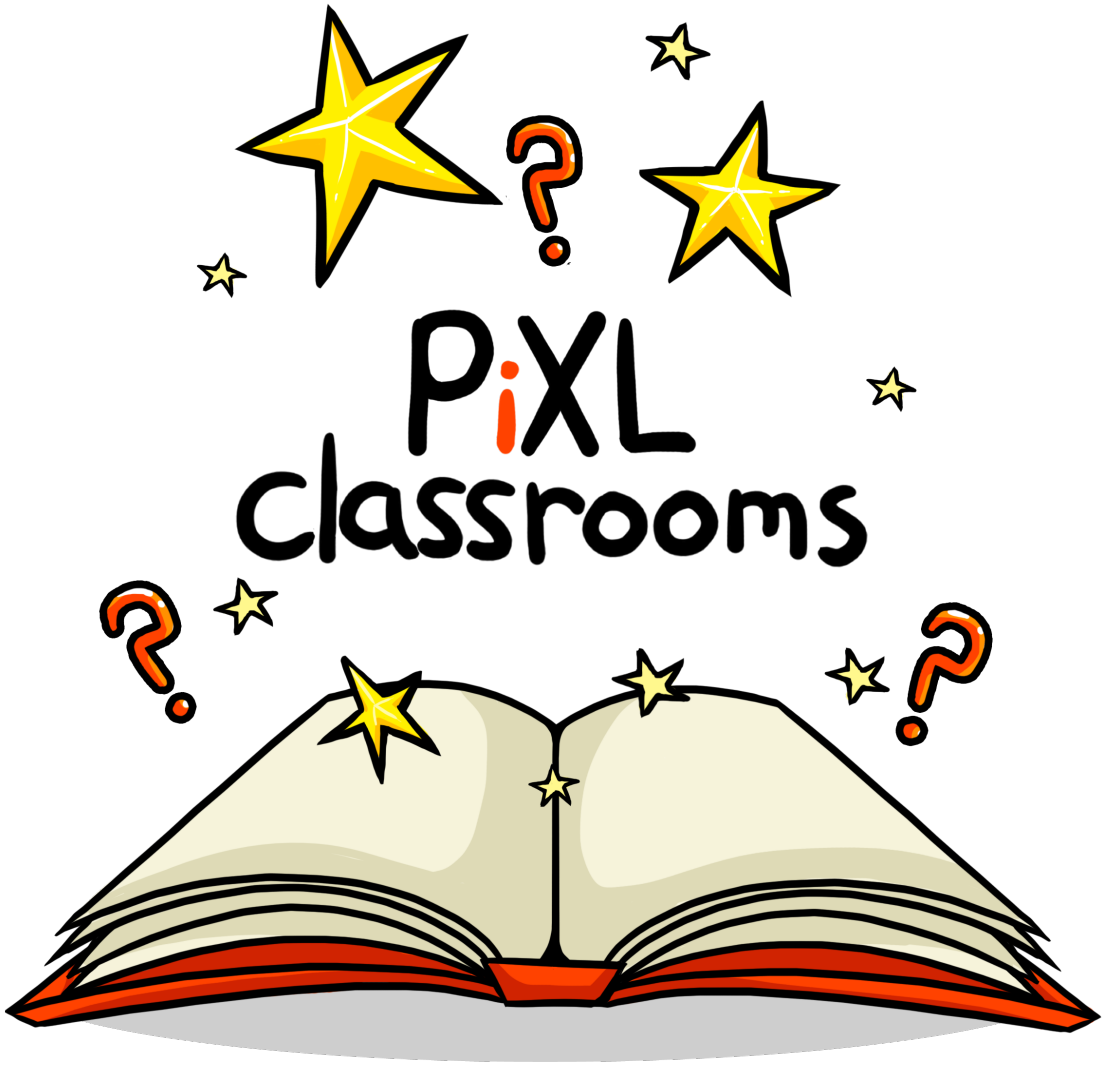


The Guide To The PiXL Classrooms App

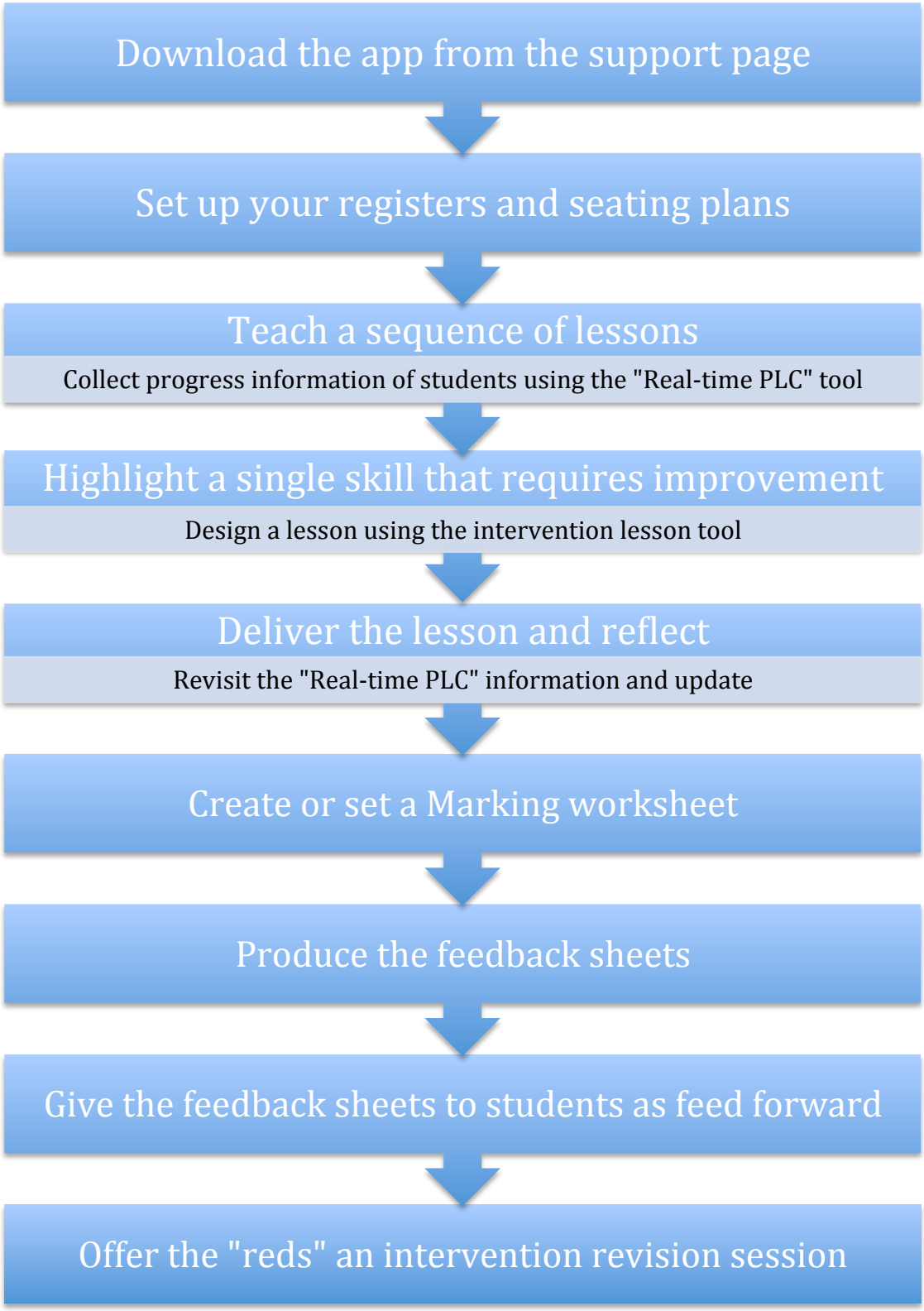
Guide to the PiXL Classrooms App

What is it?

The PiXL Classrooms App is your intervention assessment tool. Having identified a PLC element that students have struggled with over a sequence of lessons, you will then deliver your PiXL Classrooms lesson to ensure that all students have made progress within that single element. The tool allows you to monitor the work of students before, during and after the classrooms lesson. In order to prepare for the classrooms lesson, the app will suggest heavily differentiated resources or at least give you the tools to be able to create them where they don't exist or where you want to create your own lesson. As a follow up, the app will allow you to effectively track progress with the single element and provide the means for students to reflect on how well they have done.

Guide to the PiXL Classrooms App

Work flow of the PiXL Classrooms app initiative



Guide to the PiXL Classrooms App

How do you access the app?

All links to the available versions of the app can be found on the apps main support page:

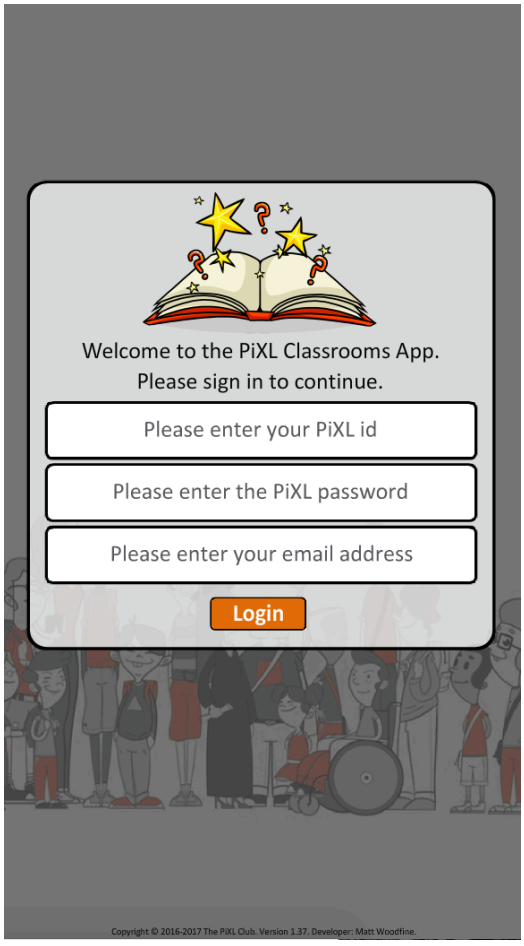
https://classrooms.pixl.org.uk

From here you will be able to download the most relevant version of the software that will work on your device or computer:

i) Desktop website – Flash player required
ii) Apple App Store – App for iPod, iPhone and iPad
iii) Google Play Store – App for all Android devices running Android 4.2 and above

How do you login?

To access the app, you need to be a PiXL Schools member with an active membership to the PiXL Classrooms program. You will need a PiXL id, PiXL password (the 2 same pieces of information that are required when accessing the main PiXL website) and an email address.



When accessing the app for the first time, you will need to verify your email address. An email will be automatically sent to your selected email address (can take up to 5 mins to arrive and please check your spam/junk folder too) where you will need to click on the link within the email to activate your account. Once your account has been activated, you will be able to login using your PiXL id, PiXL password and your email address. If you are using a mobile/tablet device, this information will be stored on the device for your convenience.

After you have logged in you will need to make your subject and class selections.

Guide to the PiXL Classrooms App

Navigating the banner menu

Figure 1

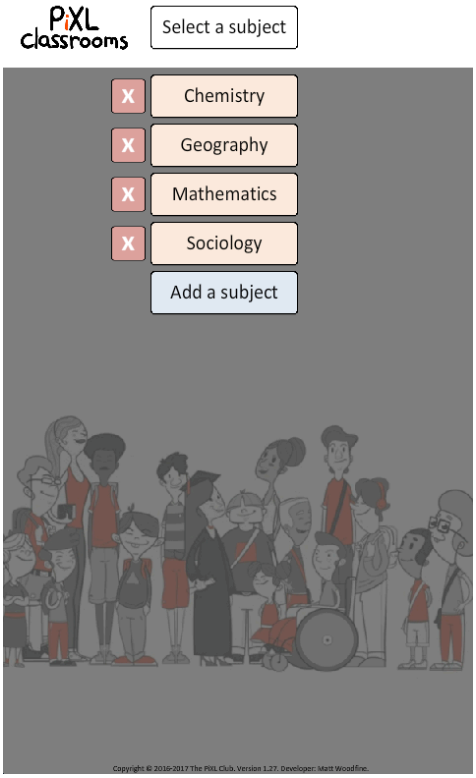


Figure 2

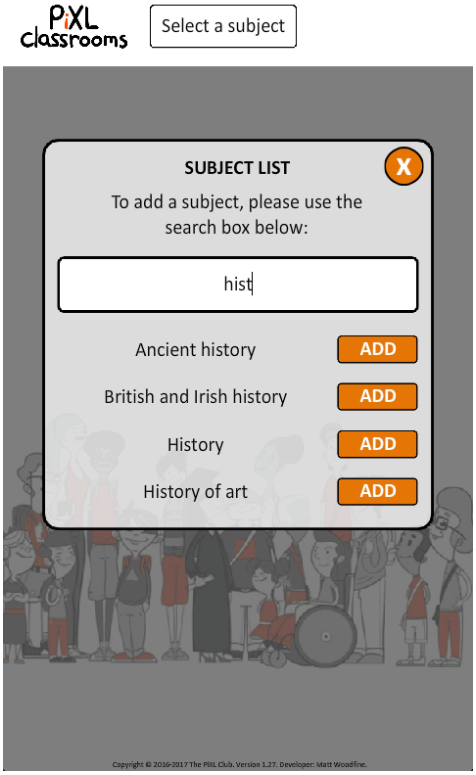


Figure 3

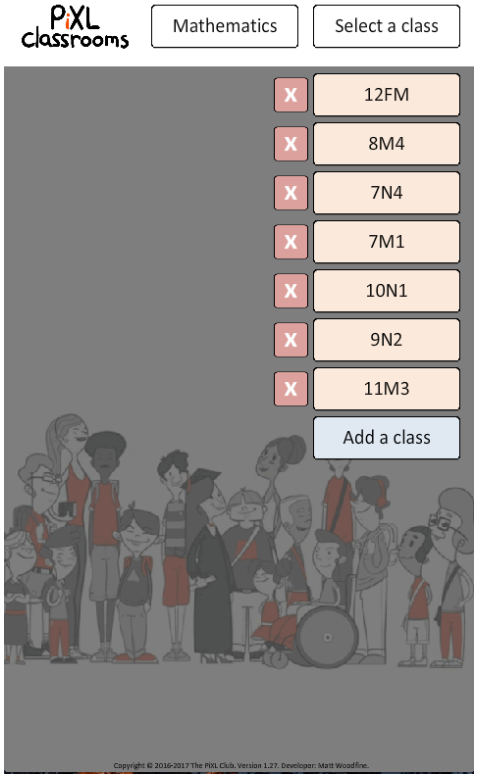


Figure 4

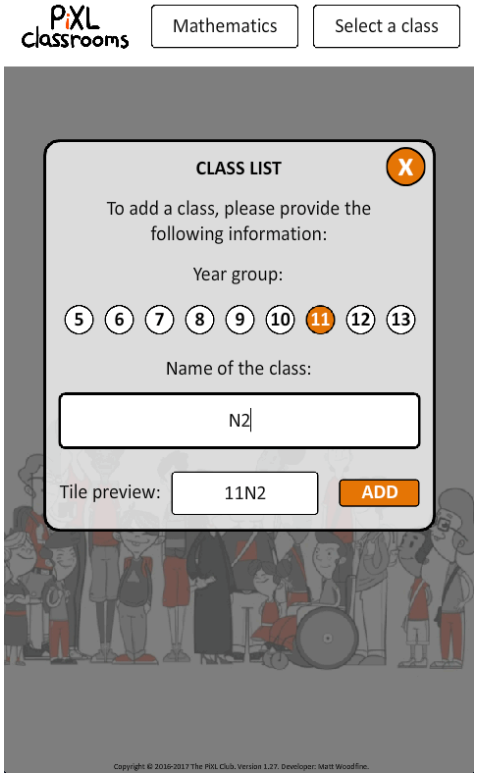


Figure 1 explained:
A list of all active subjects within your account will drop down. Select your subject or click on "Add a subject" (see Figure 2 explanation).
If you want to delete a subject that you have added to the list, select "X" alongside the name. A personal password will be required, as this will remove all data from the system for the chosen subject. If this is the first time you have used the app and the password creator prompt is shown, please add a personal password (numeric pin) and be sure to keep the password safe.

Figure 2 explained:
Having selected "Add a subject", the search box in Figure 2 will be shown. Begin typing your subject name in and the options will be shown. Select "ADD" alongside a subject name and it will be added to the subject list in Figure 1. Select the "X" button to close the menu.

Figure 3 explained:
After a subject has been chosen, a list of all active classes within your account will drop down. Select your class or click on "Add a class" (see Figure 4 explanation).
If you want to delete a class that you have added to the list, select "X" alongside the name. A personal password will be required, as this will remove all data from the system for that chosen class. If this is the first time you have used the app and the password creator prompt is shown, please add a personal password (numeric pin) and be sure to keep the password safe.

Figure 4 explained:
Having selected "Add a class", the search box in Figure 4 will be shown. Select the year group and add the register code for your class name in the text box. Your chosen options will be previewed at the bottom of the screen. Select "ADD" and it will be added to the class list in Figure 3. Select the "X" button to close the menu.

Upon selecting both a subject and a class, you will be taken to the main menu shown here on the right. From here you will then be able to access all of the key features of the app explained on the following pages:

Guide to the PiXL Classrooms App

My initial setup - Create/edit class registers

Before seeing or editing the register for your chosen class, you will need to enter in your personal pin (Figure 5). If this is the first time that you have been into the registers, it may require you to create the pin for future use within the app. If you have already entered the pin earlier in the app, the password will be self populated for ease of use.

Figure 5

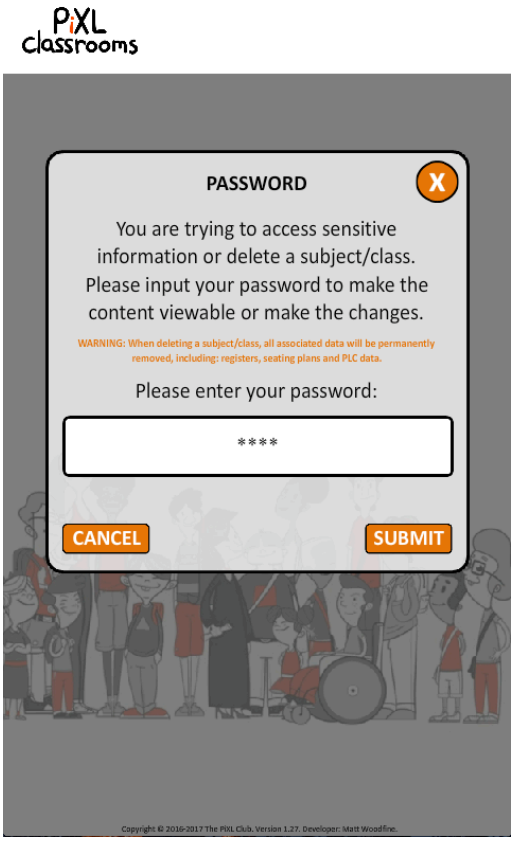
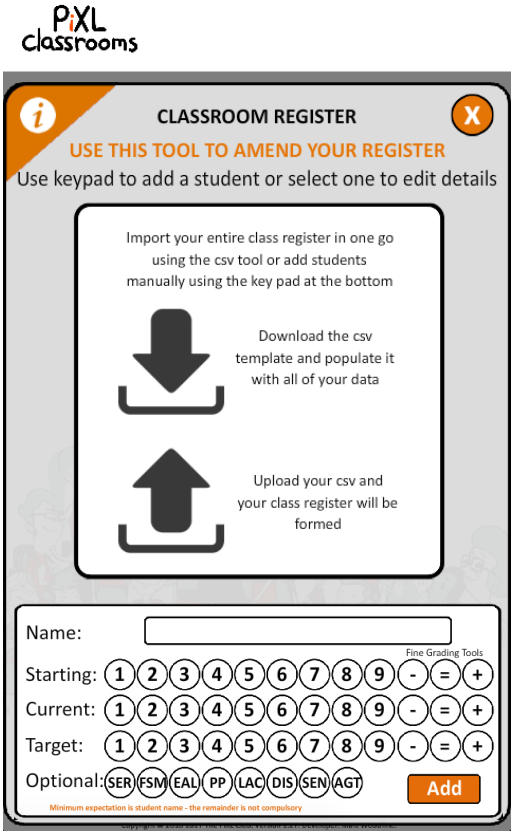


Figure 6



There are 2 main ways of entering students into the app:

i) CSV (Comma separated values – i.e. type of excel spreadsheet) upload (only available via the desktop Flash app).
ii) Key pad at the bottom of the register screen (all platforms).

Instructions for completing the CSV upload successfully are available within the downloaded document.

Both forms of entry require the same thing; names (as a bare minimum of adding students to the app), starting data, current data, target data and student metadata (all information about a student will maximise the seating plan functionality in the next section).

Guide to the PiXL Classrooms App

If you are adding students to the app via the key pad, enter in their name (one at a time) making all relevant selections before then selecting "Add". The student will then appear in the register (example shown in Figure 7).

Figure 7

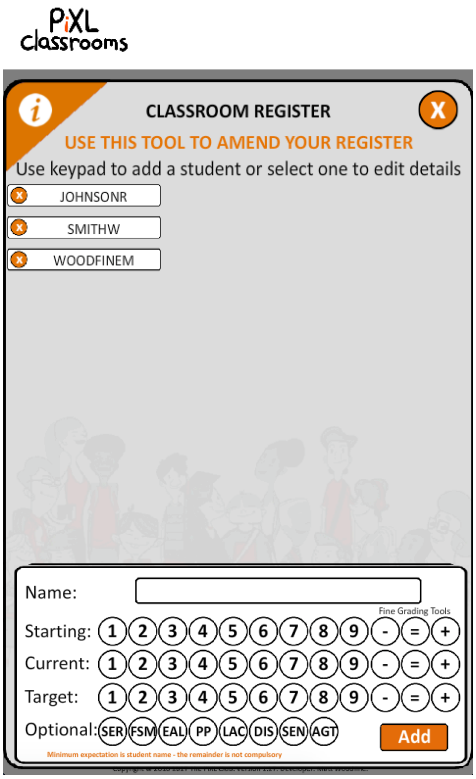
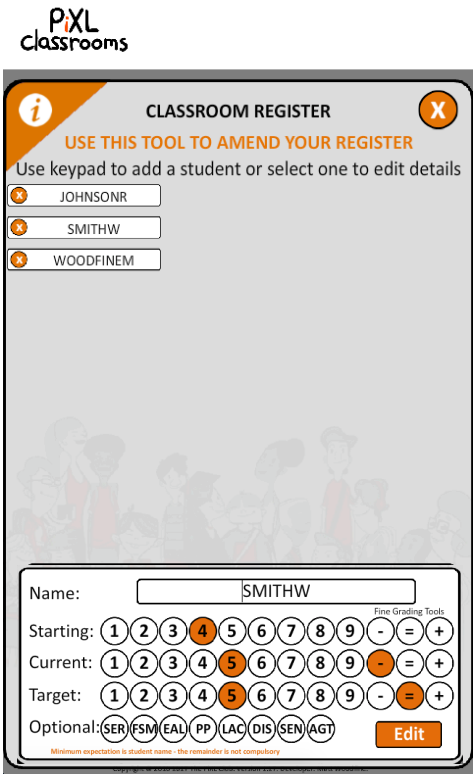


Figure 8



To edit the information, select a students name and the information will be shown in the key pad (example shown in Figure 8). Make the changes and then select "Edit".

To remove a student from the list, select the "X" alongside their name and the student will be instantly removed from the class register (including all other information stored within the app).

Create/edit seating plans

Figure 9

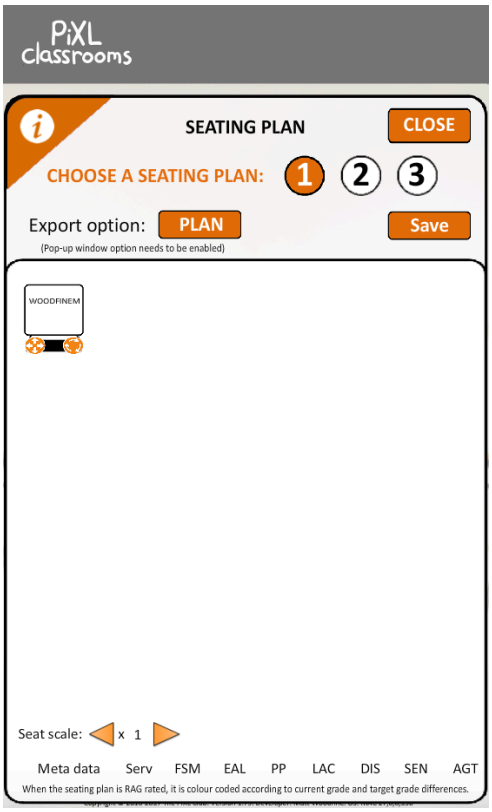
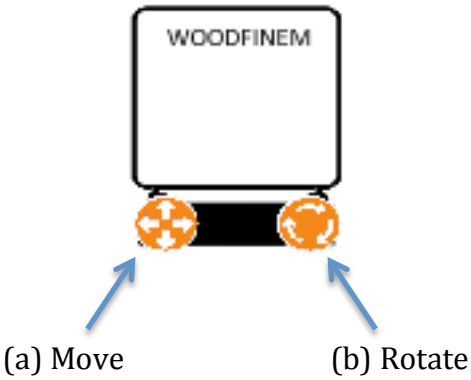


Figure 10



When setting up your seating plan for the first time, all students will appear stacked up (Figure 9). You will need to move each student to a position using tool (a), marked in Figure 10. This tool works as a drag and drop. If a different seat orientation is required, use tool (b) to rotate the seat. This tool works by dragging the tool in a circular motion or by tapping to rotate 90 degrees.

This information will be stored under seating plan 1. If you want to design a different seating plan you can create up to 3 seating plans within the app by selecting plan 1, 2 or 3.

At the bottom of the screen, you have several highlighting tools and a scale tool. The scale tool enables you to enlarge your seating plan depending on your seating orientation. With regards to the other buttons, by selecting any of the highlighter tools (pin required), you will then be able to see the relevant information shown on the seating plan that has been pulled from the metadata that was uploaded when creating the register.

Figure 11 shows the differences between current data and target data.

Figure 12 shows the students in the class who are FSM.

Having the ability to show the metadata on the seating plan enables you to then create a plan that best supports the learning of all students prior to collecting assessment data about individual PLC elements.

Figure 11

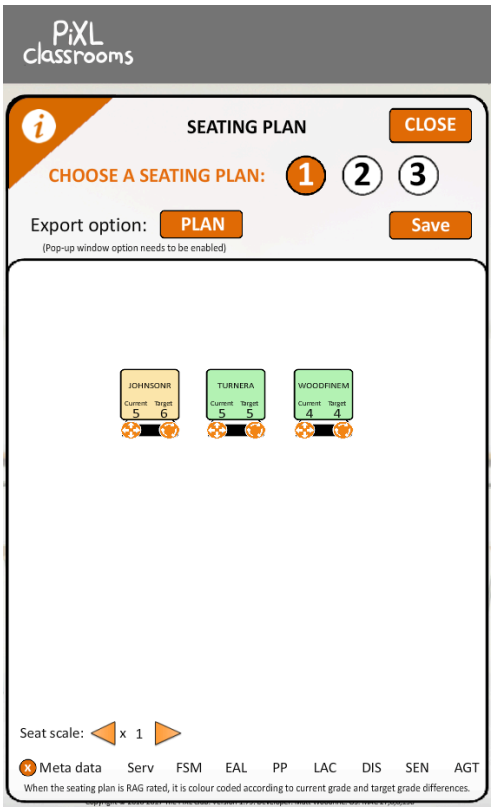
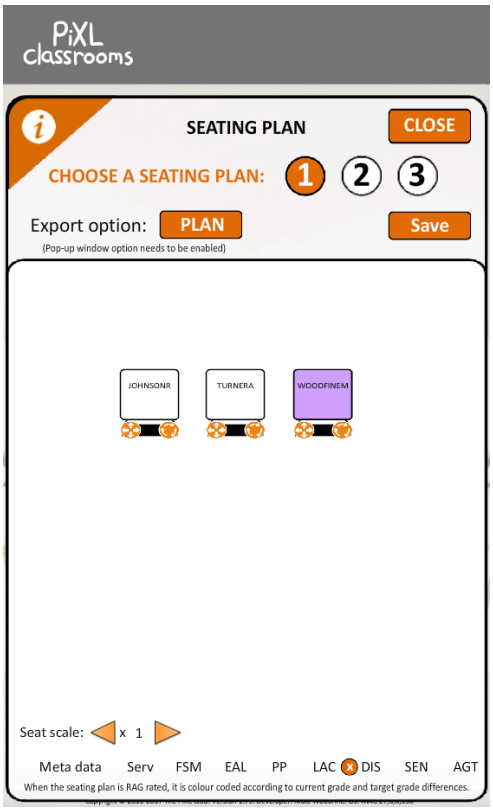


Figure 12



It is possible to export the seating plan as a pdf. Select “Plan” next to the export options and your plan will be converted into a pdf. The pdf will comprise of any information (metadata included) that is currently showing on your screen. If you want a blank seating plan, you will need to deselect all of the options at the bottom of the screen.

Be sure to click “Save” when you have completed the seating plan.

Entering data into the Real-time PLC

The Real-time PLC is your tool for entering RAG rated information about each student for individual PLC elements on a regular basis. When you first access the tool, you will need to identify the PLC element that you are currently teaching using the search tools shown in Figure 13 and 14. As soon as you begin typing, the built in PLC elements will be shown. If your element doesn't exist, you can create it by typing in the full element name. Select "Add" alongside the one you want to focus on. Alternatively to focus or edit the information stored about your students with a specific PLC, you can select the worms shown in Figure 13.

Figure 13

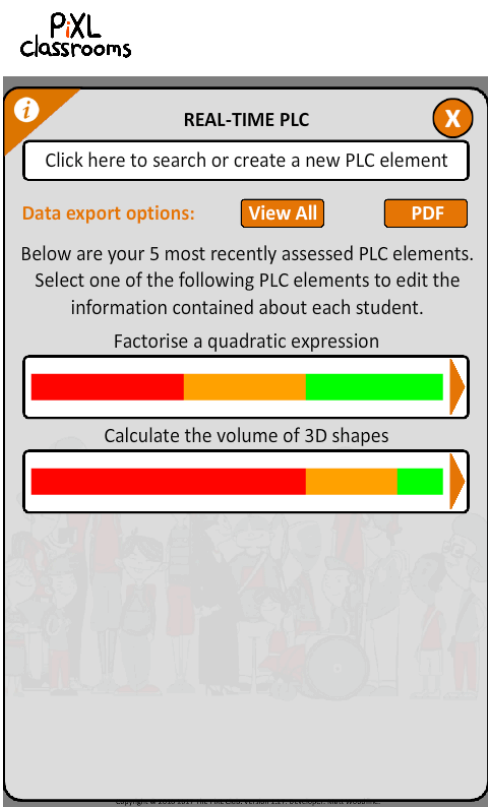
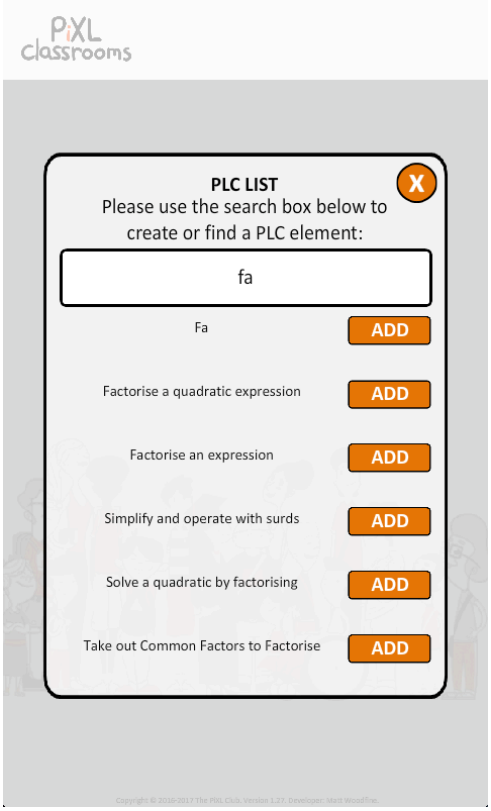


Figure 14



Once you have made your selection, your seating plan for that chosen PLC element will now be shown (Figure 15). By selecting each seat, you can then cycle through red, amber or green for each student to show their strength with the topic area, where:

i) Red – insecure
ii) Amber – on the fence
iii) Green – secure

You are also able to make changes to your seating plan too.

Figure 15

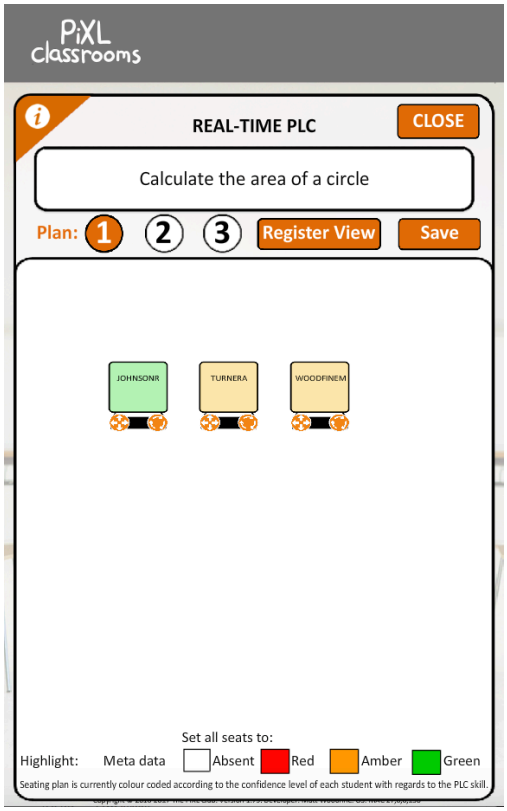


Figure 16

Name	Class	Calculate the area o...	Calculate the area o...
JOHNSONR	11N1	A	G
SMITHW	11N1	R	A
WOODFINEM	11N1	?	G

Figure 17

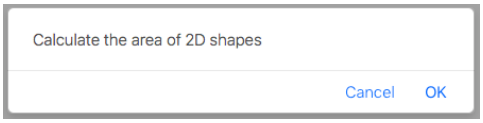
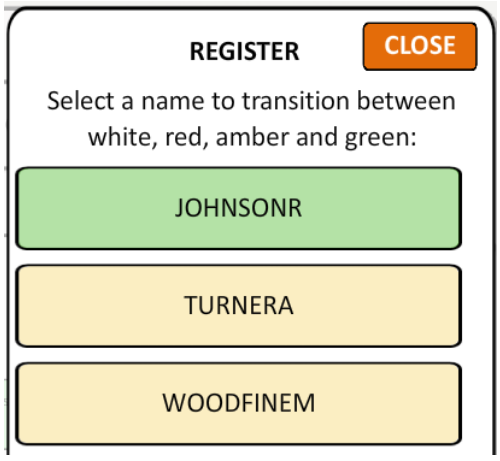


Figure 18



If the seating arrangement is too small due to how you have scaled the seating plan, there is another way of entering in the assessment data. By selecting the "Register view", a list of all students will be shown. This register then has the same functionality as the seating plan. An example is shown in Figure 18.

Over time as you collect more information for various PLC elements, the information is collated into a covey board (pictured in Figure 16) or exported into a pdf file (that includes a summary page for staff and individual student sheets) using the buttons in Figure 13. When viewing the Covey Board website (Figure 16), by selecting any one of the cells (or by hovering over them on a desktop computer), the name of the PLC element being assessed in that column will pop up (shown in Figure 17). The information shows strengths and weaknesses across the whole class over time and more importantly, feeds into the intervention lesson builder.

How do you create a PiXL Classrooms intervention lesson?

When selecting the "Find/Create Your Intervention lesson" option from the main menu, to design an intervention lesson you will need to select the second option from Figure 18 or you download the top 10 resources from the top option.

Figure 18

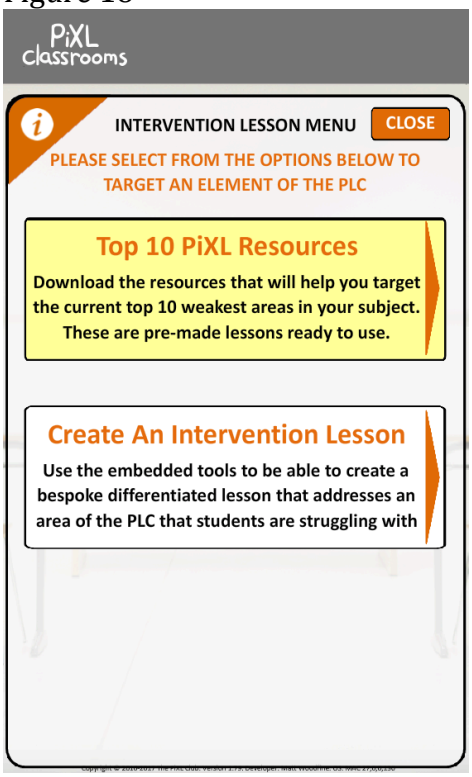


Figure 19

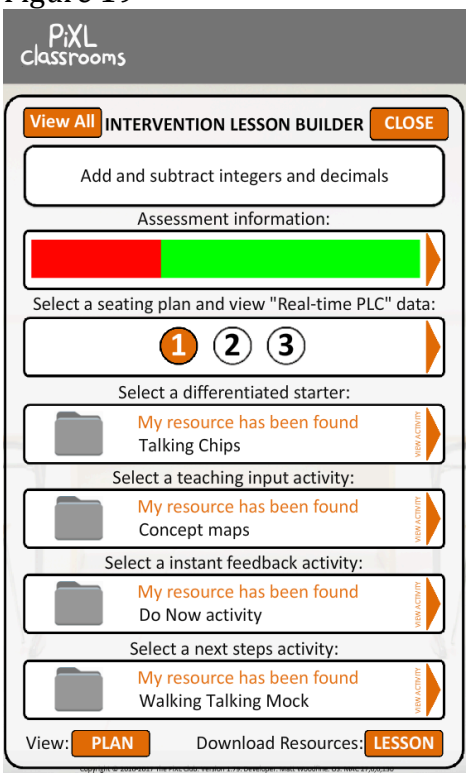


Figure 20

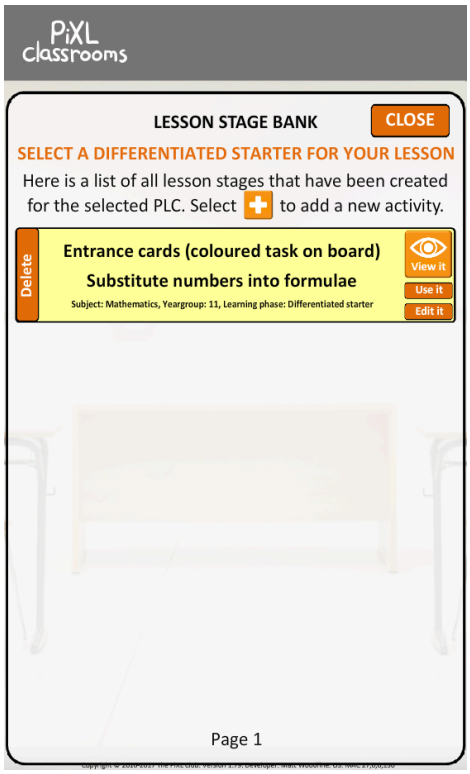
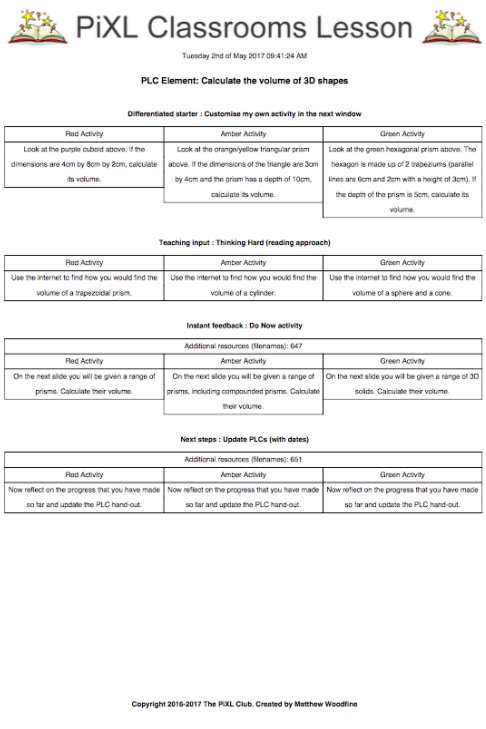


Figure 21


PiXL Classrooms Lesson

Tuesday 2nd of May 2017 09:41:24 AM

PLC Element: Calculate the volume of 3D shapes

Differentiated starter : Customise my own activity in the next window

Red Activity	Amber Activity	Green Activity
Look at the purple cuboid above. If the dimensions are 4cm by 8cm by 2cm, calculate its volume.	Look at the orange/yellow triangular prism above. If the dimensions of the triangle are 3cm by 4cm and the prism has a depth of 10cm, calculate its volume.	Look at the green hexagonal prism above. The hexagon is made up of 2 trapeziums (parallel lines are 6cm and 2cm with a height of 3cm). If the depth of the prism is 5cm, calculate its volume.

Teaching input : Thinking Hard (reading approach)

Red Activity	Amber Activity	Green Activity
Use the internet to find how you would find the volume of a trapezoidal prism.	Use the internet to find how you would find the volume of a cylinder.	Use the internet to find how you would find the volume of a sphere and a cone.

Instant feedback : Do Now activity

Additional resources (filenames): 647		
Red Activity	Amber Activity	Green Activity
On the next slide you will be given a range of prisms. Calculate their volume.	On the next slide you will be given a range of prisms, including compounded prisms. Calculate their volume.	On the next slide you will be given a range of 3D solids. Calculate their volume.

Next steps : Update PLCs (with dates)

Additional resources (filenames): 651		
Red Activity	Amber Activity	Green Activity
Now reflect on the progress that you have made so far and update the PLC hand-out.	Now reflect on the progress that you have made so far and update the PLC hand-out.	Now reflect on the progress that you have made so far and update the PLC hand-out.

After selecting a PLC element, if the information for that PLC element has been entered into the Real-time PLC, the information and the resources (if they exist) for that element are pulled through (Figure 19).

The Real-time PLC information is now represented as a worm indicating the proportion of red, amber or green students. If you select the worm, it will show you the names of red, amber and green students.

If you select the seating plan option (1, 2 or 3), the Real-time PLC information will be shown on the selected seating plan. By selecting 1, 2 or 3 on the option screen that appears, it will change the seating plan that is attached to the lesson. Once you have made any amendments that are necessary, you can select the "X" at the top and the change will happen in the menu of Figure 19.

All suggested resources will be displayed for the 4 different phases of the lesson (differentiated starter, teaching input, instant feedback and next steps). The phases will be categorised in two ways: "PiXL recommended resource" (a moderated resource by a PiXL team member), "My resource has been found" (one that you or someone from the same school has created) or "No recommended resources found". If you want to view a particular lesson activity, you can select it and it will guide you to a list of all available resources for that specific lesson stage (Figure 20). If you click the eye symbol, it will take you to a screen similar to the one where you can design a phase (Figure 22 to 24) and you will be able to look at the activities in that phase, or you can select "Use it" and it will transfer/swap that activity to your lesson for the selected phase.

The lesson can be exported in 2 formats:

i) Lesson plan (shown in Figure 21). The lesson is exported as a pdf so is easily printable. On page 1, all of the available key activities that a red, amber or green student would do for each phase will be displayed (outlined when you or a colleague has created a phase). On page 2, the lesson plan outlines the key information about who is red, amber or green and also the seating plan with the PLC data for that specific element is displayed.

ii) A zip file with all resources for your lesson in one folder. Within the folder are sub folders for each learning phase of the lesson with all resources for that phase packaged up.

How do you create individual lesson activities?

When viewing the alternative lesson stages from Figure 20, to add a lesson stage you will need to select the + option.

Figure 22

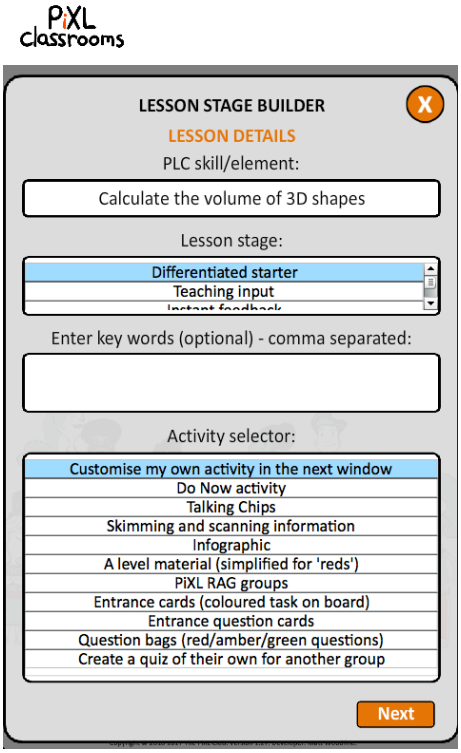


Figure 24 (desktop only)

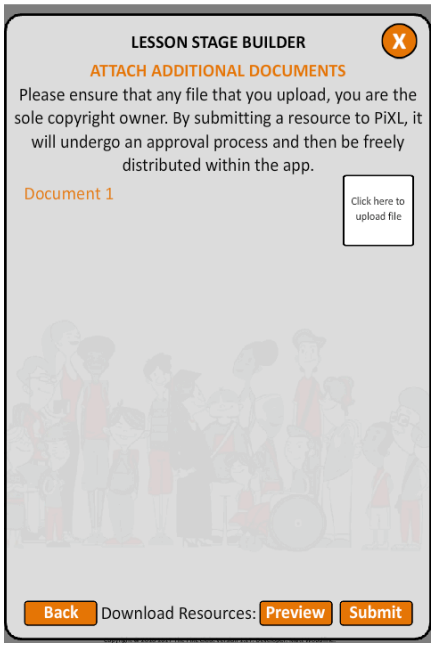


Figure 23

In Figure 22, the PLC element that you are currently working on will be shown in the header. The PLC element and key words will help the resource to be found in the PLC search menu by others when designing their own intervention lessons. At the bottom, you can select from some of the templates that will keep your lesson PowerPoint engaging. This is where the process begins to design a front lesson slide for this specific activity that will be automatically generated (Figure 23). With the front slide, you need to specify what the red, amber and green students are going to do during this activity. This information will also be available on the lesson plan (Figure 21). If you would like students to refer to text and you don't want to upload it as a handout in Figure 24, you can select "Customise my own activity in the next window" in Figure 22 and a central instruction window will then appear (in the space at the bottom of figure 23). If you select "Preview" in Figure 24, it will download a zip otherwise click "Submit".

How do you view/edit the PLC element activities that you have created?

When designing your intervention lesson, you will need to select a phase for each activity. Selecting the starter, teaching input, instant feedback or next steps buttons from Figure 19, a list of all existing phases will then appear (Figure 20). For any phases that you have created that haven't yet been verified, you will still have control over the resource. A "Delete" button and "Edit it" button will be available if this is still your resource. Selecting "Edit it" and you will be taken to a screen like Figure 22 where you first designed the phase except all information will be pre-populated with the lesson details. You can make any changes necessary and save in stage 3 of the upload. By selecting "Delete", the resource will be immediately removed from the app and removed by the review queue.

How do you view existing Marking templates?

Figure 26

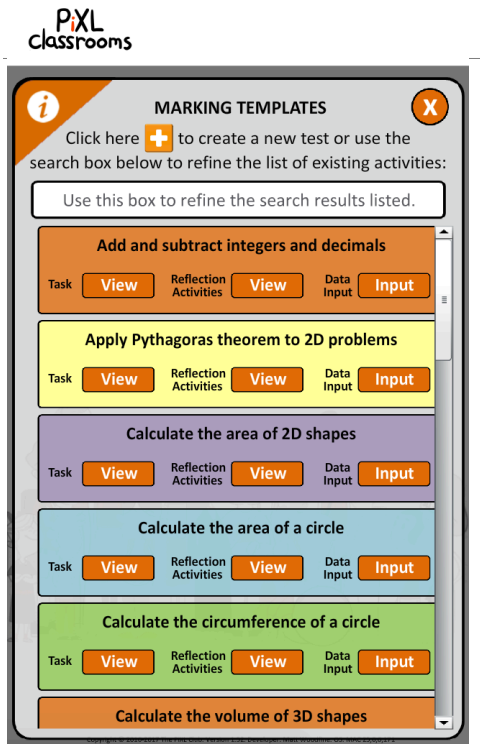
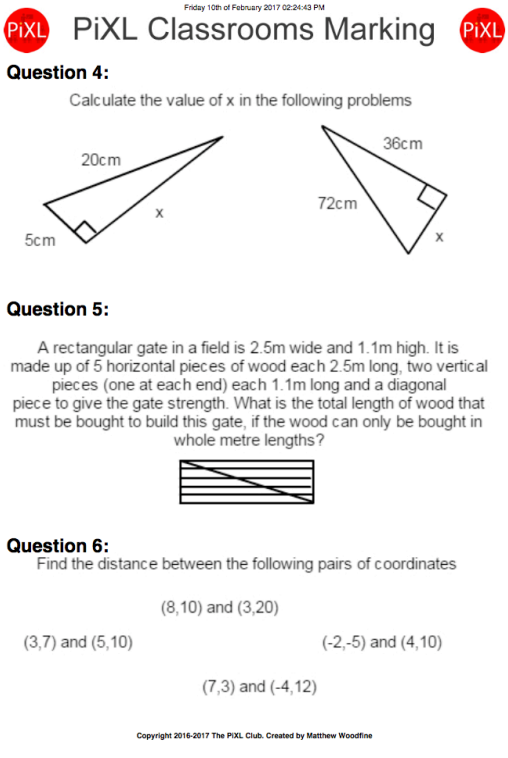


Figure 27



Having completed an intervention lesson, you will be looking to assess that the learning from that lesson is now secure. The "Marking" area enables you to create sharp and differentiated worksheets that are aimed at differentiating the PLC element for all students.

When selecting the marking tool from the main menu, all verified worksheets (or those available within your school) are shown (Figure 26). From here you can view the worksheets, the reflection questions or the input sheet. An example of a task is shown in Figure 27 (shows page 2 of a task), a data entry form in Figure 28 and more importantly the feedback (Figure 29) that would be automatically generated for any student when they get a question from the original task wrong.

You can use the search facility at the top to reduce the number of templates that are shown.

Entering data into a Marking template

Having completed an intervention lesson, you will be looking to assess that the learning from that lesson is now secure. By entering data into Figure 28, it collects information on how secure students were for a selected differentiated worksheet and then uses this information to generate an individual feedback sheet for each student based on their areas of strength and areas of weakness (Figure 29).

Figure 28

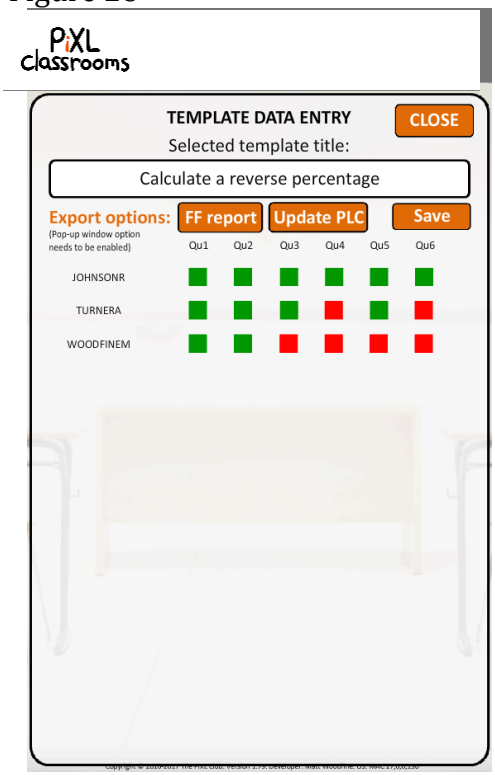
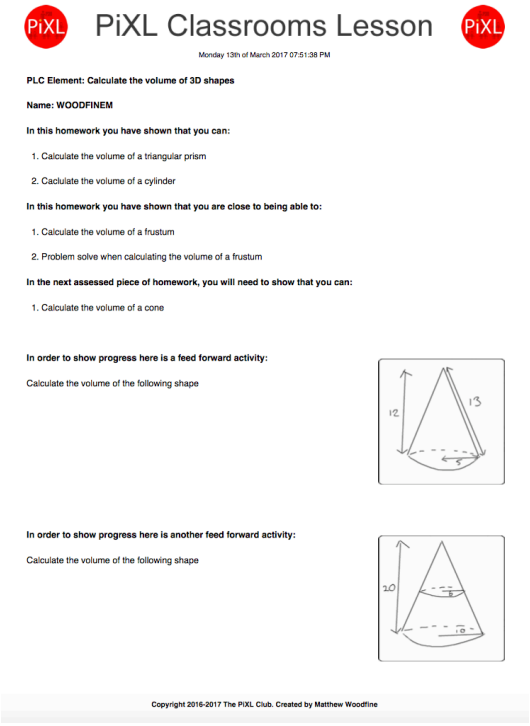


Figure 29



Select the data input button from Figure 26 and the template will then load (Figure 28). When a marking template is first created (Figure 30 to 32), you give each question an assessment objective. By outlining the objective of each question, it produces a tile that you will colour code in Figure 28 for that specific template. To change between red, amber and green, simply select the cell. After all data for each question and for each student has been completed, click "Save". You can select to "Update PLC" to change any existing information in the "Real-time PLC" to the information from the marking tool.

You have the options of downloading the task that you would have set students and viewing a brief objective list for each question, however, the most important button is "Generate report". This option looks at the colour coding from Figure 28 and decides on a suitable follow up question for 2 areas of weakness. The report follows a "Black box" marking approach of highlighting both strengths and areas to develop. These can be printed out for students to complete as the last line of intervention to assist students in their progress.

How do you create a Marking template?

Figure 30

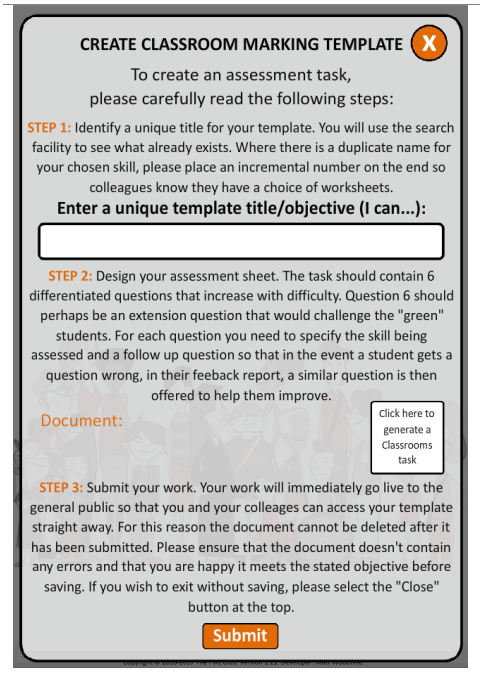


Figure 31

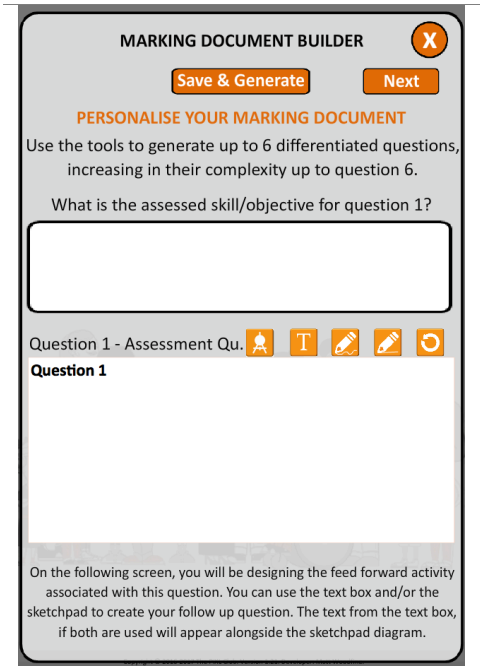
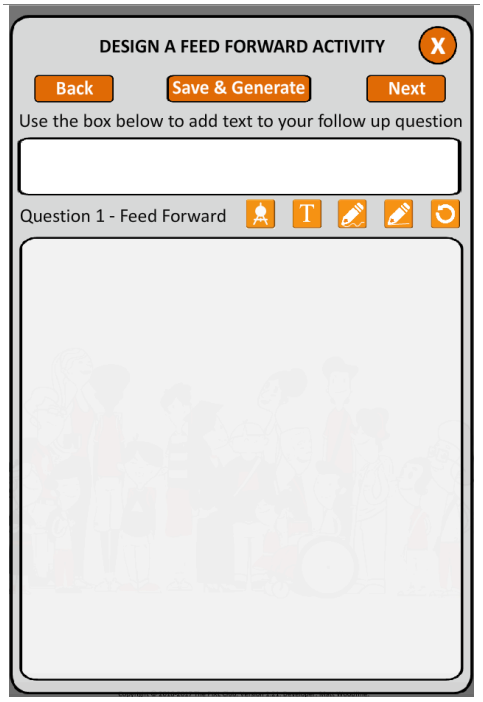


Figure 32



To create a marking document, you will first need to select a template name (linked to the PLC element to aid search facilities) (Figure 30 – top text box). Once this is done, you will move onto the document (Figure 30 – square box). To create the document you need to provide 3 things:

i) Objective
ii) Question
iii) Feed forward question

The question (Figure 31) can be either drawn or typed using the orange tool bar. The same applies for the feed forward activity (Figure 32). The question and feed forward activity should be similar in terms of complexity. You will need to write up to 6 questions in total for the worksheet and 6 accompanying feed forward tasks. Click "Save & Generate" when completed in Figure 31 or 32, then "Submit" in Figure 30.

Full list of subjects and elements:

Subject	Year group	PLC element
Biology	KS4	I can demonstrate knowledge and understanding of reading data from a graph or table
Biology	KS4	I can demonstrate knowledge and understanding of how to calculate area using cm and m
Biology	KS4	I can demonstrate knowledge and understanding fertilisation and cell division
Biology	KS4	I can demonstrate knowledge and understanding of the keywords connected with inheritance and genetic cross diagrams
Biology	KS4	I can demonstrate knowledge and understanding of the organelles within plant and animal cells
Biology	KS4	I can demonstrate knowledge and understanding of respiration
Biology	KS4	I can demonstrate knowledge and understanding of how blood flow changes during exercise
Biology	KS4	I can demonstrate knowledge and understanding of how to construct and interpret genetic diagrams
Biology	KS4	I can demonstrate knowledge and understanding of what enzymes and their function
Biology	KS4	I can demonstrate knowledge of the functions of cell components
Biology	KS5	I can demonstrate knowledge and understanding of the structure of bacteria and viruses.
Biology	KS5	I can demonstrate knowledge and understanding of the role of B and T cells.
Biology	KS5	I can demonstrate knowledge and understanding of how gene mutation can lead to a non-functional protein
Biology	KS5	I can demonstrate knowledge and understanding of converting between units
Biology	KS5	I can demonstrate knowledge and understanding of using graph data related to rates of reaction.
Biology	KS5	I can demonstrate knowledge and understanding of producing a tangent to a curve to determine rate.
Biology	KS5	I can demonstrate knowledge and understanding of selecting and applying a statistical test.
Biology	KS5	I can demonstrate knowledge and understanding of what is shown by a standard deviation of the mean
Biology	KS5	I can demonstrate knowledge and understanding of the emulsion test for lipids with reference to their structure and chemical properties.
Biology	KS5	I can demonstrate knowledge and understanding of the location and action of endopeptidases.
Chemistry	KS4	I can demonstrate knowledge and understanding of atomic structure
Chemistry	KS4	I can demonstrate knowledge and understanding of the differences between intermolecular forces and bonds
Chemistry	KS4	I can demonstrate knowledge and understanding of when ionic compounds can be used in electrolysis
Chemistry	KS4	I can demonstrate knowledge and understanding of naming conventions of ions and atoms
Chemistry	KS4	I can demonstrate knowledge and understanding of the comparative size of nanoparticles
Chemistry	KS4	I can demonstrate knowledge and understanding of smart alloys
Chemistry	KS4	I can demonstrate knowledge and understanding of neutralisation reactions using word equations
Chemistry	KS4	I can demonstrate knowledge and understanding of naming salts
Chemistry	KS4	I can demonstrate knowledge and understanding of the melting points of ionic and covalent substances
Chemistry	KS4	I can demonstrate knowledge and understanding of the difference between thermosetting and thermosoftening polymers
Chemistry	KS5	I can demonstrate knowledge and understanding of drawing displayed structures including functional groups
Chemistry	KS5	I can demonstrate knowledge and understanding of the difference between intermolecular forces and intramolecular bonding.
Chemistry	KS5	I can demonstrate knowledge and understanding of why symmetrical molecules are non polar.
Chemistry	KS5	I can demonstrate knowledge and understanding of selecting titres and calculate a mean.
Chemistry	KS5	I can demonstrate knowledge and understanding of using the avogadro constant.
Chemistry	KS5	I can demonstrate knowledge and understanding of how to prepare a solution of known concentration.
Chemistry	KS5	I can demonstrate knowledge and understanding of how to reduce uncertainty in a burette
Chemistry	KS5	I can demonstrate knowledge and understanding of the shapes of simple molecules and ions
Chemistry	KS5	I can demonstrate knowledge and understanding of full and half ionic equations.
Computer science	KS4	Recognise the difference between Client Server and Peer to Peer networks
Computer science	KS4	Identifying the different types of secondary storage optical magnetic and solid state
Computer science	KS4	Use the three common programming constructs when developing algorithms
Computer science	KS4	Recognise how images are represented in a computer system
Computer science	KS4	Recognise the main components of the CPU
Computer science	KS4	Compare the different uses of IP addressing and Mac addressing
Computer science	KS4	Understand the purpose and functionality of system software
Computer science	KS4	Use of arrays
Computer science	KS4	Explain the need for adherence to suitable professional standards in programming
Computer science	KS4	Explain the characteristics of different types of translators
Computer science	KS4	Recognise the difference between Client Server and Peer to Peer networks.
Computer science	KS4	Identifying the different types of secondary storage optical magnetic and solid state.
Computer science	KS4	Programming techniques and algorithms
Computer science	KS4	Handling Data in Algorithms
Computer science	KS5	Describe the characteristics of knowledge based systems
Computer science	KS5	Explain the need for both physical and logical protocols and the need for layering in an interface
Computer science	KS5	Define different modes of file access
Computer science	KS5	Interpret and use formal methods of expressing language
Computer science	KS5	Database design and normalisation techniques
Computer science	KS5	Representation of a floating point number in binary
Computer science	KS5	Compare and contrast thin client and rich client computing
Computer science	KS5	Fetch decode execute cycle
Computer science	KS5	Classes
Computer science	KS5	Describe the characteristics of knowledge-based systems
Computer science	KS5	Understanding Algorithms
Computer science	KS5	High level language programming (OOP)
English language	KS4	I can use terminology
English language	KS4	I can show detailed and perceptive understanding when analysing the effects of writers choices of language
English language	KS4	I can show detailed and perceptive understanding when analysing structure
English language	KS4	I can select a range of relevant quotations
English language	KS4	I can use subject terminology accurately
English language	KS4	I can show clear understanding when explaining the effects of writers choices of structure
English language	KS4	I can show perceptive understanding when analysing structure and use terminology to explain
English language	KS4	I can show a clear understanding by demonstrating clear connections between texts
English language	KS4	I can show a clear understanding by comparing ideas and perspectives

English language	KS4	I can write an effective and accurate argument
English language	KS4	I can use terminology
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Nouns
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Adjectives
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Verbs
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Verbs - Active Passive Voice
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Verbs - Active Passive Voice
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Verbs - Modality
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis Adverbs
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Sentences - Co-ordination and Subordination
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Sentence Types
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Sentence Type
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Connotations
English language and literature	KS5	AO1 AO2 Developing Identification into Analysis - Discourse - Analysis of Spoken Language
French studies	KS4	To be able to recognise and use negative expressions in French
French studies	KS4	I can recognise and use a range of tenses
French studies	KS4	I can identify and understand prepositions
French studies	KS4	To understand and use the little words that can make a big difference in French
French studies	KS4	To be able to understand and formulate the Simple Future tense in French
French studies	KS4	I can understand and use connectives
French studies	KS5	To be able to use direct and indirect object pronouns in French
French studies	KS5	To be able to make adjectives agree correctly in French
French studies	KS5	To be able to understand and use a range of negative constructions in French
French studies	KS5	To be able to understand and use the subjunctive correctly in French
Geography	KS4	Interpreting resources
Geography	KS4	Improving skills in human geography
Geography	KS4	Improving skills in physical geography
Geography	KS4	Human geography and exam question interpretation
Geography	KS4	Global actions and organisations
Geography	KS4	Interpreting resources and answering exam questions (GCSE B)
Geography	KS4	A focus on Coasts
Geography	KS5	Interpretation of exam questions
Geography	KS5	Answering physical geography questions
Geography	KS5	Enhancing skills for Edexcel, A2, Unit 4
Geography	KS5	Enhancing skills for Edexcel, A2, Unit 3
History	KS4	Achieving full marks
History	KS4	Chronology - Protest 1800 to 1914
History	KS4	Hitler becomes Fuhrer
History	KS4	Context - Protest 1800 to 1914
History	KS4	Cross referencing - Munich Putsch
History	KS4	Detailed knowledge - Crime in Middle Ages
History	KS4	Exam technique
History	KS4	Hitler becomes Chancellor
History	KS4	Well Explained Paragraphs
History	KS4	Causation
Mathematics	KS4	Calculate the area of 2D shapes
Mathematics	KS4	Calculate the volume of 3D shapes
Mathematics	KS4	I can find the next term of a sequence
Mathematics	KS4	Calculate equivalent fractions decimals and percentages
Mathematics	KS4	Add and subtract fractions
Mathematics	KS4	Solve two linear simultaneous equations
Mathematics	KS4	Further indices
Mathematics	KS4	Take out Common Factors to Factorise
Mathematics	KS4	Multiply single term over bracket
Mathematics	KS4	Factorise a quadratic expression
Mathematics	KS4	Form and solve equation
Mathematics	KS4	Simplify expressions using index laws
Mathematics	KS4	Express percentages as fraction or decimal
Mathematics	KS4	Ratio notation
Mathematics	KS4	Solve linear inequalities with one variable
Mathematics	KS4	Understand and use standard form
Mathematics	KS4	Expand 1 or more brackets
Mathematics	KS4	Interpret cumulative frequency diagrams and box plots
Mathematics	KS4	Construct linear and quadratic graphs
Mathematics	KS4	Calculate probabilities from tree diagrams
Mathematics	KS4	Apply Pythagoras theorem
Mathematics	KS5	Simplify and operate with surds
Mathematics	KS5	Solve trigonometric equations
Mathematics	KS5	Understand how to differentiate and apply basic principles
Mathematics	KS5	Integrate an expression and apply basic principles
Mathematics	KS5	Apply an understanding of geometric sequences
Mathematics	KS5	Solve logarithmic equations
Mathematics	KS5	Find the equation of a line in vector form
Mathematics	KS5	Rationalise the denominator
Mathematics	KS5	Use and understand the first derivative
Mathematics	KS5	Use and understand the second derivative
Mathematics	KS5	Trigonometric transformations
Physical Education	KS4	Heart and Circulatory System
Physical Education	KS4	Media and Sponsorship
Physical Education	KS4	Motivation and Participation

Physical Education	KS4	Principles of training
Physical Education	KS4	Muscles and Bones
Physical Education	KS4	How overeating can affect physical activity
Physical Education	KS4	Initiatives for promoting sport
Physical Education	KS4	How climate and environment affects physical activity
Physical Education	KS4	Injuries in sport
Physical Education	KS5	Cardiac output from rest to exercise
Physical Education	KS5	Cardiovascular
Physical Education	KS5	Energy systems
Physical Education	KS5	Aerobic capacity and interval training
Physical Education	KS5	Audience effects on sports performance
Physical Education	KS5	Anxiety Aggression Arousal
Physical Education	KS5	Skill Acquisition
Physical Education	KS5	Psychological preparation for sport
Physical Education	KS5	Sport Psychology Attitudes
Physical Education	KS5	Sport Psychology personality
Physics	KS4	I can demonstrate knowledge and understanding of the range penetration alpha beta and gamma radiation
Physics	KS4	I can demonstrate knowledge and understanding of distance time graphs
Physics	KS4	I can demonstrate knowledge and understanding of the formation of stars
Physics	KS4	I can demonstrate knowledge and understanding of nuclear fission and nuclear fusion
Physics	KS4	I can demonstrate knowledge and understanding of radio active Half life
Physics	KS4	I can demonstrate knowledge and understanding of electrical circuits
Physics	KS4	I can demonstrate knowledge and understanding of electrical safety devices
Physics	KS4	I can demonstrate knowledge and understanding of generating electricity
Physics	KS4	I can demonstrate knowledge and understanding of energy and power in circuits
Physics	KS4	I can demonstrate knowledge and understanding of momentum
Physics	KS5	I can demonstrate knowledge and understanding of Young Modulus of materials
Physics	KS5	I can demonstrate knowledge and understanding of vector quantities
Physics	KS5	I can demonstrate knowledge of momentum and conservation of momentum
Physics	KS5	I can demonstrate knowledge of superposition and interference of waves
Physics	KS5	I can demonstrate knowledge of the principles of stationary waves on strings
Physics	KS5	I can demonstrate knowledge of Radioactive decay
Physics	KS5	I can demonstrate knowledge of magnetic flux and how transformers work
Physics	KS5	I can demonstrate knowledge of resistance and voltage in a potential divider circuit
Physics	KS5	I can demonstrate knowledge of moments and conservation of moments
Physics	KS5	I can demonstrate knowledge of the photoelectric effect and the equations to calculate kinetic energy of a photoelectron
Psychology	KS4	Research Methods
Psychology	KS4	Sex and Gender schemas
Psychology	KS4	Sex and Gender Theories
Psychology	KS4	Reducing prejudice and discrimination
Psychology	KS4	Sex and Gender PPE
Psychology	KS4	Learning
Psychology	KS4	learning PPE
Psychology	KS5	Elaboration of evidence
Psychology	KS5	Localisation of function in the brain
Psychology	KS5	Synaptic Transmission
Psychology	KS5	Extended writing
Psychology	KS5	Approaches in psychology
Psychology	KS5	Psychological treatments
Psychology	KS5	Data analysis
Psychology	KS5	OCD
Psychology	KS5	Writing skills
Psychology	KS5	Inferential statistics
Psychology	KS5	Classification and diagnosis of Schizophrenia
Sociology	KS5	Methodological concepts
Sociology	KS5	Education Analytical Skills
Sociology	KS5	AO2 Application Skills in relation to Crime and Deviance
Sociology	KS5	30 Mark Essay Skills for Education A Level Paper 1
Sociology	KS5	Methods in Context for Education A Level Paper 1
Sociology	KS5	Social Action Theory
Sociology	KS5	Timing and Skills in relation to marks
Sociology	KS5	A03 skills in relation to Methods Moving away from juxtaposition
Sociology	KS5	A03 Evaluating skills in relation to Crime and Deviance
Sociology	KS5	A01 Crime Prevention Strategies