## Using Student Pathways

'Pathways' is a term used when different students (in the same school Year) are offered different Choices. They have different Pathways.

There are 5 examples on the following pages.

Contents:
There are 2 main possibilities:
pages
A When some students are to be offered a different number of Choices.
See Example A on page 2.
What are the best ways to offer this in TOOLS ?
2-4
B When the Choices are to be arranged in the best Pattern in Options.
See Examples 1, 2, 3, 4 on pages 5-8.
What are the best ways to deal with these examples in Options?

## A Choosing Subjects : Student Pathways in TOOLS

## Example A

Suppose a school has 180 students in the whole Year, and 170 of them are to choose 4 Subjects (+1 Reserve), but 10 selected students are to choose just 3 Subjects (no Reserve), so that they can be given extra support.
Also, the list (range) of Subjects to be offered to those 10 is to be smaller than that shown to the rest of the Year.
(On the timetable the 10 will be in with the rest of the Year-group for the 3 subjects that they select. When the other students are studying the 4th subject, these 10 students will have extra support.
Note that the timing of this extra support will coincide with one of the Option blocks, but will be at different times, depending on their Choices.)

There are 5 possible alternative ways of dealing with this situation.
Choose the one that suits you best:
1.

You could choose to handle this situation by issuing detailed instructions to the 10 students and their parents. ie. a list of Rules for them to follow.
And then, afterwards, check their Choices carefully to make sure that they have chosen within the Rules. Counsel them as necessary.

## 2.

Alternatively, similarly, you could choose to add a Subject to the list called 'Support' or 'Extra Support' and give instructions to the 10 students and their parents that they must choose this subject as one of their 4 Choices.
Snag: among the 170 there are likely to be some parents who want their children to be removed from an option and given extra support, when their progress data doesn't show a need for it.
This would cause extra stress for your SENCO and the Options-Organiser as you discuss again, and then have to justify to the parents, why those students should not be removed from an options class.

## 3.

Or, use the 'Review \& Counsel' section of the Options software, using a member of staff (eg. the Form Tutor, or Year Tutor, or Guidance Counsellor) sitting with each of the 10 students (and parents?) in turn to discuss and enter their Choices.
This is used by many Scottish schools with all their students.
For more details of this method see Appendix 5 and Appendix 1 in the Options Handbook, and the details given by $\qquad$ Help
4.

Alternatively, you can set up TOOLS, as follows, so that the 10 students are given an entirely separate instance of TOOLS for their Choices.
You first need to set up each 'Pathway' as a different Population in Options.
Note: you need a TOOLS site for each Pathway as they will be separate populations. If we/MIST are hosting TOOLS for you, and you have not requested enough sites to handle this, please see www.mistservices.co.uk/timetabling/tools/ to arrange the additional site(s).

Set up each Population as usual, ensuring that the correct rules are applied to the correct Population and that you import the correct students into each Population / Pathway.
In this 'Example A', one Population, of 170 students, will have 4 Choices +1 Reserve, as shown here:
(while the other Population of 10 students has just 3 Choices).


Taking each Population in turn, export from Options the files for importing into (the separate instances of) TOOLS, via Export
At the same time Export the Subjects that this Population can choose from:

Q Export Students

Export Subjects

Then import each file into the relevant (separate) instance of TOOLS.
For more details see pages 2-3 in: www.timetabler.com/PDFs/TOOLS-Manual.pdf
The students (parents) can then make their Choices, with each Population accessing a different instance of TOOLS, with the main population of 170 being allowed 4 Choices (+1 Reserve) ... and the other 10 students allowed only 3 Choices (in this example).

After all have finished making their Choices,

- export the results from each instance of

10 Export the Students' Choices to a file needed by $\boldsymbol{T r}$-Options TOOLS,
and then

- Import the relevant file into the correct Population in Options, $\rightarrow$ Import Student Choices from TOOLS as described in Step 8 (page 14) of that document.

At this point you will still have two separate Populations containing student Choices.
You can then:

- either continue to handle the students' Choices as separate Populations,
- or, better, combine them back into one Population.

To combine the students and their Choices so that they are all in one Population:
First ensure that the 'whole year group' Population ('Pop1') has all of the subjects from your other Population / Pathway ('Pop2') before you transfer the students.
Export the students and their choices from Pop2: Go to the 'Students \& Choices' screen, click on: Print ${ }^{n+4}$ Export students \& choices and save the file that has been created.
Then import the students and their Choices into Pop1: Go to the Students \& Choices screen, click on the 'Import Students' button, choose method 2, locate the file you have just saved and follow the on-screen instructions.

Then continue using Options as shown in your Handbook, using AutoCreate etc, with all your students now in one Population.

## 5.

Alternatively，you can keep all of the students in the same Population but set up TOOLS so that the 10 students are given a separate TOOLS site for their Choices（similar to 4 above）．

Note：you need a TOOLS site for each Pathway as they will be separate．If we／MIST are hosting TOOLS for you，and you have not requested enough sites to handle this，please see www．mistservices．co．uk／timetabling／tools／to arrange the additional site（s）．

Student Pathways
In Options，on the Design a Pattern Screen，at Rules Define Pathways Assign Students the Pathways button，specify 2 Pathways（we＇ll call them＂P1＂and＂P2＂）， and then on the Assign Students tab，put the students into the relevant Pathway：in this example 170 students into P1（use the＇Global＇button） and the 10 students into P2：

1．For the $\mathbf{1 7 0}$ students in Pathway P1（eg． 4 Choices，+1 Reserve）：
Ensure that the Populations Screen it is showing the correct number of Choices（and Reserves） for this Pathway．At Export TOOLS Export Students Multiple Pathways，Multiple Pathways export some ．txt files to a folder． Pathway－1
In this example there will be 3 files，as shown here：

埥 TOOLS＿Stud＿PO＿None．txt
䦩 TOOLS＿Stud＿P1＿．txt
閏 TOOLS＿Stud＿P2＿．txt

Pathway－1
TOOLS＿Stud＿P1＿txt
but you only need to keep one ．txt file，the relevant one，for Pathway P1：


Then start your 1st copy of TOOLS，as described in www．timetabler．com／PDFs／TOOLS－Manual．pdf
Load in your Students and Subjects as described in Step 5，sections 4， 5 （p．5）of that document． Allow these 170 students／parents to make their Choices in the usual way．

After all have finished，export the results from that copy of TOOLS，and then
－on the Populations Screen in Options，ensure it is set to the maximum total of both Pathways （ie． $4+1$ Reserve in this Example A）．Then：
－import that file（from TOOLS）into Options，as described in Step 8 （page 14）of that document．
2．For the 10 students in Pathway P2（eg． 3 Choices，no Reserve）：
Now do similarly for this Pathway．ie．follow the same steps as above， they are marked by the blue bar in the left－hand margin．

This includes changing to just 3 Choices for P2 in this Example A．
Pathway－2
Then Export as above，but this time retain just the P2 ．txt file：
Load that file into your 2nd copy of TOOLS．
Note：If the ten Pathway－2 students are to be offered fewer subjects，then in TOOLS，on the Tick Subjects Screen（shown in section 6，page 6 of that same TOOLS document），tick only the subjects that they are to be offered．Test it，as described on page 11 of that document．

Students \＆Choices
When you have completed all this，and ALL the data are back in Options， the Students \＆Choices Screen will show something like：
Here Patrick Horne was in Pathway P2 and has been offered only 3 Choices．

| $\|c\| c\|c\|$ |  |  |  |
| :--- | :--- | :--- | :--- |
| Students in Class 9C（26） |  |  |  |
| Surname | Forename | Sex | Ch |
| Farnell | Ross $[$ P1］ | M | 4 |
| Healey | Sarah $[\mathrm{P} 1]$ | F | 4 |
| Horne | Patrick $[\mathrm{P} 2]$ | M | 3 |
| Howarth | Laura $[\mathrm{P} 1]$ | F | 4 |

You can now use Options in the usual way，eg．use AutoCreate，as explained in the Handbook．

## B. Finding a Pattern : Student Pathways in Options

In Options, on the Design a Pattern Screen, by clicking on the Rules button you can see a list of 7 possible Rules you can apply (in the drop-down box).

Rule 7 refers to: Use student Pathways.
For example,

- some students are on a 'Blue' Pathway (with choices from one set of subjects), and
- other students are on a 'Green’ Pathway (with choices from a different list of subjects).

Think carefully whether you need to use this Pathways Rule at all.
Just because you have 'Pathways' in your school does NOT mean that you need to use this Rule. In some cases it would lead to a poorer pattern!

You are unlikely to need this Pathways Rule except in the case where you have minority subject(s) that you want to offer in a common Block that spans 2 or more Pathways of students.

Consider these two criteria before deciding whether to use this Rule:

## Criterion 1

You have a Block which spans across 2 (or more) pathways. eg. it has both 'Blue' and 'Green' students in it.

## Criterion 2

You have other Blocks that apply to a single Pathway.
eg. some Blocks offered to 'Blue' students but not 'Green' students, and vice-versa.
You should use this Pathways Rule only if both criteria apply.
Some examples are shown on the next pages.

Notes that apply to all the examples:
1.

As with all the 7 Rules, it is best to also do a run with the Rule(s) suspended. That way you can see how much the restrictive effect of the Rules is affecting the solution, and you can decide whether all your Rules are really necessary.

If you Suspend this Pathways Rule then you may also have to reduce the number of specified Blocks to be the same as the actual number of Choices that the students make.
2.

If you are sure that you want a minority subject to be in the Spanning column (eg. Music in Column A in Example 1) then you can start by placing it there, ie. 'Seed' it.
See also the section on 'Seeding Auto-Create' in the Options Handbook (page 34).
3.

The first two examples have just 2 Pathways ('Blue’, 'Green’) but you can have up to 10 Pathways in any scheme.
4.

If there is no Block spanning 2 or more Pathways then don't use this Pathways Rule, just use separate Populations. ie. a separate Population for each Pathway of students. See Example 3.
5.

Separate Populations may also be needed if you are using TOOLS, so that when students/parents are on-line they see only their own set of subjects, see page 2.

## Example 1

This school has 2 Pathways (called Blue and Green) in Year 10.
Each student is either in Blue or in Green, and each chooses 3 Subjects.
The Blue students can choose from a list of largely 'academic' subjects.
The Green students can choose from a different list, of largely 'vocational' subjects.
But some (minority) subjects appear in both lists. For example, Music is on both lists, because unless it is offered to both Blue and Green students it doesn't usually recruit enough students to be viable.

Schematically:

P1 Blue Pathway:

P2 Green Pathway:


Any subject can be in the common/spanning column A, but Blue subjects can only be in Blocks B and C, while Green subjects can only be in Blocks D and E .

To ask Options to find a solution for this,

- go to the Design a Pattern Screen, click on the Rules button,
- select Rule 7: 'Use Student Pathways',
- click on 'Define the Pathways', set the number of Pathways =2,
- set the number of Blocks =5 (Note: five blocks are required for this example, see below)
- then click on the Grid on the screen to make the pattern shown below.

Think of the pattern shown above as being:


- Click on the Assign Students tab, and then click in the columns to allocate each student to the correct Pathway (P1 or P2) : Use 'Globally move students' to allocate them in bulk.
- Having set-up the Pathways Rule, now use Auto-Create

| Pathway: |  | P1 | P2 |
| :--- | :---: | :---: | :---: |
| Total students: |  | 46 | 55 |
| 9C Farnell, Ross (M) |  | 1 |  |
| 9C Healey, Sarah (F) |  |  | 2 |
| 9C Horne, Patrick (M) |  |  | 2 |
| 9C Howarth, Laura (F) |  | 1 |  |
| Rn U.urnt noul (LI) |  |  |  | in the usual way.

When you come to schedule these blocks on the timetable, then you can schedule them as:

or as:

|  | B | C |
| :--- | :--- | :--- |
| A | + | + |
|  | $E$ | $D$ |

## Example 2

If there are 2 Blocks spanning the Pathways, or if there are 3 (or more) Pathways, the principle is the same. Schematically:

|  | 10A | 10B | 10 C | 10D |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { blue } \\ \text { subjects } \\ \text { only } \end{gathered}$ | $\begin{gathered} \text { blue } \\ \text { subects } \\ \text { sonly } \end{gathered}$ |
| P2 Green Pathway: |  |  | 10E | 10F |
|  |  |  | $\begin{gathered} \text { green } \\ \text { subiects } \\ \text { only } \end{gathered}$ | $\begin{gathered} \text { green } \\ \text { subjects } \\ \text { only } \end{gathered}$ |
|  |  |  | 10G | 10 H |
| P3 Red Pathway: |  |  | $\begin{gathered} \text { red } \\ \text { subjects } \\ \text { only } \end{gathered}$ | $\begin{gathered} \text { red } \\ \text { subjects } \\ \text { only } \end{gathered}$ |

Any subject can be in the common/spanning columns $\mathrm{A}, \mathrm{B}$ but Blue subjects can only be in Blocks C and D,
while Green subjects can only be in Blocks E and F,
while Red subjects can only be in Blocks G and H .

And so it looks like this on the Pathways Screen:

| Pathway | Block A | Block B | Block C | Block D | Block E | Block F | Block G | Block H |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P1 | Blue | Yes | Yes | Yes | Yes | No | No | No |
| P2 | Green | Yes | Yes | No | No | Yes | Yes | No |
| P3 | Red | Yes | Yes | No | No | No | No | Yes |

Having set-up the Pathways Rule, now use Auto-Create in the usual way.

## Example 3

This school has 3 option Blocks. The students choose 3 Subjects but because the students are in 4 Pathways the choices for each Pathway are different:

| P1 | Pathway 1 | These students choose 3 GCSE subjects. |
| :--- | :--- | :--- |
| P2 | Pathway 2 | These students choose 2 GCSE subjects + 1 BTEC subject. |
| P3 | Pathway 3 | These students choose 1 GCSE subject + 2 BTEC subjects. |
| P4 | Pathway 4 | These students choose 3 BTEC subjects. |

Although this school has Pathways, it should NOT use the Pathways Rule.
The reason : there is no option Block spanning 2 or more pathways [see criterion 1 on page 1].
The best way to get a solution is to enter the students' Choices as usual, as described in the Options Handbook. Then use Auto-Create without using the Pathway Rule.
The solution will have some GCSE and some BTEC subjects in each of the 3 Blocks.

## Example 4

This school has option Blocks in both Year 10 and Year 11, for 2-year GCSE courses starting in Year 10. Students choose 3 subjects (typically in popular subjects) and study them for 2 years.

In addition it also has one option Block that contains both Year 10 and Year 11 students that are doing 1-year GCSE courses. ie. this is a Block that spans both Year 10 + Year 11.
Typically it contains minority subjects that may not be viable if only offered to Year 10 or Year 11 alone. Students choose 1 subject to study while in Year 10; and then choose another 1-year course to study in Year 11.
Schematically it looks rather like Example 1 (though in fact it is not the same):

P1 Year 10 Pathway:

P2 Year 11 Pathway:


One-year courses will be in the common/spanning Column A.
Year 10 two-year subjects will only be in Blocks B, C and D, while Year 11 two-year subjects will only be in Blocks E, F and G.

To solve this in Options, in the Population for Year 10, include:

- The Year 10 students with their 4 Choices [one 1-year course and three 2-year courses], and
- The Year 11 students with their single Choice for the new 1-year course to study in Year 11. Enter these Year 11 students like: Smith, John, Latin, free, free, free
Then 'seed' all the 1-year subjects into Block A (see the Handbook for more details).
Then there are 3 ways forward.

1. Use Options in the usual way (without using the Pathways Rule) by using Auto-Create.
or
2. You could set up Pathways as in Example 1, and as shown below:

Think of the pattern shown above as being:


On the Assign Students tab, put Year 10 students in P1 and Year 11 students in P2.
3. Either of those methods will show you the total number of students in the teaching groups in the joint Block A, and allow you to manipulate them. An alternative is to do Year 10 and Year 11 entirely separately, and just add the numbers manually to get the group sizes for Block A.

