Using *TimeTabler* to timetable S3

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 S3 within a Scottish setting. Other papers give more detailed help for S4/5/6 and for S1/S2.

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 Teacher (or Careers Counsellor), while counselling the student in school. Either way, the **TOOLS** system collects the students' Choices in a paperless way, ready for the best pattern of subjects to be found by Auto-Create in *Options*.

The next stage is to schedule lessons to times of the cycle (week or fortnight), in *TimeTabler*. If you haven't already done so, see: http://www.timetabler.com/images/Video-4-Steps-in-TimeTabler and download the free Tutorial version from: www.timetabler.com

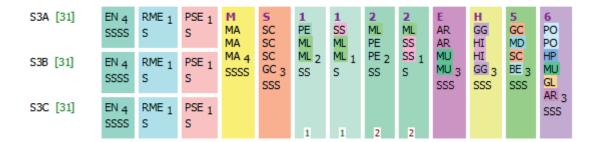
The HelpMovies, HelpScreens and the printed Manual provided with *TimeTabler* all help with this. And there are many articles on all aspects of timetabling in the KnowledgeBase in the Support Centre.

However there are some aspects of timetabling that have a uniquely Scottish flavour, and this paper focusses on these aspects in **S3**. (S4/5/6 and S1/2 are explained in detail in other documents.)

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For ways of timetabling S1 and S2, and for scheduling S3/4/5/6 either as a joint S456 or as S4 and S56 or as a joint S3456, see the other documents listed at: www.timetabler.com/scotland

Usually, S3 has the simplest curricular structure and may be the easiest part of the timetable. Here is a 3-form-entry school (with 3 Registration groups in S3), as shown in *TimeTabler*:



Some subjects (EN, RME, PSE) are taught in form groups, while for other subjects (MA, SC, etc) the pupils join together and are re-organised in other groupings, perhaps according to their prior attainment.

Each pupil has 31 periods of lessons per week (in this school it's 6 pds/day except Wednesday has 7).

As usual we have not shown the Registration Groups here, and is much easier if you omit them like this while scheduling the timetable. Then you can add them later:

- either before printing out the timetable Printouts for publication.
- or before exporting your completed timetable into SEEMiS (or another MIS).
 SEEMiS requires you to enter the Registration periods in *TimeTabler* before exporting the completed timetable to it, whereas WCBS/PASS/3sys (for example) prefers that you add the Registration periods in the MIS after importing the completed timetable.

Four Class Scheduling Names are required to describe this structure: (See Section C in the printed Manual, and HelpMovies 15, 16.)



EN lessons are entered using the Pure Class Wizard: (And similarly for forms S3B and S3C.)

(And similarly for RME and PSE.)



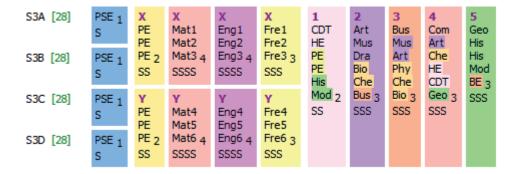
While the rest are entered using the Simple Block Wizard:

As usual you can re-use all this data next year, by just editing/tweaking it.

When the Curriculum Diagram is correct then you can move to the scheduling stage, see the HelpMovies.



Here is a slightly more complicated example. It's a 4-form-entry school (with 4 Registration groups in S3).



PSE is taught in form groups; while PE, Maths, English, French are taught in half-year groups (and some of those subjects are 'setted'). There are 5 blocks of optional/elective subjects across the whole yeargroup.

Each pupil has 28 periods of lessons (6-period days but with the school closed on Friday afternoon). Registration groups will be added later, after scheduling the timetable (see the previous page).

Seven Class Scheduling Names are required to describe this structure: (See Section C in the printed Manual, and HelpMovies 15, 16.)



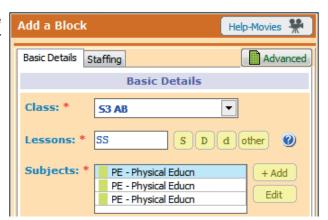
PSE lessons are entered using the Pure Class Wizard: (And similarly for forms S3B, S3C and S3D.)



PE, Maths, English, French are entered using the Simple Block Wizard, using the Scheduling Names for half-year blocks (S3AB and S3CD):

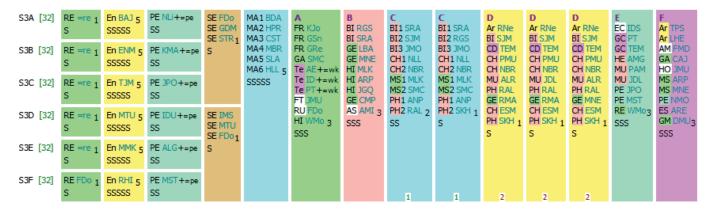
Block Labels (X, Y) have also been entered in the wizard. (See also Appendix 3.)

In a similar way the 5 whole-year-blocks are entered using S3ABCD.



Please see also the notes about Example 1.

Here is another example, a 6-form-entry school this time.



Some subjects (RE, En, PE) are taught in form groups, while SE is taught in half-year-bands (because FDo teaches two groups). The rest of the curriculum is taught in blocks across the S3 Year, as shown.

Each pupil has 32 periods of lessons per week (in this school Monday & Tuesday have 7 periods while the other days have only 6).

As usual we have not shown the Registration Groups here, see the comments on earlier pages.

For RE:

The =re indicates that there is a 'Pool' of RE staff, and the software will select anyone from that Pool who is free to teach the group (except for S3F where FDo has been specified as the teacher). See Section C20 in the printed Manual, and HelpMovie 23, and Appendix 2, for more details.

For PE:

The +=pe indicates that as well as the specified teacher, the activity also needs a **Special Resource** (a Gym) and that there a limited number (the number is shown on the Pools Screen for this resource). The same method is used in Block A where each Technology (Te) group must have a workshop (=wk). See Section C20 in the printed Manual, and HelpMovie 23, for more details.

For Block C:

The team for two single-periods is slightly different from the team for the third period, as you can see. To ensure that the 3rd period is not scheduled on the same days as the other two, they are given a **Global DayBlocking Code** (of [1] in this case).

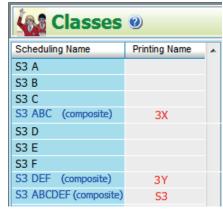
See Sections D9, D29 in the printed Manual, and HelpMovie 25, for more details.

For Block D:

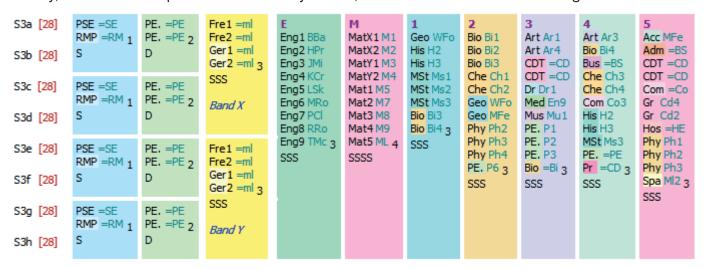
This has been entered as 3 blocks (because the teams are 3 different teams, see teachers JDL, MNE), and a different Global DayBlocking Code [2] has been used to ensure that all three go on different days.

Note that with this structure it is not possible for a teacher to teach 2 English groups, because that would require $2 \times 5 = 10$ periods of English time, and there aren't 10 periods outside the whole-year blocks. For a solution see section 4.3 in 'The Timetabler's CookBook'.

Nine Class Scheduling Names are required to describe this structure: (See Section C in the printed Manual, and HelpMovies 15, 16.)



Finally, here is an example in an 8-form-entry school, as shown on the Curriculum Diagram Screen:



Some subjects (PSE, RMP, PE) are taught in pairs of forms, while French/German is taught in half-year-bands. The rest of the curriculum is taught in blocks across the S3 Year, as shown.

Each pupil has 28 periods of lessons per week (in this school Monday to Thursday have 6 periods while Friday has only 4). As usual we have not shown the Registration Groups here.

The labels 'Band X' and 'Band Y' were added by using the 'Description' field in the wizard (Appendix 3).

Pools: In this school the timetabler has chosen to use a lot of Pools of teachers (as shown by =SE, =RM, =PE, =ml, etc). While this is a sensible strategy for the PSE, RMP, PE (because they are only scheduled once per week), it is not good for the other subjects (because of the likelihood of causing splitteaching, which is particularly damaging in the teaching of subjects like French & German). For more details see the caveats in Section C20 in the printed Manual.

In other subjects the timetabler has assigned specific staff and has sometimes chosen to use the teachers' initials (see English in Block E). This is usually the best practice.

However in Maths the timetabler has chosen to use just M1, M2, etc, which may be helpful if the timetabler doesn't know the school and its staff well, but has the disadvantage that the final printouts won't be as helpful (unless you choose to show the teachers' *full* names on the printouts, which then are not compact).

Fifteen Class Scheduling Names are needed to specify this structure:

Even though the Curriculum Diagram above does not use the Class Scheduling Names for individual forms (3a, 3b, 3c, etc) they are needed, particularly when you come to enter the Registration lessons (using the 'Pure Class Wizard'), like this:



Classes @ Scheduling Name Printing Name S3 a S3 b S3 ab (composite) S3 c S3 d S3 cd (composite) S3 abcd (composite) Band X S3 e S3 f S3 ef (composite) S3 q S3 h S3 gh (composite) S3 efgh (composite) Band Y S3 abcdefgh(composite) **S3**

For more about Registration see Appendix 1.

Appendix 1: Registration periods

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

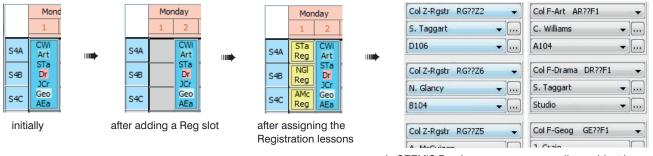
less cluttered, and it means you cannot accidentally put a subject lesson into a Registration time-slot.)

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:

in SEEMiS Reg lessons appear as well as subject lessons

in SEEMiS Registration lessons are not imported

Monday Tuesday Wednesday Ti

.

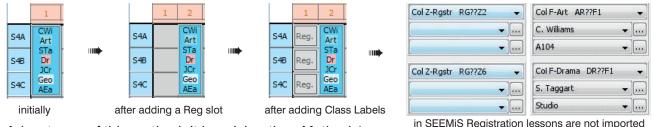
¥ ...

Col Z-Rastr RG??Z2

- (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 manually, later.

Appendix 2: Using Teacher Pools

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.

The following outline brings some of those ideas together.

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.

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



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

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.

To specify these extra resources for an activity you should click on the Advanced button, to go to the Advanced wizard screen.

This button is shown on the Pure Class wizard and on the Simple Block wizard.



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 (entered as a Special Resource).
- Science Set 3 will be allocated any one of the Labs that are in the =Lb Pool.
- {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).

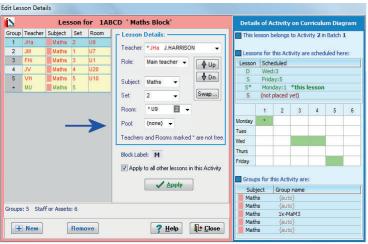
See the HelpScreen for more details of all these.

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 \$456) 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 the HelpMovie 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.



A 'soft' allocation is shown like: =Ph

Appendix 3: Labelling big teacher-teams

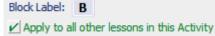
During scheduling and exporting to SEEMiS it is useful to be able to identify the different teacher-teams across S4/5/6. There are 4 ways to do this. You can choose one or more of them, as shown below.

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):

Description: S5 Column B

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

3 Block (column) Colour

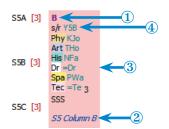
To help you to identify a column you can specify its colour (in the Simple Block Wizard, see HelpMovie 24), at:



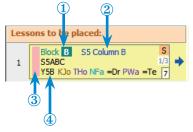
4 Special Resource (dummy teacher)

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

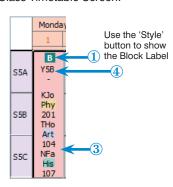


B. During scheduling a 'card' on the Visual Builder Screen

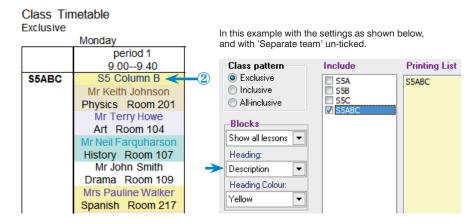


C. During scheduling, on the Visual Builder Screen

D. During scheduling, on the Class Timetable Screen:



E. On the Final Printouts, for your colleagues:



Appendix 4: Scheduling Lower School

Please see the other document for full details of how to do this efficiently & quickly. It is called 'Scotland-Timetabling S1-S2-with-TimeTabler.pdf' and it is listed with all the other helpful documents at: www.timetabler.com/scotland

It includes:

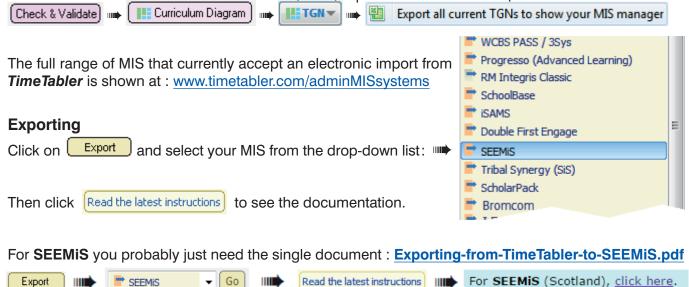
- 6 examples of efficient ways to structure your Lower School,
- the best ways to set up screen-displays & printouts,
- a Case Study of a school, showing how even a very large school can be timetabled quickly (for example, S2 timetabled in 20 minutes).

Appendix 5: Exporting to your MIS

SEEMIS

There is a direct electronic import from *TimeTabler* to **SEEMiS**. It is *much* quicker than entering a timetable manually. See HelpMovie **65**.

We **strongly recommend** 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:



For other MIS (eg. WCBS PASS/HUB, iSAMS, etc) the supporting documentation falls into three parts:

1. Export-Doc-1. Preparing your data

See also HelpMovie 65.

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 3.

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.

Appendix 6: Teaching Group Names ('TGNames' or 'Set Codes') needed for some MIS (not SEEMIS)

On the Curriculum Diagram Screen, sub-screen, you can select from 4 choices: on the Customize

as well as the choice of: | Customize the {auto} TG Names



Show TGs in Batches Show TGs in Batches

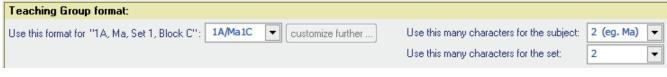
The Curriculum Diagram will now visually show {auto} like this:

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

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

- 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:



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.

A similar display is shown if you choose: Show TGs on Schedule

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

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.
- Advanced Click on 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.

With many thanks for the help provided by Neil Farquharson and Terry Howe.