

Now let's think about the rules relating to time and space in a different kind of social institution - prisons. Prison time and space is even more strictly controlled than factory time and space. We speak of prisoners as 'doing time' and as 'being inside'. Both phrases remind us of how time and space structure, and are structured by, prison activities. Prison rules are designed to restrict, rather than enable, those whom they affect. The very idea of a prison is one of enclosed space, with hard boundaries between inside and outside. Thick, impenetrable walls; high, barred windows, and heavy, securely locked gates - all these help to cut prisoners off from the world outside. Prisoners are not willing participants but inmates whose agency is severely restricted. At the heart of prison punishment is a deprivation of freedom. As inmates, prisoners must be out of bed at a specific time every morning. Their meal times are prescribed, as are recreational times, time for lights out, time for visitors and, of course, time for confinement to the cell.

Where do prison rules come from? The government makes some; the prison authorities make others. But prison inmates have no say in the rules that regulate them. Unlike factory rules, prison rules are neither consensual nor contractual. Their enforcement therefore depends on *coercion* rather than on *consent*. For prison inmates there is no core practice; much of their time is spent simply in trying to get time to 'pass'. For them, prison rules are entirely restrictive, not enabling. Yet it is because the rules are restrictive that they enable the prison to fulfil its institutional function.

Although there are important differences between factory rules and prison rules, and differences in the ways in which they construct time, you have probably noticed some similarities, too. For example, in both factories and prisons, the time/activity matrix is crucial for the proper functioning of the institution. In other words, time is an important principle of *structuration* in these institutions. Rules about time and space structure the activities and allow for their control, but the activities also structure time and space. The resulting routines help to develop and sustain orderliness.

Factories and prisons have at least one thing in common with schools - all three are social institutions. As the factory and prison examples show, for social institutions to function properly they have rules that *construct* and *regulate* the uses of institutional time and space. In the same way that rules provide order and promote the systematic use of time in institutions such as factories and prisons, so they provide the framework within which schools can function purposefully and effectively. Before we go on to consider school time and space, here's an important idea for you to hold onto:

Take note of this key point about social institutions.

Social institutions can function properly only if they have appropriate rules to construct and regulate the use of institutional time and space.

School time and space

Now you are in a position to reconsider the questions posed at the beginning of section 3.4.

ACTIVITY 11

In your workbook, write one or two paragraphs in response to these questions:

- Should school time and space be constructed and regulated like factory time or prison time?
- Why or why not?

Clue: Think about the purpose of a school as opposed to the purpose of a factory or prison.

The proper functioning of an institution depends on having rules to regulate the uses of time and space in the institution. But, as Activity 11 may have led you to conclude, the rules also have to be appropriate to the purposes of the institution. What does this mean? Appropriate rules and routines are those that enable and do not impede the activities and practices that the institution is supposed to support. In other words, the rules should not undermine the purposes of the institution or of its core practice.

How did you respond to the question in Activity 11? In your view, should school time be constructed like prison time or factory time? Remember that the purpose of a school is to support the practice of school teaching and that the defining purpose of the practice is to enable systematic learning. Now think about whether the sort of rules applied to time and space in a prison, or a factory, would enable or impede systematic learning. There have been times in the history of schooling when schools have been run rather like factories. At other times they have been run rather like prisons or army barracks. This is because how schools are run depends on the assumptions that are made about their institutional purposes.

In the next two sections we'll think about how school time and space are structured and at how well different ways of structuring school time and space are suited to the practice of enabling systematic learning. Section 3.5 looks at school time; Section 3.6 at school space.



You will need about 30 minutes to write your response. But you may find it helpful to reread the sections on factory and prison time and space first.

3.5

The construction of school time



Week 6 begins.

How is school time structured? Who decides? And what are the reasons for structuring school time in different ways?

Government regulations and school time

In South Africa, government regulations provide the general framework within which schools are required to arrange teaching and learning time. At the beginning of 1998, the national Department of Education established a new set of norms for time management at schools so as to prevent the kind of chaos that has made so many of South Africa's schools dysfunctional. Each provincial education department has passed a set of regulations that complies with national norms. Here's an extract from the regulative rules issued by the Western Cape Education Department in 1998. Notice the amount of time that is prescribed for the formal school day. Also, notice whether the regulations allow for discretionary time.

1. INTRODUCTION

The circular ... acknowledges the professional commitment of educators and the nature of their work and attempts to provide a framework within which their work may be regulated so as to be aligned with the 1 800 hours of work prescribed in the public sector.

2. WORKLOAD OF EDUCATORS

All educators should be at school for a minimum of 7 hours per day. Any absence during this period will be at the discretion of the principal with the proviso that the normal functioning of the school timetable is not disrupted.

Seven hours comprises about 1 400 hours allocated to the formal school day and about 400 hours for activities outside the formal school day (including 80 hours of professional development).

The work of an educator includes the core duties ... None of these duties may diminish the total amount of scheduled teaching time as per the school's timetable.

3. ADAPTING THE SCHOOL DAY

With regard to the religious and cultural needs of various communities, institutions where such needs exist may, after consultation with all role players, adapt the formal school day to accommodate these needs. However this adaptation is done, it does not reduce or in any way affect the obligation of educators to be at the school for a minimum of 7 hours a day every day, including Friday.

For both educators and learners, the last day of the school term should not be shorter than 5 hours.

During examinations, learners must be at school for a minimum of 5 hours and staff members are to be at school for the prescribed 7 hours of the formal day.

These regulations deal with 'the formal school day', that is, time to be spent on the school premises. A formal school day consists of seven hours for teachers. This is *prescribed time* for teachers - they must be at school for the specified hours, unless they have permission to be away from school. Time spent on learning outside of the prescribed time is at the discretion of the teacher who may set some tasks to do at home.

School timetables

Within the framework of government regulations, the most important tool for structuring school time is the timetable. Let's look at a fictitious example of how a principal organizes school time.

Case study 2: Mr Speelman drafts the Grade 12 timetable

With the help of the school management team, Mr Speelman, the principal of Columbia High, has drafted three timetables for Grade 12. He has written some notes for each table. Some notes are reminders about possible problems and solutions, others are meant to help staff to understand the tables. Mr Speelman thinks that the younger teachers are quite inept when it comes to reading a timetable.

TABLE 1: WORK ALLOCATION PER SUBJECT (GRADE 12)

SUBJECT	CLASSES, TEACHERS AND PERIODS PER WEEK			LEARNER NUMBERS		
	Grade 12A	Grade 12B	Grade 12C	121	12B	12C
English first language	Ms M (8)	Ms M (8)	Ms M (8)	36	38	32
Second language	Mr R (7)	Mr R (7)	Mr R (7)	36	38	32
Mathematics	Mr P (7)	Mr P (7)	36	38		
Physical Science	Mr P (7) ¹		14 ²	22 ²		
Biology	Mrs S (7)	Mrs S (7)	Mrs S (7)	36	38	32
History		Mr A (7) ¹	Mr A (7)	16	32	
Geography	Ms D (7)		Ms D (7)	36	32	
Accountancy	Ms B (7)+	Ms B (7)		22	32	
Economics			Mrs J (7) ³	38 ²	8 ²	
Industrial Arts			Mr X (7) ³		13	
Home Economics			Mrs Y (7) ³		11	

NOTES ON TABLE 1

¹Mr P (Physical Science) and Mr A (History) have a split class. 22 of the 12Bs go to Mr P for Physical Science and the remaining 16 go to Mr A for History.

²Combined classes: Grades 12A and 12B combine for Physical Science; grades 12B and 12C combine for Economics.

³Mrs J (Economics), Mr X (Industrial Arts) and Mrs Y (Home Economics) have a split class. 8 of the 12Cs go to Mrs J, 13 of them go to Mr X, and the remaining 11 go to Mrs Y.

TABLE 2: TEACHING TIME PER CLASS PER SUBJECT (GRADE 12)

Teacher and subject	Grade 12A	Grade 12B	Grade 12C	Total hours
Mr A (History)		5 h 50 min	5 h 50 min	11 h 40 min
Ms B (Accountancy)	5 h 50 min		5 h 50 min	11 h 40 min
Ms O (Geography)	5 h 50 min		5 h 50 min	11 h 40 min
Mrs J (Economics)		5 h 50 min		5 h 50 min
Ms M (English)	6 h 40 min	6 h 40min	6 h 40 min	20 h
Mr P (phys Science)	5 h 50 min			5 h 50 min
(Mathematics)	5 h 50 min	5 h 50 min		11 h 40 min
Mr R (Second language)	5 h 50 min	5 h 50 min	5 h 50 min	17 h 30 min
Mrs S (Biology)	5 h 50 min	5 h 50 min	5 h 50 min	17 h 30 min
Mr X (Indus Arts)			5 h 50 min	5 h 50 min
Mrs Y (Home Econ)			5 h 50 min	5 h 50 min

NOTES ON TABLE 2

Mr X, Mrs J, and Mrs Y have light loads. They can be allocated to teach Grades 8, 9, 10, and 11, as well as Grade 12.

Ms M is already fairly heavily loaded, but she's also the only teacher properly qualified to teach Grade 11 English. This is a problem. If she is allocated the Grade 11 English as well, she'll be teaching 40 hours a week. And she has administrative work as department head.

TABLE 3: CLASS AND SUBJECT TIMETABLE (GRADE 12) - MONDAYS

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7
Grade 12A	Maths (Mr P)	Phys.Scl Account. (Mr PI Ms B)	English (Ms M)	Biology (Mrs S)	Geography (Ms D)	Second language (Mr R)	English (Ms M)
Grade 12B	English (Ms M)	Phys.Sc/ History (Mr PI Mr A)	Maths (Mr P)	Second language (Mr R)	Biology (Mrs S)	Economics (Mrs J)	Economics (Mrs J)
Grade 12C	Biology (Mrs S)	History (Mr A)	Account. (Ms B)	Econ/ Indus/ Home Econ (Mrs JI Mr XI Mrs Y)	Second language (Mr R)	English (MsM)	Geography (Ms D)

NOTES ON TABLE 3

50-minute periods scheduled, as requested by teachers. Will it work? The teachers and students are so used to 30-minute periods that there may be some difficulties adjusting to longer time-slots.



If you are interested in how timetables reflect a school's culture, see Meighan's chapter 'Timetables' in the reader that accompanies this module. This is not a required reading for the module, but an opportunity for you to enrich your understanding of school time.

Together these three tables are an example of how school time is constructed. A timetable codifies the deliberate allocation of time in a school. But, as you may have noticed, a timetable doesn't only allocate time; it also allocates people, places and 'subjects' or activities.

We can ask a number of different questions about timetables, depending on what

aspect of schools we are interested in. For example, we can find out quite a lot about a school's culture and about its views on knowledge, teaching and learning by asking what principles and assumptions underlie the allocation of time at the school. Right now, our aim is to think about the timetable as a tool for bringing order to the teaching and learning activities in a school. From this point of view, there is an obvious question to ask about any school timetable: Is it viable? In other words, will it do the job of bringing order to the teaching and learning activities of the school?

Stop. Think.

What would you look for if you wanted to judge the viability of a school timetable? Pause to think about this before reading on. Now compare your suggestions with the conditions for viability that are proposed below.



Take some time to reflect on the issues raised here.

Viable timetables

To be viable a timetable should, at the very least, show *when* each teacher is teaching *what* to *which* class. In a school where the teachers move from class to class, the timetable should also show teachers *where* they will find their classes. In a school where teachers remain in their own allocated classrooms, the timetable should show *which* class is due at which times. A viable set of timetables and worktables would also need to pay some attention to:

- the sequence and timing of subjects on the timetable;
- the amount of time to be allocated to each subject per week or cycle;
- whether and when to combine classes;
- whether and when to split classes;
- possible clashes of teachers' time.

ACTIVITY 12

- 1 Look carefully at Tables 1, 2 and 3 on pages 55 and 56. Are they viable? Will they help to bring order to teaching and learning at Columbia High?
- 2 In your workbook, make brief notes on whether and how the set of tables meets the requirements for viability. Your notes should include comments about any important information that you think is missing from the tables.



You will probably not need more than about 30 minutes for this task. As usual, you might like to read and assess what you have written before proceeding.

Although there is some missing information (for example, room allocations, breaks, and assembly time), the three tables show that Mr Speelman has planned fairly carefully for the school year. All the Grade 12 teachers know what they will be teaching when and to whom; and the Grade 12 classes know which subjects they will be doing when. What is more, the timetable complies with departmental regulations about the prescribed number of teaching hours per week. At Columbia High the *allocated teaching time* per subject complies with the *prescribed teaching time* – at least in the case of Grade 12. So far, so good – the timetable for Grade 12 seems to be viable.

Appropriate timetables

We've seen that Mr Speelman's timetable is viable, but is it appropriate? Has teaching time been arranged in a way that will help to promote systematic learning? In other words, does the timetable fit the institutional purposes of a school and the formal purpose of school teaching? Would the same kind of timetable be appropriate for a primary school, and for a Grade 1 class? To help you reach your own provi-

sional answers to these questions, we can think about a number of other, related questions:

- Why should periods be 50 minutes rather than, say, 30 or 35 minutes long?
- Should any subjects or activities be allocated double periods? Why?
- Should certain subjects or activities be allocated preferential time? Why?
- Do the arrangements of time provide favourable conditions for learning?

As you read through the discussion below, keep the following idea in mind:

A feasible and appropriate timetable structures school time in a way that helps to promote systematic learning.

Duration of periods

Let's begin with the length or *duration* of periods. The first two questions on the list are both about duration. Tradition and school ethos often play a great part in influencing the timetable, as do practical or educational considerations. Some schools work in 30-minute slots because they have always done so - or at least for as long as anyone can remember. To change the length of the period would be to break with long-standing tradition.

In the timetable for Columbia High, Mr Speelman has opted for seven 50-minute periods per day (see Table 3). This is a break with tradition. Previously the school was run on 30-minute periods. We know that Mr Speelman has changed this in response to a request from teachers (see the notes to Table 3) but we don't know why they have made this request. Perhaps it was for practical reasons. For instance, 50-minute periods will reduce the number of times the learners have to move from room to room. Reducing the movement of large groups of learners could help to reduce disorderly behaviour and disruptions to the school day.

But perhaps the request reflects a particular view of teaching and learning. In other words, the length of periods may have been decided on pedagogical rather than practical grounds. For example, while a 30-minute period may be suited to rote learning of facts, it is too short a time for critical discussion, group problem-solving or scientific experimentation. This is why many schools allocate double periods for science, especially in the senior classes. Perhaps there are good reasons why subjects other than science should also be given longer periods. For example, in 30-minute periods, it is very difficult for teachers to set activities in problem-solving, critical discussion and group decision-making. As you may know, South Africa's policy of outcomes-based education requires teachers to enable learners to develop their capacity for critical inquiry, co-operative work, creative thinking, and so on. Perhaps outcomes-based education needs longer periods to be effective.

Stop. Think.

Earlier on, we asked whether it would be appropriate for a Grade 1 class to have a timetable similar to the Grade 12 timetable shown in Table 3. There are several strong reasons for answering 'No' to this question. Can you think of any? Think about the age and abilities of the learners; think about the structure of the curriculum in the foundation phase; think about the kinds of things that you would have to teach young children entering school for the first time.

You might like to make some brief notes about your thoughts. You will have an opportunity to reconsider your ideas in Section Four when you examine the relationship between length of period, approaches to teaching and learning, and the age, abilities and interests of learners.



Take some time to reflect on the issues raised here.

ACTIVITY 13

This investigative task requires you to do some of your own 'research'.

- 1 Find a South African example of a Grade 1 timetable and try to find out who drew up the timetable (the teacher, a group of teachers, the principal, the provincial department?).
- 2 Paste a copy of the timetable into your workbook and write a brief note acknowledging the source of the timetable (that is, say where it came from and who drew it up).
- 3 Write a detailed account in your workbook of the similarities and differences between Mr Speelman's Grade 12 timetable and your example of a Grade 1 timetable.
- 4 Say whether you think the differences between the Grade 12 and Grade 1 timetables are appropriate. Give reasons for your answer.

Primary schools, especially in the foundation phase (that is, junior primary), structure time differently. Class teaching rather than subject teaching is the norm and since a foundation phase teacher spends most of her day with a single class, she is able to use time flexibly as long as she complies with departmental prescriptions about the amount of time for different areas of the curriculum. For example, in Gauteng schools Grade 1 learners have four hours a day of formal learning time. One hour a day is prescribed for each of the core learning programmes, that is, Mathematics, Communication and Life Skills. The fourth hour is *discretionary time*. Schools may choose how to use this time, so long as it is used for learning activities.

ACTIVITY 14

Have another look at the Grade 1 timetable you analyzed for Activity 13. In your workbook, write short notes in response to these questions:

- 1 Does the timetable reflect the prescribed time for the three core learning areas? If so, in what sequence?
- 2 How does the timetable break down the hours of discretionary time?

Preferential time

We have been thinking about the duration of school periods. Let's now consider the claim that some subjects should be given *preferential time*. This is the idea that certain subjects – for example, mathematics and the sciences – should be taught in the morning because they require greater 'mental ability' and concentration than other subjects. Practical subjects such as handwork and art, it is assumed, do not make the same intellectual demands on learners and so should be scheduled later in the day. Think for a moment about your own schooling: Were subjects like mathematics allocated preferential time? Have another look at the Grade 1 timetable that you included in Activity 13. Are any of the learning areas given preferential time?

Why is preferential time given to some subjects? Some people argue for preferential time on *pedagogical* grounds. A pedagogical argument is one that focuses on the requirements for enabling learning. The argument that mathematics should be taught in the morning because it is intellectually demanding could be a pedagogical argument. If we add that learners concentrate best at the beginning of the school day and so are better able to learn at this time, then we will have the premises for a valid argument. Whether it is a good or sound argument is still open to question. We can raise questions about the supporting evidence for the claim that learners concentrate better at the beginning of the school day. We can also raise questions about the assumption that mathematics requires greater concentration than does art or geography, for example.

There is another way of looking at preferential time. Some writers suggest that preferential time is not so much a pedagogical matter as one that has to do with the *micropolitics of schooling*. In other words, preferential time may reflect relationships



As this is a 'research' task, it will take you longer than the other tasks you have undertaken so far. First, you will need to schedule time to find a recent Grade 1 timetable. If you are a pre-service student teacher or if you are not teaching at a primary school, you will have to contact a teacher, principal or lecturer who can help you. For the written part of the task you will need about 60 minutes.



Janet Moyles discusses primary school timetables in her book *Organizing for Learning in the Primary Classroom* (Methuen, 1992). If you are interested, see her chapter 'Time for teaching and learning' in the reader for this module.



You will need about 10 minutes for this task.



If you are interested in this line of argument, have a look at the section on 'Micropolitical time' in the chapter by Hargreaves in the reader that accompanies this module.

of power and status. Because mathematics is high-status knowledge, so the argument goes, it is given preferential treatment.

Timetables and the conditions for learning

The final question on my earlier list asks whether the arrangements of school time provide favourable conditions for learning. I am sure you will agree that this is the most crucial question on the list. Answers to the other questions about duration and preferential time are all linked to this question. If the arrangements of school time do not provide favourable circumstances for learning, then they are inappropriate. Such arrangements do not fit the institutional purpose of school, which is to support the promotion of systematic learning. How can you tell if arrangements of external time are suited to enabling systematic learning? Section Four explores some aspects of this question. A full answer to the question probably requires an account of how people learn but that is outside the scope of discussion of this module. You might like to refer to another module in this series called Learners and Learning for more discussion of this matter.



We have been thinking about the structure and use of school time. Let's move on now to think about school space.

The construction of school space

3.6

When we speak about the construction of school space, the word 'construction' has at least two meanings. The buildings, the layout of the grounds and the use of boundary markers such as walls or fences are all part of the physical construction of school space. But school space is also constructed by the rules for how and when the space may be used and by whom. If you think back to our discussion of time and space in factories and prisons, you will remember that those social institutions, too, have rules that construct and so structure institutional space.



Week 7 begins.

The physical construction of school space

The physical construction of school space (that is, the buildings and grounds, and the relationship between them) suggests possibilities for teaching and learning and at the same time, sets constraints on what can be done. School buildings and the layout of school grounds also provide interesting examples of different layers of meaning. A school building presents a different experience to each group of people involved. To learners it is a place of pleasure and interest, or pain and boredom, where a large part of one's early life is spent or misspent; to teachers it is a place of work – for some a place of professional fulfilment, for others a place of stress and frustration. The layout and uses of school buildings and grounds also imply ideas about schooling that we often take for granted. For instance, in South Africa the physical size of classrooms is based on an assumption that class-size will remain static and that the 'right' class-size is somewhere between twenty and thirty students. As class-sizes 'grow' the rooms become 'too small'.

ACTIVITY 15

1 First look carefully at the three schools illustrated on pages 62 and 63.

Then, in your workbook:

a Write a short comparison of the three schools, using the following checklist as a guide:

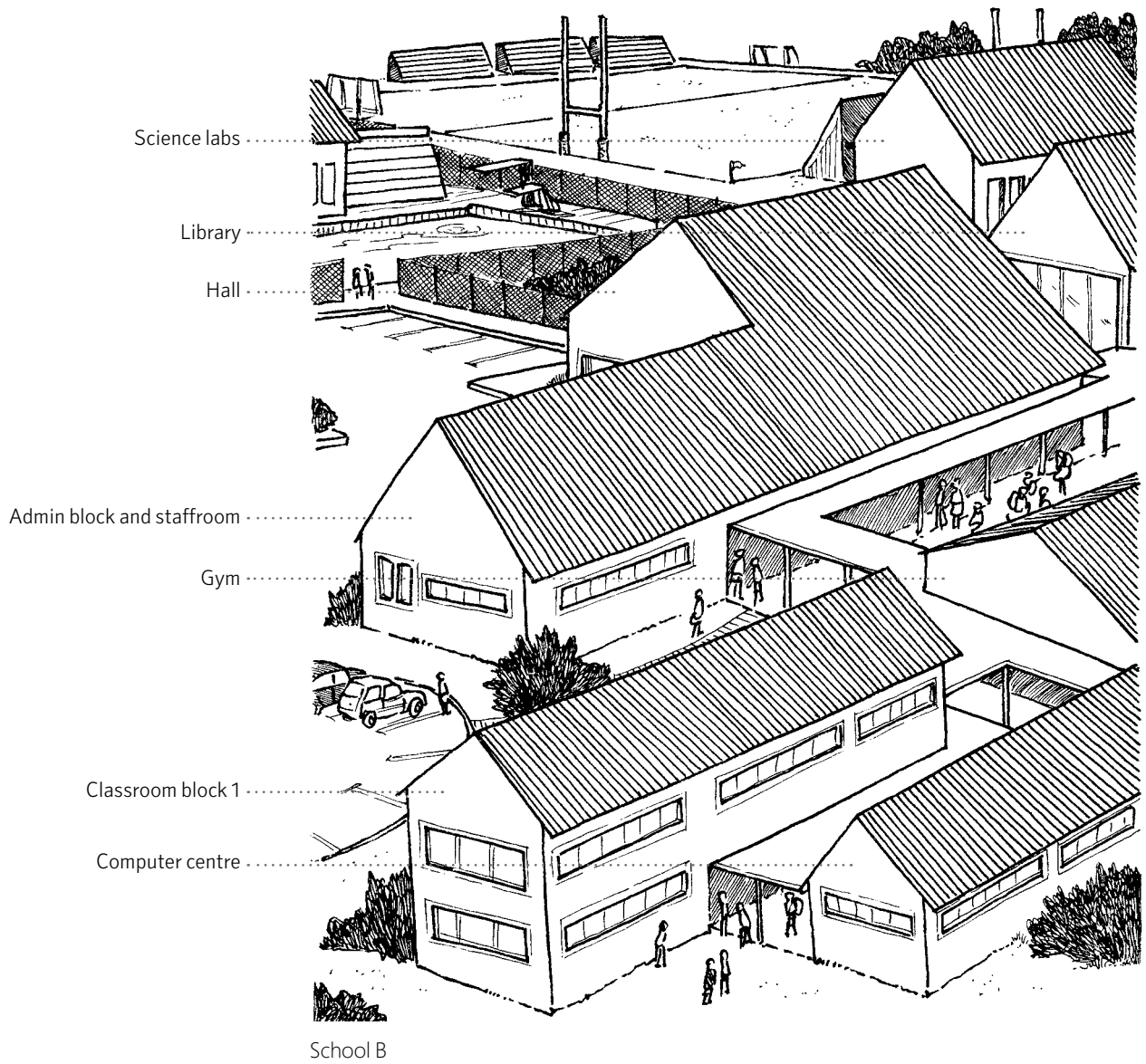
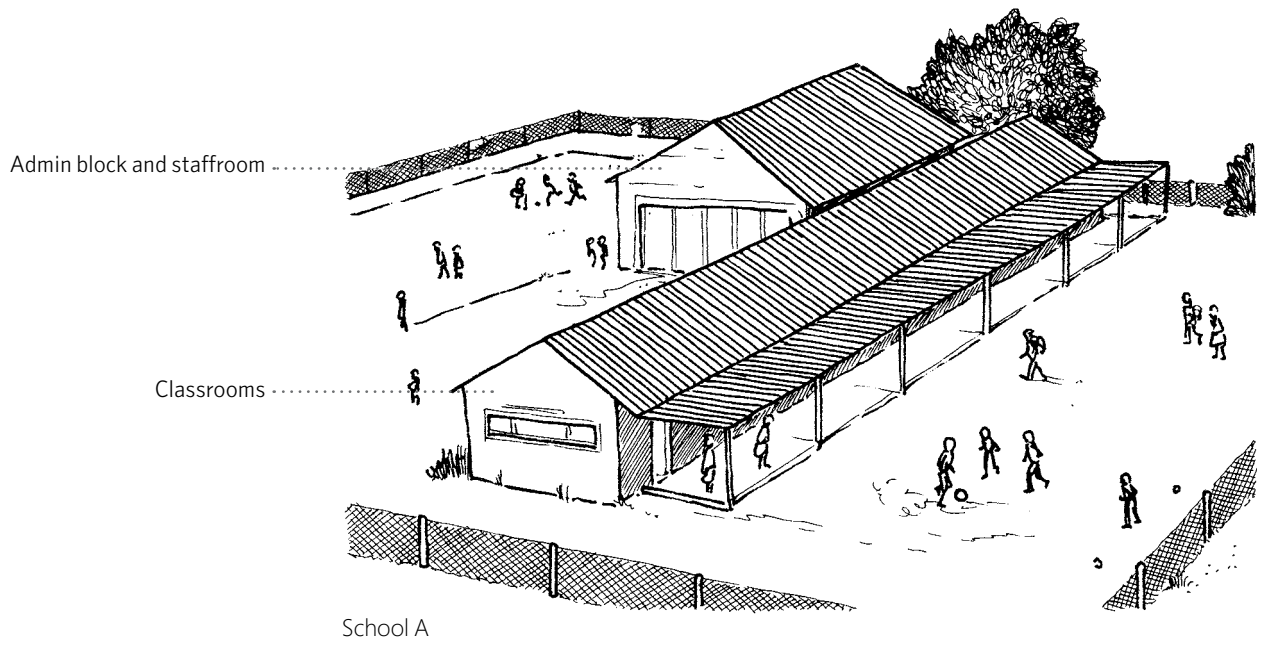
- general-purpose teaching rooms, e.g. classrooms;
- specialized teaching spaces, e.g. science laboratories, libraries;
- multipurpose rooms, e.g. halls;
- circulation space, e.g. corridors;
- administration space;
- spaces for learners' recreation and 'time-out'. e.g. sports fields, playgrounds;
- spaces for teachers' 'time-out'. e.g. staff-room.

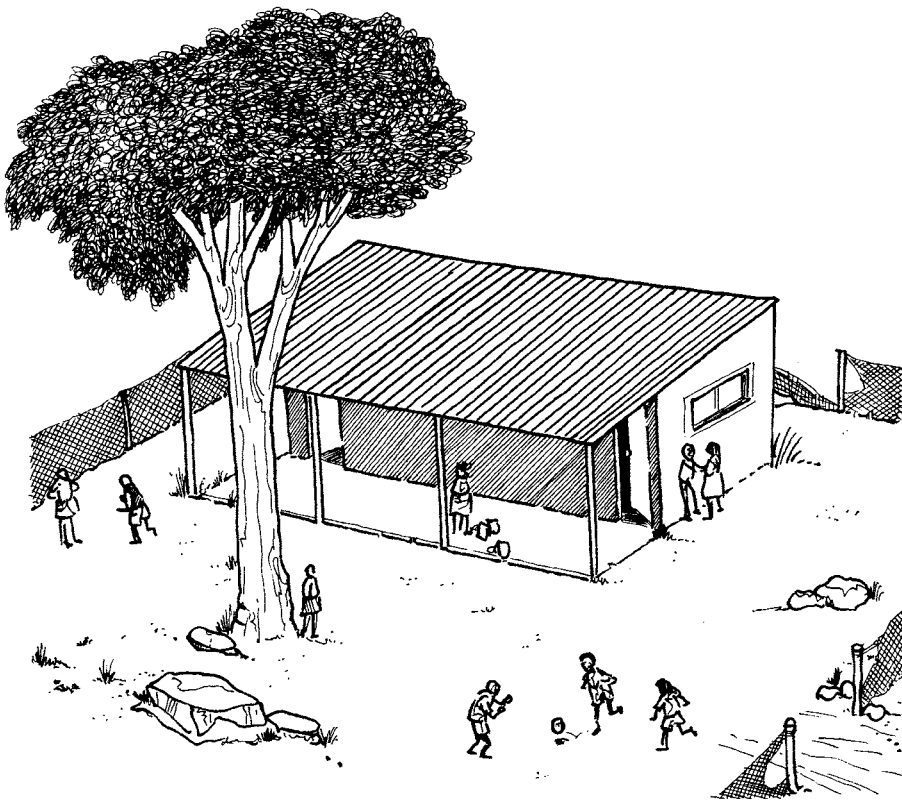
b Comment briefly on what each of the three physical constructions suggests to you about:

- the relationship between teachers and learners;
- the teaching and learning possibilities of the building;
- the limitations set by the building and grounds;
- whether the buildings and grounds are suitable for their purpose (primary school or high school).



Spend 60 minutes on this task.





School C

Rules and school space

In South Africa the rules that regulate the uses of school space, like the rules that regulate school time, are made within the framework of departmental regulations. The regulations stipulate that schools should be used primarily for the purposes of organizing and promoting learning. Activities like running a supermarket, a bank or a shebeen do not comply with this stipulation and so are forbidden. Within the framework of departmental regulations, the school principal is responsible for allocating teaching and learning space. Some principals delegate this responsibility to a deputy or to a space committee.

Let's eavesdrop on a meeting at Emma's school, Columbia High, where Mr Speelman and his staff are talking about space allocation:

Case study 3: A staff meeting

MR SPEELMAN: I believe some of you are worried about teaching space. This new OBE policy, so you say, needs more space as well as more time. *(He nods at Emma, who has raised her hand to speak.)*

EMMA: OBE or no OBE, I would really like a bigger classroom for geography. One that I don't have to share with someone teaching another subject. It's so frustrating trying to do group work and map-reading activities in an overcrowded room. *(Emma notices that Mr Dlamini, the Grade 10 history teacher, hasn't come to the meeting and decides to speak out.)* I can't arrange the room for proper group discussion when Mr Olamini insists on straight rows of desks for his history lessons. There's just never enough time for me to rearrange desks between periods, especially when the class arrives in dribs and drabs.

MR SPEELMAN: Thank you Emma ... Yes, Mr Bala?

WOLE BALA (a new science teacher who hasn't yet started teaching at the school):

I'm not yet familiar with how things work here. Is each teacher allocated a classroom so that the students move from class to class? Or do the students have a homeroom and the teachers move from class to class?

MR SPEELMAN: The former. Each teacher is allocated to a classroom for the year.

Learners move from class to class. We've tried it the other way, but the staff convinced me they could work more efficiently if they had their own classrooms. Of course, some teachers still have to share a room ... like Emma and Mr Olamini. Short of building an extra classroom, there's nothing I can do.

WOLE BALA: I would have my own laboratory, surely? After all, science is a high priority subject ...

MR SPEELMAN: I'm not a magician, Mr BaJa. The school has one lab and three science teachers. All three of you need to use it and you can't all be there at once ...

BIJLELWA (interrupting emphatically): listen, at least the science teachers have a lab even if they have to share it and it isn't very well equipped. But we need other rooms to be dedicated to specialist activities. Rooms for woodwork, typing, home economics, and even geography – all the subjects where equipment is crucial. The very idea of a specialist room is that it will be fully equipped and not be used for any other subject. Why do you think the results are so good at privileged schools like Buxton College? (She addresses the assembled staff, who are a bit uneasy about how Mr Speelman will take this outburst) ... Because they have properly equipped, specialist rooms, that's why. It's our right to have equal facilities. Is there nothing we can do to get the department to deliver on this? Why is the school governing body not making a noise about this?

YASMINE (who is hoping for a promotion): Frankly, Mr Speelman, I don't know what everyone is carping about. Columbia is a very well-organized school. One just has to look around to see that things are functioning properly. Under your leadership (she smiles at Mr Speelman), we know how to make the best of what we've got. (She doesn't notice Emma raising her eyebrows in disgust.)

JOE (a student teacher): Excuse me, Sir, as part of my college assignment I'm supposed to find out what it means to organize a school ... ;'

MR SPEELMAN: Yes, young man, how can we help you?

JOE: Well, I've noticed that at Columbia High the school hall is used for all sorts of activities – the weekly assembly, of course, but also for physical education when it is raining and for large class groups when there isn't space to accommodate them elsewhere. The hall even seems to be used as a place where the kids ... sorry, I mean learners ... can relax and play table tennis at break. I was wondering how these activities are co-ordinated to prevent clashes and confusion. Another thing: are teachers – or should I call them educators? – in any case, are they permitted to use corridors and the playground for group activities. We've heard at college that ... I quote my lecturer 'the timetable is the vital administrative instrument to regulate the use of multipurpose areas' and that it's possible to use corridor space creatively and ...

MR SPEELMAN (interrupting): You seem to be very well informed, young man ... Now shall we get on with the main business of the meeting?

ACTIVITY 16

The teachers in the staff meeting mention at least four different ways of allocating space. What are they? And, in your view, what are the advantages and disadvantages of each?

Pay special attention to how different allocations might enable or impede the promotion of an orderly teaching and learning environment. Present your findings in your workbook, in a table like the following:

WAYS OF ALLOCATING SPACE	ADVANTAGES	DISADVANTAGES
1		
2		
3		
4		

You may have concluded that each way of allocating space has both advantages and disadvantages. It can be argued that each way is enabling in some respects and restricting in others. Do you agree with this?

Providing teachers with their own rooms

One way of allocating space is to provide teachers with their own rooms. An obvious advantage is that this enables teachers to create a learning environment that reflects the nature of their subject or learning area. If imaginatively used by teachers, this arrangement helps in developing the learners' appreciation of the special features of different subjects and so may enhance the conditions for purposeful learning. Another advantage is that this arrangement allows teachers a greater sense of ownership and control over their work.

One disadvantage of allocating rooms to individual teachers is that it does not allow classroom use to be based on need. Here is an example to illustrate this point. Suppose that a teacher, Mrs Twala, is allocated Room 24, the biggest classroom at the school. This is because she teaches two classes of more than 50 learners and only Room 24 is able to accommodate such large groups. However, all Mrs Twala's other classes have fewer than 25 learners. Yet she uses the same room for all her classes, while another colleague has five classes, each numbering between 45 and 50 learners. These learners have to cram into Room 22, which was designed for a maximum of 40 people. Under these circumstances, it would have been better to reserve Room 24 for the use of excessively large class groups rather than dedicating it to one teacher.

Another disadvantage of allocating rooms to teachers is that learners have to move every 35 or 50 minutes. If not properly managed, this can result in disorderliness, as well as a good deal of time-wasting. Think back to Emma's Grade 10 geography lesson in the case study on pages 47 to 49. The class arrives in dribs and drabs, with some arriving well after the starting time for the lesson. Some schools overcome this disadvantage by having strictly enforced rules for learners' movements from lesson to lesson.

Allocating classrooms to learners

A second way of using school space is to *allocate classrooms to learners* and have the teachers moving from class to class. This may enhance orderliness because large groups of learners will not be moving from class to class at the end of every period. It may also allow for better use of teaching and learning time because learners are able to prepare for the following lesson in between periods. Another advantage of allocating rooms to learners is that it may help to give them a sense of ownership and pride in their learning space.



Set aside 30 to 45 minutes for this task. You will be in a stronger position to engage in the discussion that follows if you complete the task and assess what you have written before proceeding.



From a learner's perspective, what do you think might be the disadvantages of this arrangement?

From a teacher's perspective, there are several disadvantages. It limits the teacher's options for the preparation of her work. Since all teachers who teach a particular group of learners use the classroom, it cannot easily be reconstructed into a 'subject room'. Even the blackboard has to be shared and work cannot be left for the following class or the next day. This may lead to frustration, loss of morale and friction between teachers.

Allocating specialist rooms to specialist teachers

A third option, which is a compromise between the first two options, is to allocate 'specialist rooms' to specialist teachers, while allocating other rooms to learner groups. This option acknowledges that certain subjects – like physical science, typing and woodwork – need specialized equipment that cannot be moved from room to room. But there's a further argument and that is some subjects – like mathematics – are so specialized that they ought to have their own space even if they do not have heavy or immovable equipment. The main objection to this further argument is that it may lead teachers and learners to elevate certain subjects above others and so to rank learners according to their selection of subjects. No doubt you can think of some examples from your own experience.

Allocating space according to need

A fourth way of organizing school space is *on the basis of need at any particular time*. So, drawing from our earlier example, Mrs Twala, the teacher with the two large class groups would use Room 24 only when she teaches these groups. Other teachers with large class groups would use this room when they needed the bigger classroom. The advantage of this kind of arrangement is that it reduces the possibility of disorderliness in the classrooms and gives teachers enough space for group work, classroom drama, and so on. More generous classroom space also allows the teacher to move freely through the room, checking on the progress of individual learners and groups as they work on set activities.

A possible disadvantage of organizing space according to need is that it discards the ideas of ownership and of space with a strong subject or learning area identity. As a result, learners and teachers may be left with a sense that there is no particular area in the school with which they can identify. I think this would be a more serious disadvantage in a primary school (especially in junior primary) than in a high school. What do you think? Even in a high school, the lack of a sense of ownership could undermine teachers' and learners' pride in the school and so affect their willingness to maintain any part of it. Also, the school's sense of purpose and direction might be affected in such a way that it would impair the school's discipline.

Two more ways of allocating teaching and learning space

There are two more ways of allocating teaching and learning space at schools, both of which combine options we have already discussed:

- 1 Cluster the classrooms for learners in the same grade.
- 2 Cluster the classrooms to be used for the same subject or learning area.

The first kind of organization helps to limit learner movement, especially if teachers are allocated teaching responsibilities using the same principle, namely, that each teacher is given class groups at the same level. This form of classroom allocation promotes orderliness in a number of different ways. The Grade 12 groups, for example, could develop a collective responsibility for the area allocated to them. An important advantage of this type of organization is that it allows learners of similar ages to interact with one another more closely than would normally be the case. This is a common way of organizing space in junior primary schools.

The second type of organization allows for the creation of subject or learning area blocks. The advantage of this type of division of space is that it enhances the possibility of sharing resources, especially specialist equipment. It also creates the space for teachers to develop their areas to reflect their subjects, as was the case for individual teachers, so that the learners can identify with specific areas in the school.

Despite obvious advantages of this type of arrangement both for school discipline and in raising the awareness of learners, it is based on some questionable assumptions. Teachers often have to teach a range of different subjects, especially in primary and junior secondary school. Allocating space by learning area or subject blocks can work efficiently only if teachers are assigned to teach within a single subject or learning area and not across a range of subjects.

Primary schools differ substantially from high schools in the way they are organized. Generally speaking, primary schools (especially the junior primary classes, as we have seen) are organized according to class- rather than subject-teaching, which means that a class teacher teaches virtually every subject in the curriculum. In the junior primary (or foundation phase) both teacher and learners have 'ownership' of the classroom. What does this mean for teachers and learners? To a far greater extent than high school teachers, primary teachers are able to arrange their rooms in order to provide an atmosphere of learning. Primary school learners are more likely to have a sense of belonging since this arrangement of space encourages them to identify with both the teacher and the classroom. Also, within primary classrooms, learning space is ideally subdivided into smaller areas to allow each learner to 'claim' a bit of space for herself and so enabling her to organize space to suit her learning needs and interests. The construction of teaching space in primary schools helps to develop a sense of pride amongst both learners and teachers and this is a key factor in enabling purposeful work.

ACTIVITY 17

Reread the discussion of different ways of arranging the allocation of classroom space and think about the advantages and disadvantages of each. Then, in your workbook, write a page in response to the following question:

As a teacher, which way of allocating classroom space do you think would best enable you to fulfil your responsibility for promoting and developing systematic learning? Give reasons for your answer, taking account of what subject(s) and what level you teach.



This task will take 30 to 45 minutes.

Looking at other school spaces

So far, our discussion of teaching and learning space has focussed on classroom space, but classrooms are not the only school spaces that can be used to promote and enable systematic learning. Most schools consist of more than only classrooms, although there are some that have no built spaces at all - the 'classroom' may be a sandy clearing under a tree. Schools with classrooms usually also have playgrounds and corridors. Many have halls, libraries, laboratories, and sports fields, too. How these other spaces are organized and used can either promote or impede teaching and learning.



You will need about 30 minutes to complete this task and to reread and assess what you have written.

ACTIVITY 18

Have another look at the three schools illustrated on pages 62 and 63.

In your workbook:

- 1 For each school, list all the spaces other than classrooms that you think would normally be used for teaching and learning activities. For each space, say what kind of learning activity would normally take place there.
- 2 Now, for each school, list all the spaces that *could* be used for teaching and learning but are not usually used for this purpose. For each item on your list, say briefly *how* you think it could be used.
- 3 Choose any two items from your list for 1 above and, for each, write down three rules you would set to ensure these areas are used in a way that suits their purpose.
- 4 Now choose any two items from your list for 2 and, for each, write three rules you would set to ensure the proper use of the area.

Let's think about the school library as an example of a place that can be used to enable the activities of teaching and learning. Where schools do have a library (and many in South Africa do not), its use should be both encouraged and regulated. A library that is locked up most of the time can't serve its purpose as a resource centre for teaching and learning, nor can a library where the books can't be found because they are shelved haphazardly and there is no system for tracing which books are out on loan. A school library that is seldom used can't serve its purpose as a resource centre for learning, but a library that has too many users at once may also fail some of its users. This is why a well-run school usually timetables library sessions for different classes and ensures that the library stays open after formal school hours.

The school hall is another example of a space that is often used for a variety of activities, some of them extra-curricular. For those schools where there is a hall, it may be used for assembly, as an additional teaching area, for school plays, for physical education lessons, and for recreational purposes during break and after formal school hours. The hall is also an important space for forging a school community with shared vision. And even where there is no hall, well-functioning schools have a shared place where everyone can assemble regularly to be informed of school activities (for example, sports, cultural activities or achievements of individuals or groups of learners) and to talk about common problem areas (for example, absenteeism, discipline or commitment to learning). This is the place where the school's achievements are given recognition, where parents and other members of the community come and meet teachers and learners and where honoured guests are presented to the school community. School ceremonies such as assembly, prize-giving and sports day are consensual rituals that help to bind the members of the school together as a moral community and this contributes to maintaining the order that is necessary for systematic teaching and learning.

Concluding comments

3.7

In this section we've examined some of the ways in which arrangements of external time and space either enable or impede the work of schools. The practice of school teaching and its activities are shaped by these arrangements of external time and space. Teaching cannot proceed smoothly if external time and space have not been arranged so as to provide a stable and orderly institutional environment.

What have we learnt so far?

In Section Two, we considered a range of activities in which rules restrict the participants and, at the same time, *enable* their participation. This concept of rules as both restricting and enabling is central to the arguments throughout the module.

In Section Three we considered this concept in relation to the structure of school time and space. Institutional rules are *restrictive* because they limit the options that principals and teaching staff have in their allocation and use of teaching space and time; they also restrict learners' behaviour and interactions. The rules are *enabling* because they enhance the possibility of systematic learning.

The next two sections use the same set of concepts in thinking about how teachers shape the space and time that has been allocated to them for the purposes of enabling systematic learning. Before proceeding with Section Four you should complete Tutor-marked Assignment I, which you will find on the next page.



This is the work for weeks 8 and 9. Spend some time revising the work done so far before writing your essay. You might like to read some of the optional readings.

Tutor-marked assignment 1

Choose one of the following assignments:

1 Carefully read this quotation and then write an essay in response to the question that follows:

Teachers are responsible for engaging students in formal curriculum activity... In doing this, they depend heavily on organizational support and, in particular, the predictability of ritual, the disciplinary sanctions of a set of structural authority relations and the security – material and symbolic – provided by school boundaries.

As organizations, schools are structured around axes of time and space, which constitute significant boundaries for learning and teaching. They are symbolic as well as material boundaries and they are predicates for school discipline. (Christie, 1998, p. 287.)

Do you agree that time and space constitute significant boundaries for learning and teaching at schools? In justifying your answer, provide your own supporting examples and make use of the following concepts:

- external time and space;
- internal time and space;
- formal purposes;
- practices and institutions;
- rules;
- construction of school time and space.

OR

2 'School teaching is a practice that is both constrained and enabled by arrangements of time and space.' In your own words, present a systematic argument in support of this claim. Your argument should make use of relevant key concepts from the module. Try to give some of your own supporting examples to illustrate your main points.

Assignment guidelines

This assignment is designed to assess your ability to draw together and reflect on some key issues and concepts from the first two sections of the module. You should write the assignment as an essay that develops a strong argument leading to a clear conclusion. Before you begin writing, think carefully about how you will structure your essay and about the examples and concepts you will need to develop a coherent argument.

Your essay should be about 1 000 to 1 250 words (three or four A4 pages) in length and should be submitted to your tutor as a stapled set of pages. You might want to paste it in your workbook once it has been assessed and returned to you. If so, write only on one side of each sheet.