# Flexible Working : 18 scenarios Timetabling Part-timers \& JobShares 

## What do we mean by flexible working?

The Department for Education has defined 4 kinds of flexible working in schools that could apply to teachers, and therefore may affect the timetable:

- Part-time working - working less than full-time hours,
- Compressed hours - working full-time hours but over fewer days,
- Staggered hours - where the employee has different start and finish times from other workers,
- Job sharing - 2 or more people do one job and split the hours.

In practice each of the first three is a variation on the same theme of part-timeness, and the fourth one is a combination of two part-timers.

Each of these scenarios can be specified easily and scheduled in TimeTabler.
Each is of these discussed, using Worked Examples, on the following pages.
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There are 2 ways of specifying Part-timeness in TimeTabler.
The most common way is using the Staff Availability Screen.
Click on Availbbility


The following pages refer to this, with 18 Worked Examples.
An alternative way to specify Part-timers uses Special Locations, see examples, 5, 6, 12, etc.
For more details about the many features in TimeTabler for dealing with Part-timers, see Appendix 1.
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## Examples of Staff Availability in TimeTabler

All timetables include Part-time Teachers of one kind or another, and this paper shows some examples for you to adapt to your own situation.
As Headteacher or as Timetabler you will need to be careful that not too many people are away on the same day (eg. a Friday). TimeTabler will analyse this for you, so you can see the consequences.
All the following examples are based on 5-period days, in a 25 -period week. If you have a different timetable cycle then just adapt them to suit.
See also the examples in Sections $\mathrm{C} 15, \mathrm{H} 2-\mathrm{H} 11, \mathrm{H} 14-17, \mathrm{H} 51, \mathrm{H} 54-55$ in the printed TimeTabler Manual.

## Example 1

David Cohen is a practising Jew and wishes to get home for sunset on Fridays. He wants to have the last period on Friday afternoon free. So the entry will look like this:


The X means that he will definitely be free on Friday-5.
TimeTabler cannot place any of his lessons in that period.

## Example 2

Sarah Jones explains while her partner is able to take the children to school in the morning, she needs to pick them up at the end of each day. To achieve this she must not teach the last period of each day. The entries on the screen will look like this:



The Xs mean that she will definitely be free at the end of each day.

## Example 3

Rebecca Smith explains that she has to drop off the children at her local primary school before travelling to work and she needs to collect them at the end of the day too. To achieve this she must not work the first or last period of each day:



## Example 4

John Taylor explained at interview that he is able to come to teach Physics but only on Monday, Tuesday, Thursday, because of family commitments:

## Example 5

Claire Williams is returning from maternity leave and explains that she can now teach Biology for 3 full days per week and doesn't mind which three days.
Solution 1
CWi - Mrs Claire Williams
The FFFFF can move to another day, as a block of 5 periods in this example.
We've made the starting positions as shown because that would give a good spread of her teaching. This will be more important if she teaches a language (like French or Maths) than if she teaches a subject that doesn't need a spread (for example, Art or Games). See also Section H4 in the printed Manual.

## Solution 2

An alternative is to use Special Locations (as explained in Appendix 2 and in the Manual, section H4).


An activity: CWi-Home 55 CWi was entered in the batch (using the Meetings Wizard), where: CWi-Home is a Special Location entered on the Special Locations Screen, HelpMovie 22 55 means two 5 -period blocks of time (ie. 2 full days in this school with 5-period days) (If you have a block of more than 9 periods then see Section H4 in your printed Manual.) CWi is the Teacher's Initials on the Teachers Screen, HelpMovie 14
These 2 'lessons' are then assigned on the timetable in the usual way (see the screenshot above). Again we have placed these 2 'lessons' on Tuesday and Thursday but the key point is that FIT can move these 'lessons' to other (full) days if necessary. See Appendix 2, and Section H4 in the Manual.

## Example 6

Emma Brown explains she can teach two mornings per week and she doesn't mind which mornings (but she can't do afternoons). Using the method of Example 5, Solution 1:
Solution 1
EBr - Ms Emma Brown
It's your choice which 3 mornings are made Unavailable at the start, but each FFF block can move once, initially. Thereafter, FIT will not move them. In this example $\mathrm{ff} f$ could be used instead.
The XX in each afternoon ensures that her teaching periods can only be in the mornings.

## Solution 2

Using the method of Example 5, Solution 2, with an activity of: EBr-Home ttt EBr where $t$ is a triple-period which may not cross a Lunch but can cross a Break (see section D3 in the printed manual). See Appendix 2 for more details of this method. The activity is assigned:

In each case the 6 free available periods would be used by TimeTabler to schedule her teaching periods. The key point about this method is that FIT can move the 'Home' periods at any stage of the timetabling.

## Example 7

Jo Johnson, Leah Davies and Mia Mills are 3 new teachers who have been employed on an 'ECF' or 'Teach First' (or similar) scheme.
As part of the scheme they have to attend a CPD/Mentoring Meeting out of school every Wednesday afternoon. The solution is:



If these 3 staff were all (say) Maths teachers, and Maths is taught largely in setted Blocks then it might mean that no Maths could be timetabled on a Wednesday afternoon (if they were all in different blocks). It would be best if, where possible, all 3 taught in the same Maths blocks (or, even better, no blocks at all).

## Example 8

Michael Chen is full-time, but is a YearTutor and must have a free period each day.
d will move if a lesson needs its period, but a d always moves within the same day. See Section C15. (If it has to be the same period every day, eg. first period after lunch, then you'd use $\mathbf{X}$ but this would be much more restrictive on the timetable.)

If you want to use this method to ensure a PPA period for each teacher in each day, see Section H 6 and see Section C15-Note-5 in the Manual for how to use the Auto-assign > button.

## Example 9

Chris Evans must have (any) 2 afternoons free each week:
CEv - Chris Evans
The PP block will move if need be, but will only go to another afternoon.
Use AAA if you want to keep a morning free (in this school with a 3-period morning).
See also Sections H5, H8 in the printed Manual.

## Example 10

Gary Wilson works in a school which gives some staff each year (on a rota) one 'Well-being' period per week at the start/end of a day (for visiting dentist, doctor, MoT, etc).
GWi - Mr Gary Wilson
The $F$ will stay where you place it, or try to move to the first or last period of a day.

## Example 11

Aysha Khan has a compressed timetable, working 19 periods over 4 days (Mon-Thurs). The school has staggered Lunches (one for Upper School, one for Lower School). It doesn't matter whether she eats during Upper School Lunch or during Lower School Lunch, but the Timetabler needs to ensure that she has a Lunch period on each of those 4 days, despite her very full timetable.

AKh - Mrs Aysha Khan


Two extra periods per day are added, and marked as possible Lunch times (in yellow).
An L marker is added to one of the yellow periods in each of Monday-Thursday ...TimeTabler can move the $L$ free period to the other half of the Lunch-time if needed, but it will keep one of them free each day. For more details, see H 17 in the Manual or click on the Help button on this screen.
In this example, Friday is blocked off to compress her timetable into the 4 days.

## Example 12

Sam Lee is quite flexible about his part-time teaching but doesn't like to have much 'trapped time' (non-teaching periods between lessons) ...and the school doesn't want this either as they'd have to pay him for that time on site.


The AAA can be moved (by TimeTabler or by you during scheduling) to another morning (only). Similarly, the PP can be moved to another afternoon (only), if it helps to obtain a timetable solution. Similarly, each F can be moved to another day, but only to the beginning or end of a day. By moving only to the start or end of a day it automatically reduces 'trapped time'.
You can manually over-ride these placements.
For more details see Section C15 in the Manual, HelpMovie 19, and the HelpScreen.

## Example 13

The Senior Management Team wish to meet one day immediately after Lunch and they don't mind which day as long as it's not Monday. ie. it must be Tues-4, Wed-4, Thurs-4 or Fri-4.

Enter a Special Resource called: smt on the Special Resources Screen (HelpMovie 21).
Then on the Staff Availability Screen block off periods as shown:

smt - meeting
Then enter a Special Location: SMT on the Special Location Screen (HelpMovie 22), and enter an activity for it in the batch, using the Meeting Wizard:

Meetings, etc
SMT S smt HTe DH1 DH2 ...
where: SMT is the location, $\mathbf{S}$ is a Single period,
HTe, DH1, DH2 etc are replaced by the initials of the real Head and Deputy Heads, and smt is the Special Resource which behaves like a dummy teacher (who is only available for those 4 periods in the week).
The 'lesson' (meeting) can only be scheduled the first period on Tuesday, Wednesday, Thursday or Friday afternoons, because those are the only times that smt is free ...but we have not restricted the timetables of the real teachers in any other way. See also Section H8 in the printed manual.
It is much easier to omit all this and just use the Find a Meeting Time button on the Staff Timetable Screen after you have finished scheduling (see section F12 in the manual). For a meeting of senior management, with low teaching loads, this button will usually find a time when all are free.

## Example 14

The Science department want a timetabled meeting time on the timetable!
It is very likely that Find a Meeting Time will not find a time when they are all free. In fact it is probably not possible to schedule such a meeting for a large department (and think of all those empty labs!), but if you want to try then:


- Enter a Special Location like: Sci.Dept-Mtg on the Special Locations Screen (HelpMovie 22).
- Enter an activity in the (first?) batch, using the Meetings Wizard, like:

Sci.Dept-Mtg S Sc1 Sc2 Sc3 Sc4 ... ...
where $\mathbf{S c} 1$ etc are replaced by the initials of the actual Science staff. See also Section H7.
Other possible solutions to this might be:
a) Schedule 2 meetings, with half the department attending each - but with one or two people attending both so they can share updates, or,
b) Schedule the meeting before or after school, and if recompense is required, give staff a ' $F$ 'ree elsewhere in the week.

## Example 15

We have 2 Deputy Heads, each with a reduced teaching load, and we want to ensure that one of them is always not teaching, so they are available for 'fire-fighting' problems that arise.

Enter a Special Resource (eg. xx) on the Special Resources Screen (HelpMovie 21),
 and then add that Special Resource to all the activities of each Deputy Head.
For example:

| 11A | SSS | DH1 xx | 11C | SSS | DH2 xx |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 10C | SSS | DH1 xx | 9A | DS | DH2 xx |
| 9D | SS | DH1 xx | 8E | S | DH2 xx |
| etc |  |  | etc |  |  |

The dummy teacher (Special Resource) xx prevents these activities from ever co-existing.

## Example 16 Job sharing

Niamh Johnson and Rachel New have agreed to Job-share (perhaps coming together via the DfE 'digital match-making service'). They are History teachers. The simplest way is to:

- treat the pair as a Single Teacher (eg. NJo) while scheduling the timetable,
- then when the timetable is complete, split it into 2 parts (by Unassigning
 Rachel's lessons, changing the Batch, and re-assigning them).
So that:

| NJo - Ms Niamh Johnson | 10AB | 7 | 7G | 12A | 9 C | 7G | 8C | 7 | 7G | 12A | 9C | 7 | 10AB | 9C | 8C | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |

can become (after the timetable is fully completed):

| NJo - Ms Niamh Johnson | 10AB | 7 | 7G | 12A | 9 C | 7G | 8C |  |  |  |  |  |  |  |  | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  | 7 | 7G | 12A | 9 C | 7 | 10AB | 9 C | 8C | 10 |

The actual days or half-days for each teacher don't need to be decided until the timetable is complete, but of course it requires close liaison between two compatible teachers.

Note: if later you ever want to use FIT, or export the completed timetable to your MIS or to StaffCover then you first need to add Xs to stop 'impossible' moves and make the 2 Part-timers totally clear, like this:

| NJo - Ms Niamh Johnson | 10AB |  |  | 7 | 7G | 12A |  |  | 9 C | 7G | 8C |  | X | X | X | x x | X | X | X | X X | X | X | X | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New | X | X | X | X | X | X | X | X | X | X | X | X | 7 | 7G |  | 12A | 9C |  | 7 | 10AB | 9 C | 8C |  | 10 |

## Example 17 Job sharing

The school agrees to arrange that these two teachers have an overlapping nonteaching period, on Wednesday-period-3, so that they can exchange lesson-plans, test results, and information about their students.
So that after scheduling (adjusted if necessary via the 'Move' button):


| NJo - Ms Niamh Johnson | 10AB | 7 | 7G | 12A | 9 C | 7G | 8C | X | 7G | 12A | 9C | 70 | 10AB | 9C | 8C | 7 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | 0 |

and then it can become:

| NJo - Ms Niamh Johnson | 10AB | 7D | 7G | 12A | 9C | 7G | 8C | X |  |  |  |  |  |  |  |  | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  | X | 7G | 12A | 9C | 7D | 10AB | 9C | 8C | 70 | 10 |

## Example 18 Job sharing

It is agreed in advance that Niamh will teach 2 Doubles of A-Level History, and that Rachel will teach 2 Doubles of Year 10 GCSE History.
In this case, the 2 Doubles of A-Level History must be assigned (early) into periods in Niamh's part of the week, and 2 Doubles of Year 10 GCSE History must be assigned (early) into Rachel's part of the week. So that initially it is:

and when complete it might be:

| NJo - Ms Niamh Johnson | 12A | 7 | 7G | 12A | 9 C | 7G | 8C | X | 7G | 10AB | 9 C | 7 | 10AB | 9 C | 8C | 7 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | 0 |

and then in practice it can become:

| NJo - Ms Niamh Johnson | 12A | 7 | 7G | 12A | 9C | 7G | 8C | X |  |  |  |  |  |  |  |  | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RNe - Ms Rachel New |  |  |  |  |  |  |  | X | 7G | 10AB | 9C | 7 | 10AB | 9 C | 8C | 7 | 10 |

Note: an alternative method is to just block off half of the week for each person, though this method will reduce your solution-space, making it harder to find a solution.

## Appendix 1 : Using TimeTabler with Part-timers

TimeTabler contains many features to help you deal quickly and effectively with the timetabling of Parttimers and Job-Shares.

The features are covered in detail:

- In a PDF, titled 'Part-timer Features in TimeTabler’, which you can find and download from the KnowledgeBase by using the Search Box:

This PDF gives you full details of the various screens \& features that you will need to deal effectively with your Part-timers.

- For many details about employing and about timetabling Part-timers, including how you may be able to improve your timetable cycle to make things easier, see the document at:
https://www.timetabler.com/improvingPart-timers.html
- In the HelpScreens in TimeTabler ? Help For example using the Index:


Type in the keyword to find:

Part-timers

Part-timers
colon
customize
displaying
highlight activities
Interaction Report
labelling
marking
Overview Screen
pie-charts
team unavailability

- And you can contact the 24/7 Support Centre if you need extra help \& support.

Support Centre (Typical response time is less than 2 hours at most times of the day.)

## Appendix 2 : Further comments, by other experienced timetablers

When collecting the data for starting the timetable, it's important to assess whether Part-timers are fixed in their requirements for time off, or flexible. Fixed Part-timers should have their restrictions entered on the Staff Availability Screen using the various codes available.
Note that these restrictions will copy across to all schedules attempted, even in later years, if they are not edited! They are also seriously disrupted if you change the shape of the day or week in future years!

With flexible Part-timers, I schedule the first part of the timetable - say Year 11 - and then review the Part-timers' commitments. With someone working three days a week, the Year 11 timetable might determine at least two of the days they're going to work, so at least one day can then be blocked out. Then schedule another YearGroup and check the Part-timers again, perhaps then blocking out another day, until the desired number of days is achieved.
This also helps me achieve a spread of the days Part-timers have off - this needs to be as balanced as possible and not biased to Mondays and Fridays otherwise all the remaining colleagues will be likely to have very full days on the days that the most Part-timers are off.

You have mentioned about Part-timers who teach the same blocked subject having the same days off. Part-timers in Maths or English that want to work three days a week should be encouraged to work 2 full days and 2 half days so that if Maths or English have 4 periods a week that don't have to have two in one day or split the class between two teachers.

The other advice I give to timetablers is to speak to any new Head appointed in their school and ask her/him to do a routine review of all Part-time arrangements. It allows a chance to renegotiate any longestablished agreement which has been clearly to the benefit of the teacher rather than the school and its students.

John Clark

Job Sharing.
The obvious and logical way to do it is the way we suggest. You timetable the JOB (using one teacher) and let them SHARE it by mutual consent. This is not obvious to many timetablers (!) because of the number of questions asked on courses and consultancies.
For the proposed DfE website help in finding a 'partner' it is clearly important to find one whose needs for time off are not the same as yours. If you both need to get away early to pick up children from infant school, for example, then it's not a good situation for sharing!

## Part-Time staff

If two Part-timers are in the same department it is clear that the HoD has to carefully place them in separate teams if their 'time-off' does not match up [see the Interaction Report in TimeTabler].
However if two Part-timers are in different departments the synchronisation of their time off is not obvious. However, if they teach in the same option block 'team' in Years 10 or 11, they can cause insurmountable difficulties. For example, a Part-time History teacher who only comes in on Monday, Wednesday and Friday could be in the same option block as a Geography teacher who only comes in on Tuesday, Wednesday and Thursday. This would mean that all of the lessons in that particular option block have to run on a Wednesday!!

Bus drivers!
Probably the most difficult part of increasing flexibility is the inevitable increase in split classes. If a bus company operates a flexible work scheme then it is obvious that when one driver is off, someone else will drive their bus. It is not a contentious issue. With teaching of course sharing a class can range from 'straightforward' to 'extremely difficult' depending on the (nature of the) subject and the level.
Sometimes it can be good policy to deliberately introduce split-teaching, with some lessons scheduled with a known-to-be-good teacher and others with a known-to-be-weak teacher, rather than give the class only the known-to-be-weak teacher.

Mervyn Wakefield

Flexible working : a wider view
As a school timetabler, many schools see Flexible working and Part timers as interchangeable terms but is that correct? Certainly there are staff who want set days or periods off, but there is also a percentage of staff for numerous reasons who want/need more flexibility. At MIST we have seen the increase of such requests over the years and this trend certainly looks to continue. We suggest understanding the 'why': is it that staff feel they need/want more flexibility? If it is colleagues feeling pressured, then understanding the reasons is imperative. For example, if colleagues feel overburdened by meetings, training, notices etc then are there different methods for disseminating this information via powerpoints, video messages, electronic notice boards etc delivered by modern technologies. Or as a school leader if you felt staff absences/sickness patterns were attributable to such pressures then by tackling the 'cause' could ultimately save the school many thousands of pounds, increase staff motivation and ensure the students have the appropriate staff teaching them. If the school can analyse the 'reasons' and they can be relatively easily solved, then that has got to be a win-win surely?
But at times there isn't a 'cause' and may be very much lifestyle based. As such we believe all requests for flexible working needs careful consideration and any potential impact on the timetable thought through. If the impact on timetabling is it simply makes it harder, then that is obviously not a good answer! We believe that the impact should also be viewed from the 'student' viewpoint. If the request is starting to impact on the students in a negative way, then that should be highlighted to the individual member of staff at the start of the process so that appropriate educational decisions can be made. Job shares offer flexibility (so long at it is a genuine job share), although as experienced timetablers we suggest you analyse which classes get the shared teaching - are particular year groups, classes or individual students continuously impacted? Thinking about an individual year 7 student studying 12 different subjects : what is a sensible/realistic number of teachers that individual student should meet during a week?
At MIST we work with schools across Europe and the rest of the world, and in many places we find staff aren't expected to be 'on-site' during non-teaching periods. We know of teachers who book medical appointments in these periods or go to a local coffee shop to help with work balance.
Some schools even give every member of staff one first or last period off each week which gives a lot of flexibility to the individual member of staff (but not to the timetable)!
Other schools may run 5 terms a year, rather than a traditional 3 term year. Or maintain the 3-term year but have a two-week October half term (by having a shorter summer break). Maybe such a change might negate the requests for flexible working - although we understand it may be hard to implement with other stakeholders. But the key message is it may be hard, but perhaps not impossible! In some schools different year groups have different start or finish times which can bring in flexibility.
Having many part timers and flexible working requests, doesn't make timetabling easy but as a professional timetabler you must be able to take each request seriously and be realistic from the outset. If it has an obvious impact on students, option blocks or curriculum then let the individual know what can be achieved or if it can't be achieved the 'why' or the impact it is likely to have. It could well be the staff member needs to be flexible as well!

Remember - no timetable is impossible (with appropriate compromises), but some innovations will come at a cost, and it is important to identify at an early stage what the costs are likely to be, and make judgements on the basis of facts rather than theory.

Chris Knights-Branch, MIST Services

