

Using *TimeTabler* to timetable S4/5/6

As schools look for new ways and new structures to deliver the best education for their pupils, this can throw extra strain on the timetabler. This paper looks at ways to use **TimeTabler** effectively in Upper School, within a Scottish setting. Two other papers give detailed help for Lower School.

As part of the moves to find the best 'Curriculum for Excellence' most schools are opening up the range of Choices (electives) offered to their students, as part of the 'personalisation of learning'.

The **TT-Options** software is particularly helpful for this task : www.timetabler.com/options1

In particular the Auto-Create feature saves an enormous amount of work.

Options includes the free **TOOLS** method of entering students' choices on-line. This is a big time-saver, allowing the Choices to be entered on-line :

- either by the parents/students from home,
- or often by their Pupil Support / Guidance / Careers Teacher, while counselling the student in school.

Either way, the **TOOLS** system collects the students' Choices in a paperless way, ready for **Options**, using AutoCreate, to find the best pattern of Subjects for each of your Columns.

See the separate document (in the KnowledgeBase) on '[Using Options in Scotland](#)'.

The next stage is to schedule lessons to times of the cycle (week or fortnight), in **TimeTabler**.

The HelpMovies, HelpScreens and the printed Manual provided with **TimeTabler** all help with this. And there are over 300 articles on aspects of timetabling in the KnowledgeBase in the Support Centre.

However there are some aspects of Upper School timetabling that have a traditionally Scottish flavour, and this paper focusses on these aspects.

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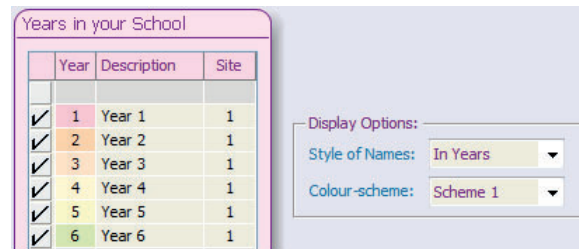
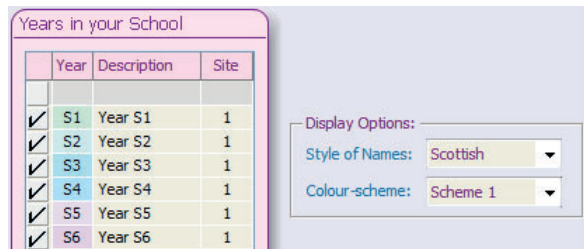
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For ways of timetabling S1, S2, S3 see the other documents at www.timetabler.com/scotland

Entering Basic Data (for new Users only)

See also Section C in your Manual, and HelpMovies 11–14.

1. School Structure Screen **Years & Sites** See your Manual section C5, and HelpMovie 11. On this screen you can choose either:



You may not need a separate S6 (as often that will be scheduled as part of Year 5).

For the next 3 items (Subjects, Rooms, Teachers) you can either type them in, or you can **import** the data from SEEMiS, see **Appendix 1**. Remember you only need to do this in the first year. Thereafter, just edit.

2. Subjects Screen See your Manual section C6, and HelpMovie 12.

Note: When, later, you are exporting the completed timetable to SEEMiS, and you get to the Matching Screen, it will help if there is some similarity between the Subject name in SEEMiS and the Subject name that you enter here into **TimeTabler**. You can **add** a new Subject at any time.

For example, if the subject in SEEMiS is 'Business' then names in **TimeTabler** like 'Business', 'BusEd', 'Bus Study' are more helpfully recognisable, for matching, than unhelpful names like 'Enterprise'.

3. Rooms Screen See your Manual section C7, C8, and HelpMovie 13.

Note: If you are setting up **TimeTabler** for the very first time then it is a very good idea to use the **same** Room Names as in SEEMiS. If you've already entered the Rooms then you can just leave them, because if they are not the same then you can still tell the program during the export stages that (for example) 'A104' in **TimeTabler** is actually 'Room 104' in SEEMiS, but it will save you time if they are already the same. See also the comments below, and Section F in '[Exporting-from-TimeTabler-to-SEEMiS.PDF](#)'.

4. Teachers Screen See your Manual section C9, and HelpMovie 14.

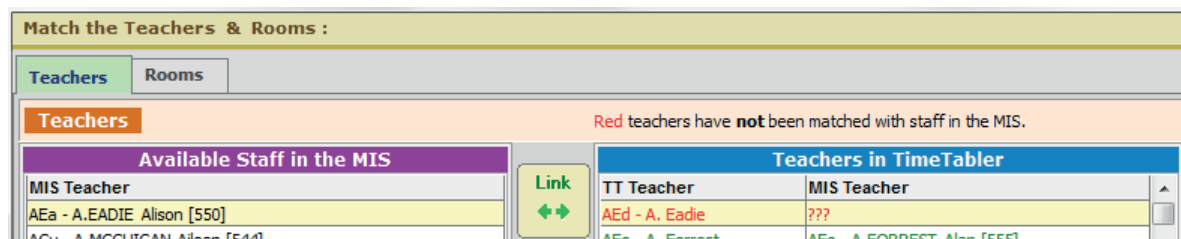
Note: In order to export the completed timetable later, the staff initials need to be recognised by SEEMiS. If you import data from SEEMiS into **TimeTabler** (as in Appendix 1) then you get a 3-character code constructed using the following rules. If you enter initials manually, try to use the same system.

- (1) take the 1st letter of the first fore-name, in Upper case, followed by:
- (2) the 1st letter of the surname, but omitting 'Mac' or 'Mc', in Upper case, followed by:
- (3) the 2nd letter of the surname (omitting 'Mac' or 'Mc'), in lower case.

Some examples: CALUM ROY STEWART \Rightarrow CST ALISON MACDONALD \Rightarrow ADo

However this system can produce duplicate initials, and in **TimeTabler** the initials must be unique. So you may have to adapt them (eg. CST, AMa in these examples). Whichever code you use in **TimeTabler**, it will be shown on the final printouts (if you choose 'initials' to get compact printouts), so there may be occasions when you don't want to use the SEEMiS common code, if your colleagues won't recognise it.

At the Export stage : Using the same 3-character initials when possible will save your time during the export, but if some staff/rooms still have different initials in the two systems, then you can tell the program at Stage 2 of the export. See Section F in '[Exporting-from-TimeTabler-to-SEEMiS.PDF](#)' about this screen:



To say that teacher AEa (in SEEMiS) is teacher AEd (in **TimeTabler**) you would just click the Link button.

continued...

Using Class Scheduling Names in *TimeTabler*

1. Scheduling Names and Printing Names See your Manual section C10, and HelpMovies 15-18.

Scheduling Names are used by you to tell *TimeTabler* about your school's curricular structure.

Printing names are what your colleagues see on their Printouts. See the HelpMovies.

Please note that you should **never** use names like 1.1, 1.2 as Class **Scheduling** Names.

Reason:

1.1 means a composite class in Year 1 made up of two classes. These two classes are Year-1-class-'dot' and Year-1-class-1. Similarly a Class Scheduling Names of 1.2 would mean Year-1-class-'dot' and Year-1-class-2. Because of the common Year-1-class-'dot', these two classes (1.1 and 1.2) could **never** be scheduled at the same time. This would probably make your timetable impossible!

In the same way, classes called 1AB and 1AC can never be scheduled at the same time because they have the pupils in class 1A in common and those pupils cannot be in two places at the same time. Sometimes this is helpful, see the document for S1/S2.

However for Class **Printing** Names it is perfectly fine to use 1.1, 1.2, etc. See the example shown here:

Class Printing Names are what your colleagues will see on their printouts.

Scheduling Name	Printing Name
1 A	1.1
1 B	1.2
1 C	1.3
1 ABC (composite)	Year 1

2. Vertical classes See HelpMovie 17.

For S 4/5/6, or S 5/6, or S 3/4/5/6 you may need to use 'Vertical' class scheduling names (see also the next 2 pages).

To use these you tick the box on the Classes Screen:

See the HelpMovie on this topic. And the Help button.

There are two steps to setting up a vertical class. In this example we'll assume you wish to set up a vertical class for Years 4+5+6.

Step 1

Set up a 'dummy' Class Scheduling Name in the lowest of these years. So in Year 4 (the lowest year in this example) we've entered a Class called **4Z** :

We've also set up classes like 4ABCDEF (all of Year 4), 5ABCDEF (all of Year 5), etc.

Step 2

Select **4Z** and then tick the tick-box for 'Vertical class':

From the drop-down lists select the classes you want to be included in this Vertical class**. Click Apply.

Class Details:

Scheduling Name: 4 Z

Printing Name: []

Vertical Class ? : for combining 2 or more years

Classes/Years to be Vertically combined:

Component Class 1: 4 ABCDEF

Component Class 2: 5 ABCDEF

Component Class 3: 6 ABCD

Component Class 4: []

Component Class 5: []

NB: You should use this method ONLY for combining classes in DIFFERENT years

Then if you want to enter an Activity for a lesson to be scheduled to all of Years 4/5/6 at the same time you will use a Class Scheduling Name of **4Z**. See the next few pages for some examples.

If you have a structure where Higher groups need a different period-allocation from National groups, then see Appendix 2.

** Note that although this example shows Year 6, S6 activities are often included in with the S5 activities, in which case you do not need a separate class for S6.

Class Scheduling Names & Activities for S 4 / 5 / 6

Here are some examples of how to enter your Class Scheduling Names, in the Classes Screen (see also your Manual section C10, and HelpMovies 15-18).
 And how to enter your Columns of Activities (See also Manual section D and HelpMovies 8, 24-26).

A. If you have a separate S56 and S4

In the example shown here, the school has about 90 pupils in S5. S6 is considered part of S5 for scheduling purposes here.

The Registration Groups are called 5A, 5B, 5C; and the big Columns (Blocks) of subjects that run across 5ABC will be entered using the single Class Scheduling Name of 5ABC.

And similarly for S4 : with 4A, 4B, 4C for the individual forms (for Registration and perhaps PSHE); and with 4ABC used for each big column that runs across the whole Year-group (see the next pages).

Scheduling Name	Printing Name
S5 A	S5A
S5 B	S5B
S5 C	S5C
S5 ABC (composite)	S5ABC
S4 A	S4A
S4 B	S4B
S4 C	S4C
S4 ABC (composite)	S4ABC

On this Classes Screen use Sort Custom to put the classes into the best order. (Remember the Printing Name can be whatever you like.)

Then, when you enter the activities into the Batch, use S5ABC for each S56 Column (block), and use S4ABC for each S4 Column.

For example, for S56 (using the Simple Block Wizard) :



Select the Class (see above):
 Click to enter the lessons:
 Click to select the Subjects:

Click this Tab when you are ready to enter the Teachers. See pages 6-7.

Add Labels, see page 12:

Save the Column of activities, and view the Curriculum Diagram.

Notes:

- The list of Subjects in each Column will normally come from the **Options** software, by using the Rule: "Limit the number of Groups in any Column, for this Subject/Faculty" (see pages 38-39 in the **Options** Handbook), so each Column will work within your available staffing and other resources. See also 'Using **Options** in Scotland' document in the KnowledgeBase.
- If your school has 6 forms or registration-groups then you'd use 5A, 5B, 5C, 5D, 5E, 5F, and 5ABCDEF, etc. Similarly for different sized schools. Similarly for S4, S3.
- If you sometimes want to treat S6 separately from S5, then you could enter 6A, 6B, 6C and 6ABC, and then make a Vertical Class (eg. 5Z) of 5ABC+6ABC (see the previous page).
- If you're sure you'll never want to refer to the individual forms (5A, 5B, etc) in **TimeTabler** or in SEEMiS then you could just use (say) 5X for each column in Year 5, and 4X for each column in Year 4. (However in the rest of this document we have used 5ABC.)

Scheduling Name	Printing Name
S5 X	S56
S4 X	S4

continued...

B. If you have a combined S456

If Years are combined like this then you treat it as a Vertical Class (see page 3).

In the example shown here, **4 Z** is a vertical class which represents the 2 years combined S4+S5 (which includes S6). ie. 5ABC + 4ABC
ie. all of S456.

Scheduling Name	Printing Name
S5 A	S5A
S5 B	S5B
S5 C	S5C
S5 ABC (composite)	S5ABC
S4 A	S4A
S4 B	S4B
S4 C	S4C
S4 ABC (composite)	S4ABC
S4 Z [=S5ABC+S4ABC]	S456

On the Classes Screen use Sort Custom to put the classes into the best order.

When you enter your activities into the senior school Batch, via the Simple Block Wizard, as on the previous page, this time you will use **4Z** for each column that is to be across S456.

Simple Block

(But for Registration, and any other Form subjects, you'll use 5A, 5B, 5C, 4A, 4B, 4C.)

Add a Block Help-Movies

Basic Details Staffing Advanced

Class: *

Lessons: *

Notes:

- For the list of Subjects to enter for each Column, see note (1) on the previous page.
- If your school has 6 forms or registration-groups then you'd use 5A, 5B, 5C, 5D, 5E, 5F, and 5ABCDEF, etc. Similarly for different sized schools. Similarly for S4, S3.
- If you're sure you'll never want to refer to the individual forms (5A, 5B, etc) in **TimeTabler** or in SEEMiS then you could just use (say) 5X (instead of 5ABC), and 4X (instead of 4ABC), with 4Z as the vertical class:

Scheduling Name	Printing Name
S5 X	S5
S4 X	S4
S4 Z [=S5X+S4X]	S456

C. If you have a combined S3456

If Years are combined like this then you treat it as a Vertical Class (see page 3).

In the example shown here, **3Z** is a vertical class which represents the 3 years combined S3+S4+S5 (which includes S6).
ie. 5ABC + 4ABC + 3ABC
ie. all of S3456.

In the Simple Block Wizard, you'd use **3Z**.

From a timetabling perspective this is an ambitious model, because of the impact on S1/S2.

Scheduling Name	Printing Name
S5 A	S5A
S5 B	S5B
S5 C	S5C
S5 ABC (composite)	S5
S4 A	S4A
S4 B	S4B
S4 C	S4C
S4 ABC (composite)	S4
S3 A	3A
S3 B	3B
S3 C	3C
S3 ABC (composite)	S3
S3 Z [=S5ABC+S4ABC+S3...	S3456

Using Teacher Pools

'Pools' of teachers are a common feature of Scottish timetabling. They are used to staff teaching groups temporarily, within available resources, until the Head of Subject decides the final staffing.

Ideas about the concept and usage of Pools are explained in several places, including:

- **The HelpMovie (23)** on this topic. (This outlines the ideas of Pools, with some examples.)
- **The HelpScreens.** Start the Help (via <F1>), click on the Index tab, and type 'pool'.
- **The printed Manual.** Sections C20, H39 – H41 give more specific details.

View those first. The following outline brings some of those ideas together.

1.

A teacher can be in up to 6 Pools at the same time (although this is not advisable).

For example, a teacher (see KJo) can be in a Physics pool (=Ph) for Upper School groups and in a Science pool (=Sc) for Lower School groups. See C20.

No.	Pool Name	Subject	Size	Teachers or Special Resources in the Pool
1	=Ph	Phys	3	KJo RPa JSi
2	=Sc	Sci.	6	KJo RPa RC GWa PW JSi
3	=Lb	Sci.	5	Lb1 Lb2 Lb3 Lb4 Lb5

KJo is in both the Physics Pool and the Science Pool.
=LB is a Pool of 5 Labs (entered as Special Resources).

2.

Resources such as Laboratories can be entered as Special Resources, and the Special Resources can be entered into a Pool of Labs (see =Lb).

This can ensure that, if you have only 5 Labs, no more than 5 Science lessons occur in any time-slot. See HelpMovie 23 and Sections C20, H40, H41.

3.

To specify these extra resources for an activity go to button, to go to the Advanced wizard screen:

Activity for S4ABC (SSS)

Description: Y4 Column F Colour as: Default (1st subject)

Teaching Groups for this Activity:

Group	Subject	Set	Teacher	Room	Assist-1	Assist-2	Teaching Group Name
1	Sci.	1	HK	{auto}	MU	Lb1	4X-ScF1
2	Sci.	2	KJo	Lab-2	(none)	Lb2	{auto}
3	Sci.	3	RC	{auto}	(none)	=Lb	{auto}
4	Span		EBr	{auto}	GP	(none)	{auto}

This screen is an extension of the Wizards screens. It allows you to enter Assistants or Assets needed for an activity.

In the examples shown:

- MU is an Assistant Teacher (in the same room as HK).
- Science Set 2 must have Lab-2 (it was entered as a Special Resource).
- Science Set 3 will be allocated any one of the 5 Labs that are in the =Lb Pool, if it's free.
- {auto} indicates that you are leaving it to **TimeTabler** to decide, using rules that you've set up elsewhere (for rooms, it's the 1st/2nd/3rd preferences on the Teachers Screen).

See the HelpScreen for more details of all these.

4.

While scheduling, **TimeTabler** allocates teachers from a Pool as 'soft' assignments.

Later you can print out Pool Timetables (see C20) so that you or the Head of Subject can decide whether to keep those 'soft' allocations or make some changes by swapping teachers. eg. in order to get less 'split teaching'.

You can do this at any stage of scheduling (eg. after scheduling S3456) and then you can change a teacher's assignment from 'soft' to 'hard' (ie. fixed) using the **Edit Details Screen**: (see sections C20 and F14, and HelpMovie 43 about the Staff Timetable Screen).

If you set a teacher to 'hard' (for a particular lesson) after scheduling S 3456, then this is fixed while you go on to schedule S2 and S1.

Lesson for 1ABCD 'Maths Block'

Group	Teacher	Subject	Set	Room
1	JHa	Maths	2	U9
2	JM	Maths	1	U7
3	FHI	Maths	3	U1
4	JV	Maths	4	U20
5	VH	Maths	5	U10
+	MU	Maths	5	

Lesson Details:
Teacher: *JHa J.HARRISON
Role: Main teacher
Subject: Maths
Set: 2
Room: *U9
Pool: (none)
Block Label: M
Apply to all other lessons in this Activity

Details of Activity on Curriculum Diagram:
Lesson Scheduled
D Wed:3
S Friday:5
S* Monday:1 *this lesson
S (not placed yet)

A 'soft' allocation is shown like: =Ph
Change it to {none} to make it 'hard'.

Entering your Staffing details into a Batch of Activities

Some schools still use the traditional Scottish method of drawing up a 'Schematic' of columns, finding the doublets/triplets either by using strips of paper, or by using simple software.

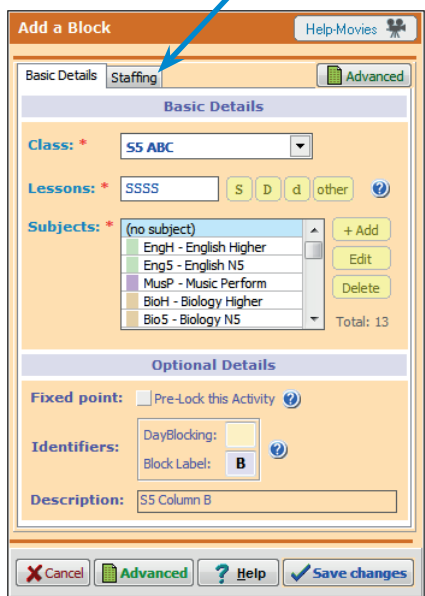
However many schools schedule it in **TimeTabler** from the start, using the features of **TimeTabler** to decide the best doublets/triplets. This method is described here.

Either way, the details need to be entered into **TimeTabler** before you start to schedule S2, S1 (see the other document explaining how to schedule S2/S1 quickly).

In order to schedule these S3 / 4 / 5 / 6 columns they need to be staffed by teachers, as well as being provided with sufficient resources (eg. Labs). The sequence is:

- Enter your Teachers (and labs) into 'Pools' (see the previous page).
- Enter the Teachers (actual or 'Pool') into the Simple Block Wizard (see the screenshot below).
- Find suitable doublets/triplets, using the Conflict Matrix Screen or the Team Combinations Screen (see the next 2 pages).
- Schedule the Columns to actual times of the week (page 10).

This is the Simple Block Wizard from page 4. Clicking on the Staffing tab opens up the other screen:



This shows a Column for S5 (5ABC). If you have a combined S456 then you would enter the columns for 4Z, page 5.

Note on Pools:
Suppose (for example) you have 2 Drama teachers in the =Dr Pool, and 3 Art teachers in the =Ar Pool, then **TimeTabler** knows that while scheduling the lessons to times of the week, it can use either of the 2 Drama teachers and any of the 3 Art teachers in order to assign the lesson.
Later, you or the Head of Subject can use a Printout of the Pool Timetable to decide which Drama teacher and which Art teacher should teach each lesson.

The 2nd column shows the same Subjects as on the first screen. The 1st column shows the Teacher for each of those subject groups.

For Music, the exact Teacher (KRo) is specified, because in this school there is only this 1 Music teacher.

For other Subjects, a Pool teacher is specified.

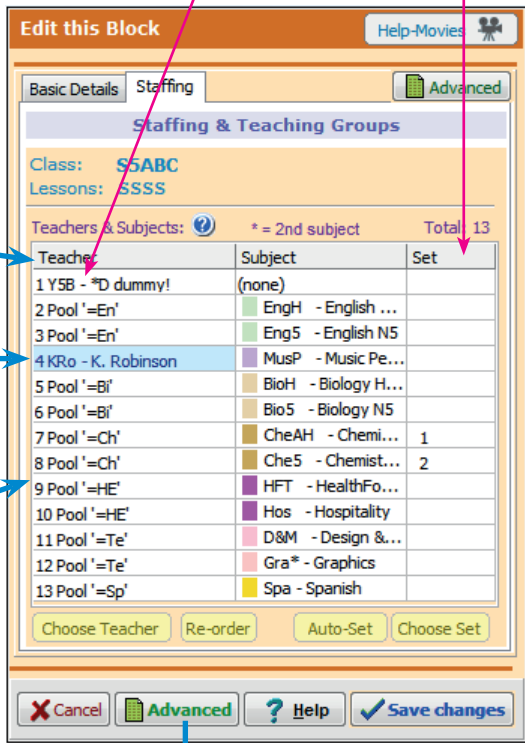
TimeTabler will allocate **any** teacher from that Pool, so long as there are enough staff available in that period.

Later the Heads of Subjects will decide.

If you need to add extra resources, use the Advanced Screen, see page 6:

For Biology & Chemistry, it has been used to specify that they each need a Lab:

The 1st 'teacher' here is a Special Resource Label (4), as described on page 12. *D means it will not appear on final printouts. Chemistry has been marked as 2 'sets'.



Groups Lessons

Teaching Groups for this Activity:

Group	Subject	Set	Teacher	Room	Assist-1	As
1	(none)		YSB	{auto}	(none)	(nc)
2	EngH*	=En	{auto}	{auto}	(none)	(nc)
3	Eng5*	=En	{auto}	{auto}	(none)	(nc)
4	MusP*	KRo	{auto}	{auto}	(none)	(nc)
5	BioH*	=Bi	Pool =lb		=lb	(nc)
6	Bio5*	=Bi	Pool =lb		=lb	(nc)
7	CheAH*	1	=Ch	Pool =lb		(nc)

The next step is to look for compatible doublets/triplets, see the next pages.

Checking your big Teacher-teams & looking for doublets/triplets

There are 3 screens in **TimeTabler** that can help you with this. They are explained on these 2 pages.

At Check & Validate Conflict Matrix you are offered a choice:

Matrix - A: Clashes between Activities
Matrix - B: Clashes with the Schedule

Conflict Matrix A (See also Chapter 8 in 'The Timetabler's CookBook.')

You can choose either one or two classes to show down the left-hand axis, depending on whether you are looking for doublets or triplets.

Choose a class to go across the horizontal axis.

Hover your mouse to see more details of a team.

Click to find the Clashes.

The grid shows you the Clashes, so you can see what is possible and what is not possible.

Click on Help for more details.

Click on any cell to be shown more details of what is causing the clash.

Buttons at the bottom allow you to view both the Staff Timetable and the Teacher-Inspector, to judge.

For example, this =Ar shows that S5 Column C cannot be scheduled at the same time as S4 Column F because together they would need too many Art staff.

If you wish, you can make changes to the teacher-teams on the screen. When you exit it asks if you want to save the changes by updating your Batches. But think carefully before you say yes!

Conflict Matrix B

This is a slightly different version which shows, automatically, for the 'Across' teams, the teams **that have already been placed in each period of the week** in the current schedule.

As before, you can look for doublets or for triplets.

In this conflict matrix, the 'Across' teams are the teams **that have already been placed in each period of the week** in the current schedule.

So once you have assigned a Year on the schedule you can now look to see how the next Batch(es) of teams will fit against it ...and whether you need to take some action to reduce the number of clashes.

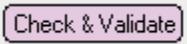

In the example above, Year S5/6 has already been assigned on the schedule, and now the Conflict Matrix is showing where the S4 teams have clashes and so their lessons cannot be placed (unless the staffing is altered).

The key question : can at least one of the teams be placed in each period of the week? In the screenshot above, Tuesday-period-2 (7 clashes with S4) may be a problem?



Remember: during scheduling, **TimeTabler** will only place Columns in the same period if that is possible within the resources you've specified. It will **never** place a Teacher in 2 places at the same time.

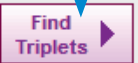

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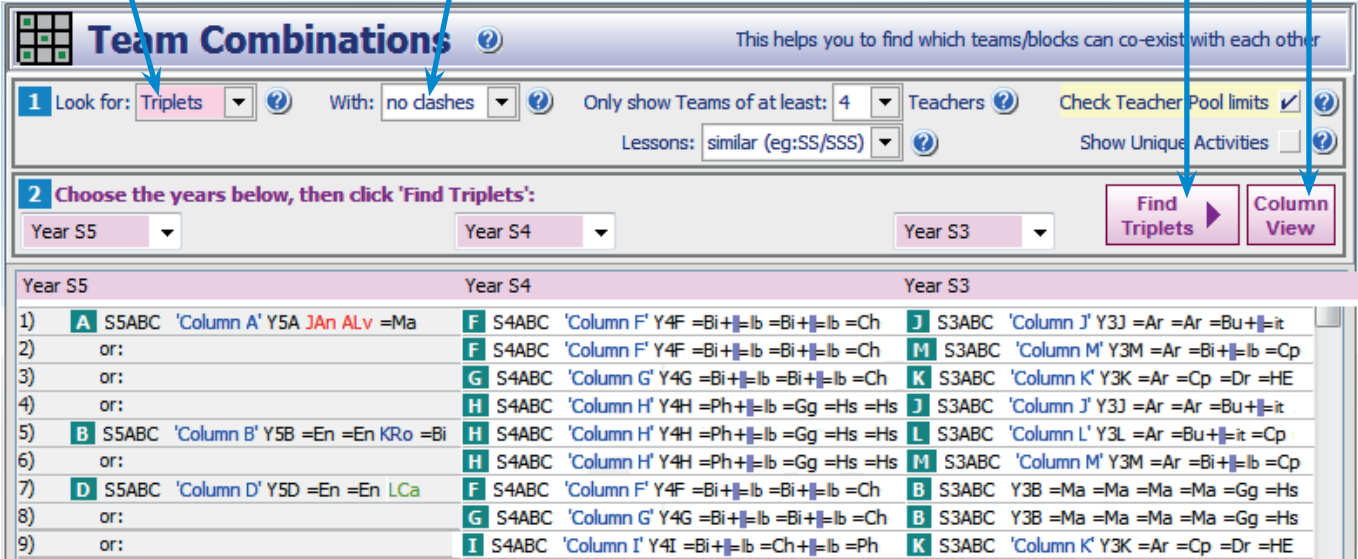
Team Combinations Screen

You reach this screen via   Team Combinations

It gives you an alternative way to look for Doublets/Triplets (after you have entered your data into batches):

Choose from:  Choose from: 

Click to find the combinations.  Click to get a column view. 



Team Combinations This helps you to find which teams/blocks can co-exist with each other

1 Look for: **Triplets** With: **no dashes** Only show Teams of at least: **4** Teachers Check Teacher Pool limits Lessons: **similar (eg:SS/SSS)** Show Unique Activities

2 Choose the years below, then click 'Find Triplets':

Year S5 Year S4 Year S3


Year S5	Year S4	Year S3
1) A S5ABC 'Column A' Y5A JAn ALv =Ma	F S4ABC 'Column F' Y4F =Bi+=lb =Bi+=lb =Ch	J S3ABC 'Column J' Y3J =Ar =Ar =Bu+=it
2) or:	F S4ABC 'Column F' Y4F =Bi+=lb =Bi+=lb =Ch	M S3ABC 'Column M' Y3M =Ar =Bi+=lb =Cp
3) or:	G S4ABC 'Column G' Y4G =Bi+=lb =Bi+=lb =Ch	K S3ABC 'Column K' Y3K =Ar =Cp =Dr =HE
4) or:	H S4ABC 'Column H' Y4H =Ph+=lb =Gg =Hs =Hs	J S3ABC 'Column J' Y3J =Ar =Ar =Bu+=it
5) B S5ABC 'Column B' Y5B =En =En KRo =Bi	H S4ABC 'Column H' Y4H =Ph+=lb =Gg =Hs =Hs	L S3ABC 'Column L' Y3L =Ar =Bu+=it =Cp
6) or:	H S4ABC 'Column H' Y4H =Ph+=lb =Gg =Hs =Hs	M S3ABC 'Column M' Y3M =Ar =Bi+=lb =Cp
7) D S5ABC 'Column D' Y5D =En =En LCa	F S4ABC 'Column F' Y4F =Bi+=lb =Bi+=lb =Ch	B S3ABC Y3B =Ma =Ma =Ma =Ma =Gg =Hs
8) or:	G S4ABC 'Column G' Y4G =Bi+=lb =Bi+=lb =Ch	B S3ABC Y3B =Ma =Ma =Ma =Ma =Gg =Hs
9) or:	I S4ABC 'Column I' Y4I =Bi+=lb =Ch+=lb =Ph	K S3ABC 'Column K' Y3K =Ar =Cp =Dr =HE

In the screen above it is looking for Triplets, of an S56 team and an S4 team and an S3 team. (S56 teams were entered with a Class Scheduling Name of S5ABC.)

You can choose to show only teams longer than a specified size. You can tell it to check that Teacher Pool limits are not exceeded in any combination, or ignore the limits. Click on 'Show Unique Activities' to get a simpler list, with no repetition.

Usually you will use it to search for combinations with no clashes.

If you can't find enough combinations with no clashes, then you can set it to show those with 1 clash (or more). Then you can see which staff you need to adjust in order to get rid of the clash. (The staff causing the clashes will be highlighted in **yellow** for you.)

 If you click on 'Column View' then you get the same data but in a different format, which many people find more helpful:

Column Compatibility Grid

	1	2
Year S5	A S5ABC 'Column A' Y5A JAn ALv =Ma =Ma =En =Ch+=lb =Ph+=lb =Gg =Ms SSSSS	B S5ABC 'Column B' Y5B =En =En KRo =Bi+=lb =Ch+=lb =Ch+=lb =HE =HE SSSS
Year S4	F S4ABC 'Column F' Y4F =Bi+=lb =Bi+=lb =Ch =lb =Hs =Ms =Dr MMC SSSS	H S4ABC 'Column H' Y4H =Ph+=lb =Gg =Hs =Hs GCu =HE =HE =PE GGa+=lb SSSS
Year S3	J S3ABC 'Column J' Y3J =Ar =Ar =Bu+=it =Te =Cp+=it =Gg =HE =Hs =Ms S	L S3ABC 'Column L' Y3L =Ar =Bu+=it =Cp+=it =Dr =Mu =Mu =Ph+=lb =Te SS
Class clashes:	0	0
Staff clashes:	0	0
Teachers who clash:		

In choosing the Doublets (or Triplets) it is fairly important to have consistent combinations. For example, if S4ABC-Column-F can co-exist with S5ABC-Column-A then it should be scheduled against it for all its periods, if possible.

See the next page for suggestions about scheduling the columns.

Scheduling the columns to specific times of the week

Please also see

- The printed Manual, sections E – H.
- HelpMovies 8, 27, 36–45.
- The Help button on each screen.

Stage 1

Start a New Schedule (HelpMovie 36, 36A).

Load the first Batch (for S56; or for S456). Check that you can identify each column [see page 12].

On the Visual Builder Screen (HelpMovies 37, 40) assign the columns interactively (Method 1). Look for a good spread of early / mid / late periods each day.

If you wish to concentrate on a particular Column/Block then use the Filter to specify that Block:



Stage 2

Load in the next Batch (S4 or S3) and assign those Columns.

You can use the Printouts (or the Excel spreadsheets) produced for you by the Conflict Matrix A or B Screens or the Team Combinations Screen (see pages 8–9), to form good doublets/triplets.

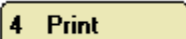
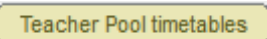
Note that **TimeTabler** will never allow you to place an activity that would double-book a teacher or a class.

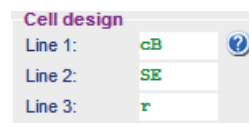
Stage 3

When S6543 has been scheduled then you can pass out the result to Heads of Subjects for them to adjust (or confirm) the allocation of teachers to the groups.

There are 2 ways to do this:

Either:

1. On paper,   perhaps with a Cell Design of:




Heads of Subject may also need a Printout of a 'master' Class Timetable (or a Subject timetable).

Or:

2. Without using paper, using Staffing Proformas (see HelpMovie 27A and Section D15 (step 2) in your printed Manual).

When setting up your Departments make sure that you include all the Subjects for that Head of Subject. *For example*, for Maths make sure you include all subjects like Maths, MatN4, MatN5, MatH, MatAH, etc.

To send the Head of Subject a 'master' Class (or Subject) Timetable as well, use Export  HTML and attach that file to an email.

S1 and S2 and S3

When you have scheduled all of S456 then please see the separate documentation about how to schedule S3, S2 and S1 quickly.

This documentation is listed at www.timetabler.com/scotland and can be downloaded from the 24/7 Support Centre:



The **S1/S2** document includes:

- 6 examples of efficient ways to structure your S1 / S2,
- the best ways to set up screen-displays & printouts,
- a Case Study of a school, showing how even a very large school can be timetabled quickly (for example, S2 timetabled in 20 minutes).

Exporting to an MIS

SEEMiS

There is a direct electronic import from **TimeTabler** to **SEEMiS**. HelpMovie **65** gives you an overview.

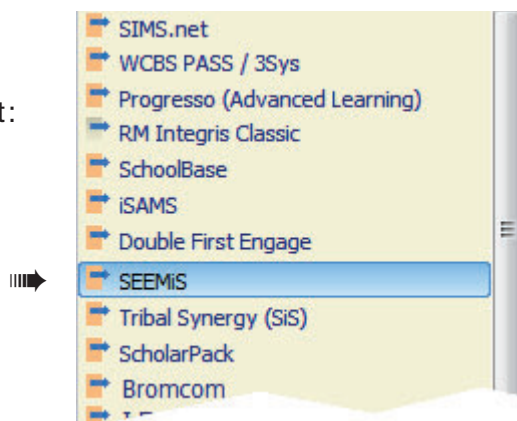
It is **strongly recommended** that well **before** you get to the stage of doing the export, you should give this Printout to the SEEMiS Manager, so that they can prepare SEEMiS for the import.

The route is:



Exporting

Click on **Export** and select your MIS from the drop-down list:



Then click **Read the latest instructions** to see the documentation.

For **SEEMiS** you probably just need the single document : [Exporting-from-TimeTabler-to-SEEMiS.pdf](#)



See also HelpMovie **65**.

It is strongly recommended that the Timetabler and the SEEMiS Manager work together during the import.

Other MIS, including WCBS/PASS/HUBmis and iSAMS

The full range of MIS that currently accept an electronic import from **TimeTabler** is shown at : www.timetabler.com/adminMISsystems

For these MIS the supporting documentation falls into three parts:

1. Export-Doc-1. Preparing your data

This document explains the key importance of ensuring that the Teacher-code / Subject / Room are the same in **TimeTabler** as in your MIS. For SEEMiS this step is less important.

2. Export-Doc-2. Exporting from **TimeTabler**, step-by-step.

This document takes you through the export step-by-step.

A key procedure is at Step 5 : Setting up Teaching Group Names (so they are recognised by your MIS). Some further comments and screenshots relating to step 5 are shown in Appendix 4.

3. Export-Doc-3. Importing into the MIS

This varies from MIS to MIS. We have included documentation on our web-site, but it would be wise to ask your MIS provider if they have a more recent version of their documentation.

continued...

Appendix 1 : Labelling big teacher-teams

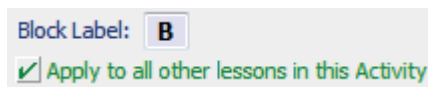
During scheduling and exporting to SEEMiS it is useful to be able to identify the different teacher-teams across S4/5/6. There are 4 ways to do this. You can choose one or more of them, as shown below.

① Block (column) Label

You can add this label to an Activity in the Batch (via the Simple Block Wizard) or to a lesson on the Schedule (via the Edit Details Screen):



in the Simple Block Wizard (HelpMovie 24)

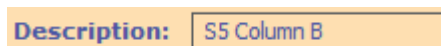


on the Edit Details Screen (HelpMovie 43)

You can choose to show this Block Label on the Curriculum Diagram, and during Scheduling, and during the export to SEEMiS, and on the final Printouts. See the examples below. Which style suits you?

② Block (column) Description

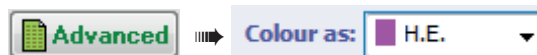
To help identify a column you can add a Description to an Activity in the Batch (in the Simple Block Wizard, see HelpMovie 24):



Then you can see it while you are scheduling, to help identify the teacher-team, see the examples below.

③ Block (column) Colour

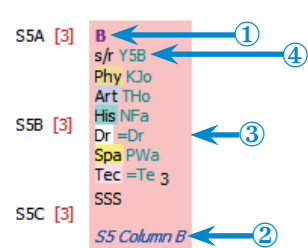
To help you to identify a column you can specify its colour (in the Simple Block Wizard, see HelpMovie 24), at:



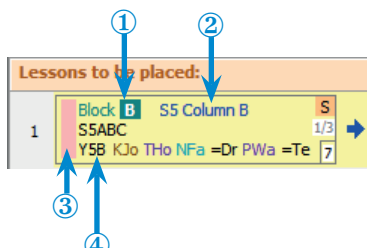
④ Special Resource (dummy teacher)

Some Users like to add a Special Resource (dummy teacher) on the Special Resources Screen, for example Y5A, Y5B, etc (one for each Column). And then add the relevant Special Resource to the front of the teacher-team as the first 'teacher', so that the 'Y5A' etc shows as a label.

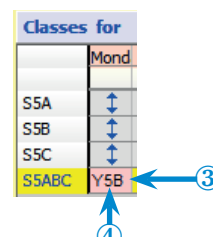
Some Examples of these methods:



A. During planning, on the Curriculum Diagram Screen

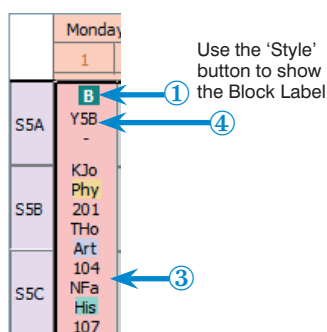


B. During scheduling a 'card' on the Visual Builder Screen



C. During scheduling, on the Visual Builder Screen

D. During scheduling, on the Class Timetable Screen:



E. On the Final Printouts, for your colleagues:

Class Timetable

Exclusive

Monday	
	period 1 9.00--9.40
S5ABC	S5 Column B Mr Keith Johnson Physics Room 201 Mr Terry Howe Art Room 104 Mr Neil Farquharson History Room 107 Mr John Smith Drama Room 109 Mrs Pauline Walker Spanish Room 217

In this example with the settings as shown below, and with 'Separate team' un-ticked.

Class pattern

Exclusive
 Inclusive
 All-inclusive

Blocks

Show all lessons: ▼

Heading: ▼

Description: ▼

Heading Colour: Yellow ▼

Include

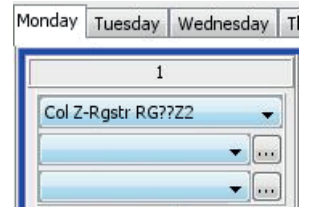
S5A
 S5B
 S5C
 S5ABC

Printing List

S5ABC

Appendix 2 : Registration periods (and form periods for PSHE, Tutorial etc.)

SEEMiS usually has Registration periods included in its structure, like this:



If your SEEMiS screen has Registration, then you must have a corresponding Registration in the export file from **TimeTabler**, as discussed below.

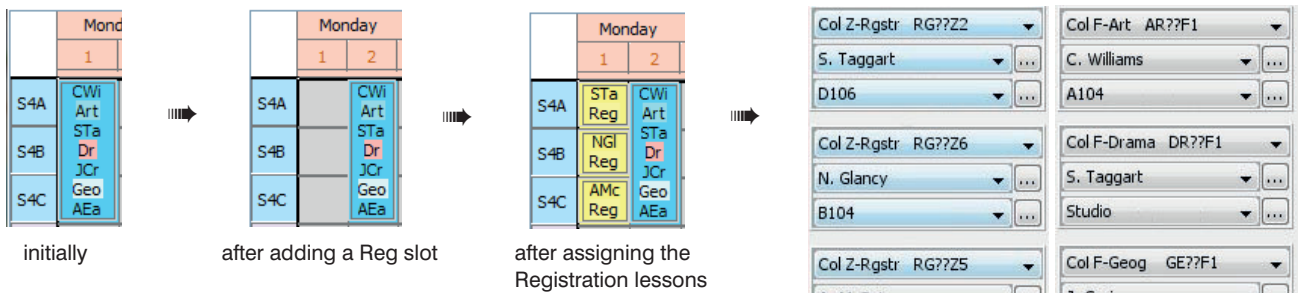
However, we recommend that you do NOT include any Registration periods in **TimeTabler** while you are scheduling the timetable. (Two reasons : the screens are less cluttered, and it means you cannot accidentally put a subject lesson into a Registration time-slot.)

Then, **after** the timetable has been scheduled, you **must** add in the Registration time-slots (before doing the export to SEEMiS), by using: **Check & Tidy** → **+ Add a Period** Take a Backup first.

At that stage there are 3 ways you can set up the Registration period in the Export file to SEEMiS:

1. You can choose to schedule individual Registration 'lessons'.

For example, in a batch for S4, for each of the classes 4A, 4B, 4C..., enter 'lessons', with a Subject called "Reg.", with the Form Teacher, and then schedule them into their Registration time-slots:

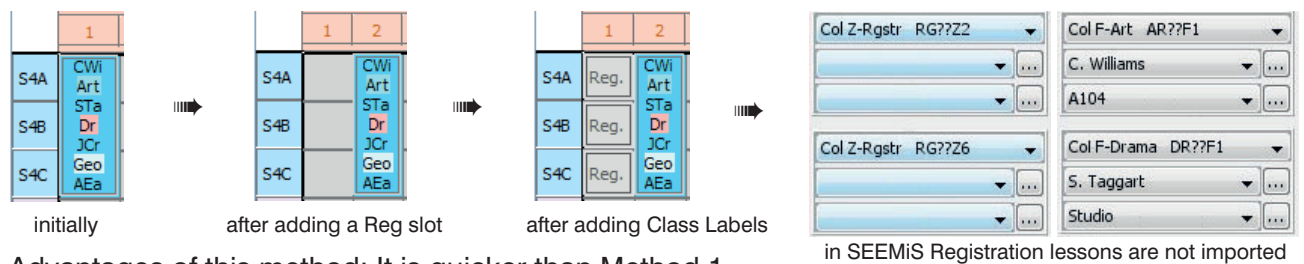


Advantages of this method:

- (i) Registration, with the correct form teacher, will appear on your Printouts from **TimeTabler**.
- (ii) These Registration 'lessons' will be imported into SEEMiS like all the other lessons.

2. You can choose to just add Class labels to the empty Registration cells.

Class labels are added on the Class Timetable Screen (HelpMovie 44) by right-clicking on a 'Reg' cell. (First, set up a suitable label, eg. 'Reg.', via Customize Menu → Class Timetable Labels.)



Advantages of this method: It is quicker than Method 1.

The 'Reg.' labels appear on your **TimeTabler** printout, but no teacher is shown.

Disadvantages : They are not imported into SEEMiS, though space is reserved so you would have to enter the Registration details manually in SEEMiS, later.

3. You can choose to add the Registration time-slots but not enter anything in them.



Advantages: It is quick to do in **TimeTabler**.

Disadvantages : No Registration is shown on **TimeTabler** printouts; not imported into SEEMiS, though space is reserved so you can enter the Registration details into SEEMiS manually, later.

Appendix 3 : Importing Basic Data from SEEMiS into *TimeTabler*

In the very first year of using *TimeTabler* you may want to import the Basic Data (of Subjects, Rooms, Teachers) from **SEEMiS** to *TimeTabler*.

(The alternative, which doesn't take long, is to type this information into *TimeTabler*.)

See Section C in the printed Manual and HelpMovies 11–14.

Either way you only need to do this **once**. Thereafter in subsequent years you will usually just tweak this data for any changes (eg. as staff are appointed or retire).

Step 1 : In SEEMiS : save a file

In SEEMiS 'Click and Go' go to :

Next Session ➡ SETTS ➡ Setup ➡ Timetabler Extract

Since you are only exporting Basic Data do **not** tick 'Include teaching groups' (you'll need that later, when you export your completed timetable into SEEMiS).

Choose the directory where you want to save the file, and click Export.

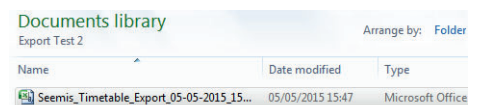
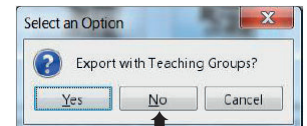
This produces and saves a file with a name like:

[Seemis_Timetable_Export_dd-mm-yyyy_hh-mm-ss.csv](#)

(the final part is the day's date and time).

Make a note of where you saved the file.

If you are unsure about any part of this step, please contact SEEMiS.



Step 2 : in *TimeTabler* : load that file

In *TimeTabler* go to the Basic Data Screen, and click on: to see:

Import from 3rd-Party File (in 5 steps)

If you have a CSV (or xls or tab-delimited) file of the correct format, then you can use this screen to import your Basic Data (Teachers / Subjects / Rooms) from another system (eg: from your MIS / Admin System):

Note, however, that this import is usually only useful in the first year that you use TimeTabler - thereafter, it is usually quicker to edit your existing Basic Data in TimeTabler.

1 Choose the file to import from:
Import Filename (click on yellow folder to browse):
F:\Seemis_Timetable_Export_05-05-2015_15
Click here to see the required file formats: ?

The import file contains this data:

TE	VAd	V.ADAM
TE	FAi	F.AITKEN
TE	HAi	H.AITKEN
TE	JAr	J.ARMSTRONG
TE	SAr	S.ARNOLD
TE	JBe	J.BEST
TE	SBI	S.BLACK
TE	KBr	K.BRACK

2 Choose the data to import from this file:
If you only want to import a specific type of data, leaving the others unchanged, please tick the type(s) you want to import below:
Teachers Subjects Rooms

3 Choose the import method:
Import data like this: replace / overwrite

4 Select the file format:
Abbreviation is field: 2 Delimiter is: Comma
Full Name is field: 3 Header is: none

5 Click to import this basic data:

In part 1, browse to find the file that you saved from SEEMiS. (If you are on a different machine on a different network then you'll need to save the SEEMiS file on a memorystick.)


In part 4 you need to ensure that the screen shows:

Abbreviation is field: **2** (because the first field is the teacher label TE, see the screen above)

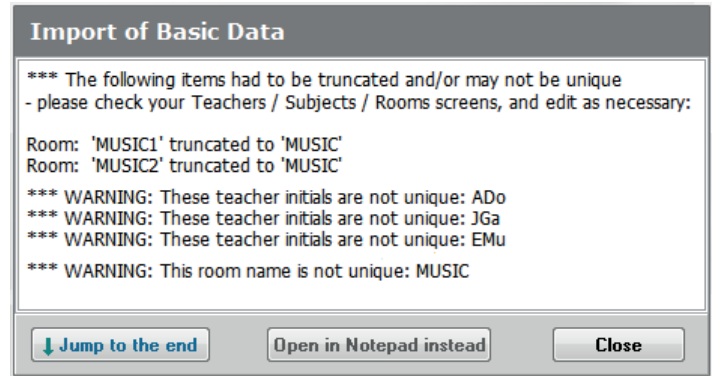
Full Name is field: **3**

then click on: to see the messages discussed on the next page.

continued...

After clicking on the  button, you are asked to confirm the import and then you are shown any warning messages, like these:

You'll need to keep a note of these items ...the easiest way is to click on the button to 'Open in Notepad' and then print out the list.



This example shows that some **Room** names in SEEMiS were too long. (To keep screen displays compact, the maximum room length in **TimeTabler** is 5 characters.) So you would need to go to the Rooms Screen and (in this example) change one of the rooms now called MUSIC to Music or MusRm, etc.

This example shows that some **Teacher Initials** are not unique. This is likely to be the commonest warning, as uniqueness is not necessary in SEEMiS but absolutely necessary in **TimeTabler**. Page 2 explained the rules that SEEMiS has used in constructing the 3-character initials.

Taking the first example above, about teacher ADo, if you go to the Teachers Screen it shows:

Two teachers called ADo will prevent **TimeTabler** from behaving correctly. You **must** change one of them.



There are plenty of possibilities: For example, change the first one to ADn, or ADn, or AMa, AMd, etc.



...Or change the second one ...but just ensure that it is different from any other teacher's **initials**. The teacher's Full Name can be anything you like.

On this same screen you also need to enter each teacher's Main Subject, see Section C9 in the Manual. We also recommend that you enter their Room Preferences, see HelpMovie 14.

Then check that you have done everything else described in Sections C3 – C9 in your Manual. Then see the section on 'Class Scheduling Names' in Section A of this document.

Note: in subsequent years you do **not** need to do this again. Just re-use your data by editing it for any changes, as explained in HelpMovie 8.

Case Study 1 : S4/5/6 Columns with differing Numbers of Periods

A school in Aberdeenshire has a structure where S4/5/6 can do National courses across 6 columns, A–F, with each one having a 4-periods-per-week allocation.

However the school also wants to have S5/6 doing Higher and Advanced Higher courses in 5 columns (A–E) of the 6 columns, but with these courses having a 5-periods-per-week allocation.

This is possible if :

- 4 of the 5 periods for the Higher courses are taught at the same time as National columns A–E, with
- the 5th periods for four of the Higher courses being taught at the same time as National column F,
- and the 5th period for one of the Higher courses being taught at the same time as an S4 core lesson.

Schematically:

Higher courses A–E 5pd/wk:	HA	HB	HC	HD	HE	HA	HB	HC	HD	HE
National courses A–F 4pd/wk:	NA	NB	NC	ND	NE	NF				S4 core
period allocation:	4	4	4	4	4	4				1
	DSS	DD	DSS	DD	DD	S S S S				S

In this scenario an S5/6 student can choose a mix of Nationals or Highers in 5 columns (A–E) but cannot easily choose a National subject in one column (column F in this example).

There are 2 ways to deal with this:

Solution 1 : the simpler way

First decide which Higher column should be scheduled at the same time as the S4-core column.

To decide this, look at the teachers who will be teaching the S4-core column and see how well they match against each of the Higher columns. In the example shown it has been decided to put Higher column E against S4-core because they fit together best without running out of staffing resources.

Then in the Batch for S456 you enter activities as shown below, using a Class Scheduling Name of **4Z**, as discussed earlier in this document.

Think of these activities as being vertical slices (of the diagram above, and of the timetable).

For the 'A' column:

4Z DSS MaH EnH PhH ArH ... MaN EnN HiN BiN ... = Higher-A team + National-A team

4Z S MaH EnH PhH ArH ... HiN ChN GgN ArN ... = Higher-A team + National-F team

where the first line is for HA + NA (for 4 periods),

and the second line is for HA + NF (for 1 period),

and MaH is replaced by the initials of the actual Maths teacher of the Higher Maths group, etc., where H refers to a teacher of the Higher group, N refers to a teacher of the National group.

Similarly for the 'B' column:

4Z DD PhH BiH HiH MuH ... EnN ArN MuN ChN ... = HB + NB teams

4Z S PhH BiH HiH MuH ... HiN ChN GgN ArN ... = HB + NF teams

and similarly for columns 'C' and 'D',

while for the 'E' column, which is to go against S4 core:

4Z DD EnH MaH GgH HiH ... PhN ArN BiN HiN ... = HE + NE

4Z S EnH MaH GgH HiH ... PE. PE. PSE. RE. ... = HE + S4-core

In checking entries of these activities you will often find it best to use the List-View button: [Open List-View](#)

Solution 2 : a more complicated way

If you wanted to allow **TimeTabler** to choose which Higher group would be scheduled at the same time as S4-core, then you could specify a Class 5A [S5/6], a Class 4A [S4] and a vertical class 4Z [=4A+5A]. Then enter activities for column A above as:

4Z DSS MaH EnH PhH ArH ... MaN EnN HiN BiN ... = Higher-A team + National-A team

5A S MaH EnH PhH ArH ... = Higher-A team

4A S HiN ChN GgN ArN ... = National-F team

And similarly for the others, so that in theory the 4A activities can swap. But we think that Solution 1 is the simpler and better way.

Case Study 2 : S4/5/6 Columns with differing Numbers of Periods

At Wick High School the pupils in S4 are offered almost the same subjects as the students in S5/6. Options A, B, C, D are common to S4/5/6. However S4 have 5 periods for each block, while S5/6 have 6 periods. An extra Block/Column E is exclusive to S5/6 (for 6 periods).

For the rest of the 35-period week, S4 have 5 periods of English, 5 of Maths, 3 PE, 1 RE and 1 PSE, while S5/6 have 3 GS, 1 RE and 1 PSE.

Rather than use 'Vertical grouping' (HelpMovie 17), all the Class Scheduling Names were entered as classes in Year S5, as shown below.

Classes 5ABCD have been given a Printing Name of **S5**, while Classes 5abcd have been given a Printing Name of **S4**.

The joint S4/5/6 subject groups were entered into the 'Simple Block' wizard, using a Class Scheduling Name of 5ABCDabcd (these are the tall columns shown in the diagram below).

The S5-only columns were entered using the 'Simple Block' wizard for Class 5ABCD.

The S4-only blocks were entered using the 'Simple Block' wizard for Class 5abcd.

The groups for RE/PSE/GS/PE were entered using the 'Pure Class' wizard, for 5A, 5B, 5C, 5D, 5a, 5b, 5c, 5d.

Then the Curriculum Diagram Screen looks like this:



As you can see, S4/5/6 (Class 5ABCDabcd) gets 5 single periods (SSSSS) for Block A (scheduled on 5 different days, with groups of MA, HI, PH etc), and then S5/6 (Class 5ABCD) gets an extra single period of this block A (on one of the days, which could form a Double, or could be 2 Single periods that day).

Similarly for Block B. And for Blocks C and D.

Block E is for S5/6 only (5ABCD) and to be scheduled as DSSSS (on 5 different days).

The RE/SE/GS/PE lessons must fit into their own 5 periods of the week (because everything else is blocked). They can fit flexibly, but they will automatically fit so that no more than 2 RE lessons occur simultaneously because this school has only 2 RE staff.

Case Study 3 : S4/5/6 Columns with differing Numbers of Periods

Lesmahagow High School, and Queen Anne High School in Dunfermline, use a different method.

S4 pupils study 7 subjects (4 periods each), plus 4 core periods.

S56 pupils can study 5, 6 or 7 subjects: some National Courses (4 periods) along with some Higher courses (6 periods). There are 2 core periods in S56.

The **Options** software [www.timetabler.com/options] is used to devise the columns while allowing pupils to have a free choice of courses.

Then the timetable is produced in **TimeTabler**.

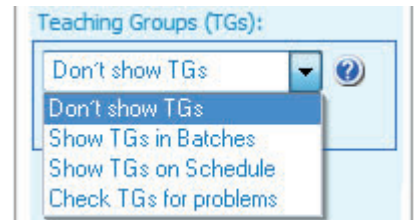
The full details of how these schools manage this are given in a separate document, at:

<https://www.timetabler.com/PDFs/S456-at-LesmahagowHS.pdf>

Appendix 4 : Teaching Group Names ('TGNames' or 'Set Codes') needed for some MIS (not SEEMiS)

On the Curriculum Diagram Screen, on the [Customize](#) sub-screen, you can select from 4 choices:

as well as the choice of: [Customize the {auto} TG Names](#)



Show TGs in Batches [Show TGs in Batches](#)

The Curriculum Diagram will now visually show {auto} like this:

The {auto} means that **TimeTabler** will automatically calculate the TGName using the style that you set up via:

MA1 MBu {auto}
MA2 JGe {auto} 4
SSSS

- either [Customize the {auto} TG Names](#) on the Curriculum Diagram Screen,
- or at Step 5 of the Export to your MIS (see Export-Doc-2).

Either of these takes you to a screen that allows you to select or design the format you want:

Teaching Group format:

Use this format for "1A, Ma, Set 1, Block C": [customize further ...](#) Use this many characters for the subject: Use this many characters for the set:

The basic choices are shown in a drop-down list:

1A/Ma1C means: Class : 1A Subject : Maths Set : 1 Block Label : C

If none of the standard designs suits you, you can select 'customise further'. This is explained in more detail in Export-Doc-2.

- 1AMa1C
- 1A/Ma1C
- 1A-Ma1C
- 1A\Ma1C
- 1A.Ma1C
- Custom**

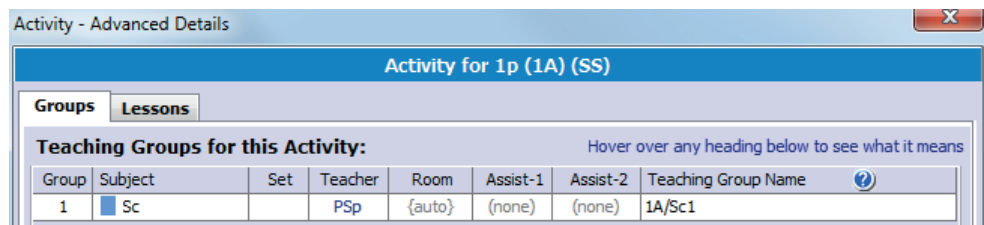
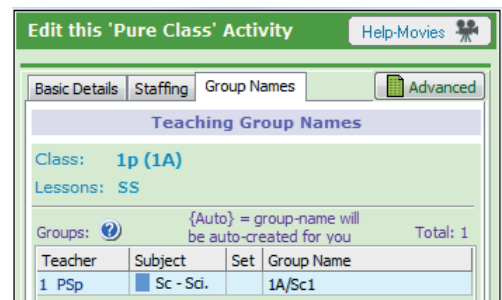
A similar display is shown if you choose: [Show TGs on Schedule](#)

Occasionally, you may find that this global {auto} system is not appropriate for a particular TG. In this case you can enter the particular TGName manually.

For example, if you wanted to have a different format from the {auto} design for your 'practical' groups in S1 then:

- Double-click on the Activity on the Curriculum Diagram Screen, to go into the relevant wizard:
 - The wizard now has an extra Tab labelled 'Group Names' which shows the current TGName.

- Click on [Advanced](#) to go to the Advanced Screen:



Under Teaching Group Name click on {auto} and enter the name you want in the box.

Do not do this manual tweaking names unless absolutely necessary. It is time-consuming. In most cases {auto} will do all that you want, and give a TGName that is accepted by your MIS during the import.

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