TimeTabler

Timetabling software for Schools

Curriculum & Timetabling

A Guide for Headteachers

October Resolutions Limited

Uh-oh? What do you mean 'uh-oh'?

Curriculum & Timetabling

A Guide for Headteachers

Changing the direction of travel of a school is not easy. It involves many factors, including the curricular structure and the timetable.

How best to analyse your school as it is now? How best to change it in a manageable way? These are some of the key questions discussed in this PDF, in a 10-point plan.

The PDF is divided into 3 main sections:
A : Analyse the existing situation.
B : Look at the things you might want to change and draft some possibilities.
C : Validate them, consider feedback and make decisions as a result.

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A Analysing the Curriculum and the Timetable as they are now Analysing

When you first take over a school, and every 2-3 years thereafter, it's useful to take stock, of both the curricular structure and the timetable, to see if they are still optimised.
This section A explains 4 ways to do that.

1. Contact Ratio

This is a measure of the number of teaching-periods provided by your staff.

Do you know the Contact Ratio for your staff in the current year?
Can you afford to increase it or decrease it?

To find out the current value for your staff,

- you can do it manually as explained in Chapter 5 of 'The Timetabler's CookBook, www.timetabler.com/book

- if you have the *TimeTabler* software, then it will calculate it for you.

Check & Validate ➟ Staff Deployment

The Association of School and College Leaders (ASCL) suggests that a reasonable value is **0.78**
How does yours compare?

There are more details on page 2 of the free PDF at: www.timetabler.com/SavingMoney.html

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Notes:

2.   Staff Deployment Analysis

This is a method which shows you how your staff's teaching-time is distributed to different Year-Groups in your school. It can sometimes gives you some surprises.

To find out the current distribution for your school,

- you can do it manually as explained in Chapter 5 of 'The Timetabler's CookBook, www.timetabler.com/book

- if you have the *TimeTabler* software, then it will calculate it for you.

Check & Validate ➡ Staff Deployment ➡ Draw a bar-chart

Here are some examples:
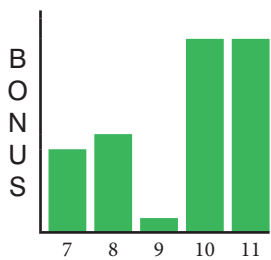
The calculation for this example school shows it has 165 bonus periods.
This shows how the 165 bonus periods were distributed between Years/Grades 7–11.

You could decide to distribute the 165 periods differently. What about Year 9?
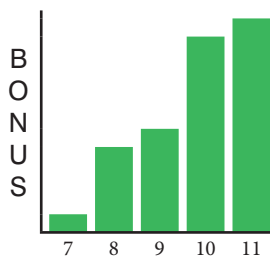
A common pattern seen in many schools for Years/ Grades 7–11.
It distributes the same 165 bonuses in a different way.
It's your judgement.

Might it be advisable to reduce the bonuses for the new Year 10.
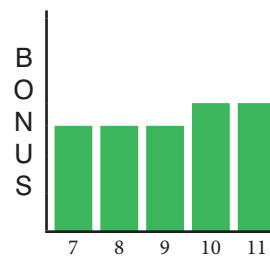
Is this pattern more, or less, fair to the students?
It distributes the same 165 bonuses in a different way.
It's your judgement.
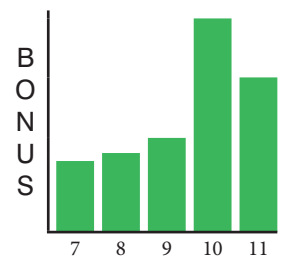
A potentially bad scenario, because the bonuses for Year 10 will normally have to continue into Year 11 as well, either by stealing from lower years or by raising the contact ratio.

You may have similar problems in Years 12–13 (or Years S 456 in Scotland)

There are more details at:
- www.timetabler.com/SavingMoney.html
- The printed manual provided with the *TimeTabler* software, section D28.

Notes :

3. Evaluate your existing timetable

One way to do this is shown by the 4 criteria, and the 12 evaluation items, shown on pages 174-175 in 'The Timetabler's CookBook', www.timetabler.com/book

One method which is easy to set up these days is an on-line Survey (using Alchemist/SurveyGizmo, SurveyMonkey, or Google Forms, etc).
Any of these give you a quick summary and a report automatically.

For example, just these 2 questions would give you a lot of information:
• What is the worst thing about your current timetable?
• What is the best thing about your current timetable?

Setting up such simple surveys would tell you a lot, if you asked for them to be completed:
• by staff,
and separately
• by students (in each Year-group?).

What is the most striking thing in the reports?

Notes:

4. Look at the existing Curricular Structure

A **Curriculum Diagram** is the only way to show the structure clearly and unambiguously.

The principles of a Curriculum Diagram are explained at:

- www.timetabler.com/SupportCentre/CurriculumDiagram.xls

and at:

- Chapter 2 of 'The Timetabler's CookBook', www.timetabler.com/book
  This chapter also shows 20 examples of curricular structures for you to consider.
  See also pages 7 and 8 in this PDF.

For example:

8A	En	Ma	Sc	1	**Fr**	Hi	Gg	Ar	Mu	Re	Se	Te Te Te	Pe Pe
8B	En	Ma	Sc	2	Hi	**Fr**	Mu	Gg	Ar	Se	Re		Pe
8C	En	Ma	Sc	3	Gg	Se	**Fr**	Hi	Re	Ar	Mu	Te Te Te	Pe Pe
8D	En	Ma	Sc	4	Se	Re	Hi	**Fr**	Gg	Mu	Ar		Pe

This shows some 'pure class' ('linear block') activities [En, Ma, Sc], some 'simple block' activities [Te, Pe] and some 'Consistently-setted' activities [Fr, Hi, Gg, Ar, Mu, Re, Se], all in Year 8.

If you have a 'Sixth Form' (Years/Grades 12/13) then you will probably have a fourth kind of structure as well, Container Blocks, which allow for the 'Spread' that is common in 'Sixth Form' timetables.

TimeTabler software will draw the Curriculum Diagram for you.

Once you have an accurate Curriculum Diagram you can begin meaningful discussions about potential changes.

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Notes:

B Thinking about possible changes

Once you are clear about the current situation, you are in a position to consider changes you may wish to make. This section B considers 4 types of change you may wish to make.

5. Changing the timetable cycle?

New Headteachers quite often change the school's timetable cycle after a year or so of being in post. *For example,* some new Heads change from a 1-week cycle of 25 periods to a 2-week cycle of 60 periods, perhaps in order to have a greater number of periods available to modify the curricular structure.

The various reasons that may be claimed for changing the cycle-length are covered on pages 34-35 of 'The Timetabler's CookBook', www.timetabler.com/book

If you decide to keep, or change to, a 2-week cycle then a key point is what kind of 2-week cycle you will want to use. There are 3 main types of 2-week timetable, with one type in particular being unhelpful for scheduling Part-time staff. This topic is discussed on page 5 of the free PDF available at: www.timetabler.com/improvingPart-timers.html

Coupled with this is the effect of lesson-length on different subjects, and this is discussed on page 36 of 'The Timetabler's CookBook'. Very few teachers have the skill to be able to provide sufficient variety and interest within the very long lessons that most schools adopted during the covid pandemic!

You might also consider the timetabling aspects of learning for teenagers outlined at: www.timetabler.com/ResearchOnEffectsOfTimetabling/

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Notes:

6. What kind of Options Structure do you want?

The main types of Options structures are outlined on pages 38-42 of 'The Timetabler's CookBook',
www.timetabler.com/book
Most secondary schools these days have some form of 'Free Choice' options structure for the older
students, as this is more likely to appeal to parents and to reduce friction in school.

But within that structure there is quite a lot of variation, as explained in the free PDF available at:
www.timetabler.com/improvingOptionsStructures.html
It explains 7 variations, including 'Pathways' and IB (International Baccalaurate).

If your school is in Scotland, there is an alternative version at:
www.timetabler.com/PDFs/WhitePaper-on-Options-&-TOOLS-in-Scotland.pdf
with more support documents at: www.timetabler.com/scotland

The documents also discuss how you can collect the students' Choices (by paper in the traditional
way, or on-line from the student's/parent's home using TOOLS, or in-school with a Careers Counsellor
using TOOLS). The last 2 methods can save the school a lot of admin time, especially when combined
with the smart *Options* software.

Notes:

7. Draft a proposed new Curriculum Diagram

If you have considered the items listed here so far, then you are now at the stage of being able to consider modifying the Curriculum Diagram that you drew up in Section 4 above.

In **Upper School** (Years/Grades 10, 12; S456) you will be able to use the information from section 6 on page 7, combined with the information you have about students who are half-way through their courses (in the new Years/Grades 11, 13; S56).

In **Lower School** you may want to modify the previous structure by adding or removing some 'setting.
For example, an extra Set in a Maths Block, if you can afford it (see sections 1 and 2 above).
For example, 'Consistent-setting' in related subjects. To see examples of possible structures see Chapter 2 of 'The Timetabler's CookBook', www.timetabler.com/book

If you have the *TimeTabler* software then see the PDF of 9 examples at:
www.timetabler.com/SupportCentre/Consistent-Setting-Methods.pdf   *For example:*

Above all, don't assume that the changes you make will be practicable or implementable!

Whatever changes you make - big or small - need to be tested, by doing a 'What if...?' investigation. For more details see section 10 on page 11 of this PDF.

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Notes:

8. Staffing decisions : Part-timers

The staffing of whatever Curriculum Diagram you are proposing will be affected by

- Staff who are leaving or retiring.
  See also section 9 on page 10.

- Staff you are intending to advertise for, but who haven't yet been appointed.
  See also section 9 on page 10.

- Part-time staff, including any staff who have previously been full-time but are now asking you if they can go Part-time.
  This aspect may be particularly tricky, perhaps especially if you have a 2-week timetable cycle.
  For more details, see the free PDF at : www.timetabler.com/improvingPart-timers.html

Notes :

C Validating possible changes

Once you have drafted your proposed changes it is *vital* to check if they are actually possible !
This section C considers 2 essential ways to check the feasibility.

9. Curriculum Audit & Staff Loading Chart

A **Curriculum Audit** shows how many teaching-periods are needed for each Subject in the proposed new structure.
A **Staff Loading Chart** shows how many periods each teacher can provide, bearing in mind the Contact Ratio (see section 1 on page 2).
The two summaries are interlinked and *must* match.

They are explained in detail in Chapter 6 of 'The Timetabler's CookBook', www.timetabler.com/book
The adjustments that you or the Timetabler will need to make, to ensure that they match, can be done:
•   in a spreadsheet (see page 231 on the CookBook),
or
•   in the *TimeTabler* software, via: [Audit & Staff Loading]

These are vital things to look at whenever a member of staff gives their notice of leaving. Just because an Art teacher is leaving does *not* necessarily mean that you should advertise for a new Art teacher.
It may be that a different subject, or a part-timer, might give you a better fit between the Curriculum Audit and the Staff Loading.
This is especially true if you are trying to change the subject-balance in the new curricular structure.
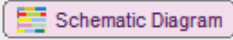
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Notes :

10.　Do 'What if....?' investigations

It is essential to *test* the viability of any proposed changes before they are finalised.
Just because a Curriculum Diagram looks good on paper, that doesn't mean it is possible with the staff that you will have for the new school year.

With modern 'smart' timetabling software it is relatively easy to do **'What if...?'** investigations.

With *TimeTabler* it is easily possible (given some allocation of time to your Timetabler) to:

- do partial timetables, using　[⊞ Trial a Year]　or　[▤ Schematic Diagram]

or

- (better) construct a full timetable using semi-automatic or fully-automatic
  methods, as Quality (eg. a good rhythm of lessons) is not vital at this stage.

[Run Semi-Automatic now]

[Run Fully-Automatic now]

The PDF at: www.timetabler.com/SupportCentre/What-if-investigations.pdf outlines the method and also suggests a simple way of evaluating the results of a 'What if...?' investigation.

Notes:

Dear Timetabler,

Timetabling is probably the most important single event in the school year. It has a powerful effect on the life of a school or college, and as the Timetabler you carry a heavy responsibility.

This Booklet, like the others in the series, is designed to help you with specific aspects of timetabling.

An effective timetable is essential for a good school. A school which does not invest in creating a quality timetable will be forever struggling uphill.
These Booklets give you help on specific topics, so you can achieve the best results using our intuitive and smart software.
You have problems? We have solutions! Based on long timetabling expertise.

We are expert in all aspects of timetabling in schools and colleges, and we have been using our expertise to help and support schools for over 40 years in over 80 countries.

Whether you are new to timetabling, or an experienced timetabler; no matter how complicated your school or how complex your timetabling problems, we have **solutions** for you.

What we offer you :

TimeTabler
Easy-to-use and intuitive smart software, used by schools world-wide to schedule their timetables.
TimeTabler can deal with any curricular structure, of any complexity.
It is supported in 12 ways by a friendly and experienced team ...see the next page for details.
TimeTabler exports your completed timetable to over 40 MIS Admin systems.

Options
An easy-to-use program for analysing and organising your students' Subject Choices (Electives).
It is important to get the highest satisfaction rate for the students, to let them study the subject Choices they have chosen. This improves students' motivation, and Exam results, and it improves relations with parents. And it keeps the cost of staffing the curriculum as low as possible.

StaffCover
This well-known program is designed to help you to streamline the daily business of arranging and publishing Cover for absent staff or special events, as quickly and fairly as possible.
StaffCover links directly into *TimeTabler*, so you do not have to type in your timetable again.

The Timetabler's CookBook
This book is the definitive 'bible' on timetabling, for both new and experienced timetablers.

Help & Support
We provide a wide range of **free** Help & Support, the best timetabling support on the planet.
See : www.timetabler.com/SupportCentre/Help-and-Support-Booklet.pdf

Happy timetabling !

Chris and Keith Johnson
and the rest of the Team

October ReSolutions Ltd

www.timetabler.com

ask@timetabler.com

Help & Support for your timetabling

With *TimeTabler* we provide the most comprehensive and expert timetabling support in the world.

We support you in **12** ways:

1 There is a free **Tutorial**, with a step-by-step Tutorial Booklet, to give you a quick introduction to the general style of the program.

Visit **www.timetabler.com** and use the Menu shown to get your free copy:

2 In *TimeTabler* every screen has its own interactive **HelpScreen** (as you can see in the free Tutorial versions).
Just click on the part of the screen you want Help on.

? Help

3 We provide a range of animated **HelpMovies** (video tutorials), to explain each main screen with a guided tour.
This is good at the start, to learn it quickly, and also at the start of each new timetabling season for quick revision.

TimeTabler
Timetabling software for Schools

Free Downloads

TimeTabler Tutorial

Options Tutorial

StaffCover Tutorial

Principles & materials

4 *TimeTabler* comes with a fully-illustrated 250-page **printed Manual**. This contains a large number of **Worked Examples**, from simple 'setting' to the most complicated 'Sixth Form'.
It includes lots of timetabling Tactics, Tricks and Tips, spelt out step by step.

5 We provide a **QuickStart Guide**, with a checklist of steps that you need to take.

6 The book by Keith Johnson, Mervyn Wakefield and Chris Johnson on *"Timetabling – A Timetabler's CookBook"* is the standard 'bible' on timetabling **principles**.
It covers every aspect from A to Z.
The web-site also has some free **INSET/CPD materials** on timetabling principles.
And if you are **new** to timetabling, there is more information for you.

7 We send you a **monthly NewsLetter** to remind you of the essential tasks at each stage of the timetabling year. To receive your free copy, go to:
www.timetabler.com/signupfornewsletter/

TIMETABLING
A Timetabler's CookBook

Keith Johnson

8 You will have free access to our 24/7 **SupportCentre**.
This includes a large fully-searchable '**Knowledge Base**', where you can find answers to common timetabling problems, and you can download over 300 articles on timetabling.

Support Centre

9 We provide detailed documentation on how to **Export** your completed timetable to SIMS .net and the other Admin Systems.

10 Before you start timetabling, our *Options* software helps you to find the most efficient arrangement of 'elective' choice subjects. Simply and quickly.

**11** Above all there is the free expert **HelpLine Support**, from our team of experienced timetablers.
For New Users we provide free **Gold-Start** **Enhanced** Support & Guidance.
More details at: www.timetabler.com/gold-start

12 And if you need a training course, or if you want some on-site in-school Help, then our *TimeTabler* **Associates** can provide it.

So we provide a complete service for Timetablers. For you.
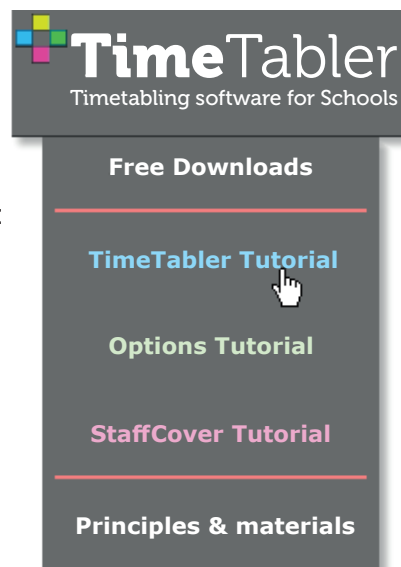
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tablet or phone

For more information and free downloads, visit   www.timetabler.com

Other booklets in the series include:

Help & Support we can provide to your school

TimeTabler Tutorial

Timetabling Primary and Prep schools

Timetabling a Special School or PRU

Solving timetable 'kickout' problems

Improving your school's Option Choices

Saving money with your timetable

Doing 'What if...?' investigations

Download these Booklets and others, free of charge,
from: https://www.timetabler.com/timetabling-ebooks/

"Everything should be made as simple as possible, but not simpler"

– Albert Einstein