

# General Introduction

## Overview

This is the fourth generation of materials produced by SHP for GCSE courses since the early 1970s. The aims of this new set of materials are to match the resources to the precise details of the new GCSE specifications introduced in 2009 and to include many developing teaching and learning ideas that will help students learn more effectively and provide more stimulating and enjoyable lessons.

This Teacher's Resource Book provides support for the Student's Book and IT resources but it's worth noting that it has been written with a particular audience in mind – trainee teachers and NQTs who have had little time to get to grips with the overall rationale of the Schools History Project and also lack any detailed knowledge of their own of the history of medicine. If you have been teaching 'Medicine' for 20 years please excuse the inclusion of material you are already well aware of – hopefully you will also find enough new ideas to make this Teacher's Resource Book worthwhile.

In addition to the Development Study, both the Student's Book and this Teacher's Resource Book contain full resources and teaching advice on the Source Enquiry, 'The Transformation of Surgery c.1845–c.1918'.

## Achieving exam success and broader aims

Everyone teaching the Development Study and the Source Enquiry is doing their best to help each individual student achieve the best possible examination grade. We have supported this aim in the Student's Book by providing detailed advice on how to answer the main types of question that appear in the Development Study and Source Enquiry papers. We

have also covered the precise details of the specification content.

However it is worth noting that exam success is not simply about focussing on the minutiae of question types and exam technique in isolation. We know from long experience that students perform better in examinations if teachers have done three other things well:

- 1) Built their course structure around the problems students have year-in, year-out, so as to, for example, ensure students develop a good grasp of the outline of medical history at the outset. If this isn't firmly established early on students often continue to stumble and make basic errors in chronology in their exams.
- 2) Kept students interested with a variety of types of activity, from written tasks to role-plays to 'washing-lines' to hot-seating.
- 3) Built-in revision strategies from the beginning of the course rather than tacking them onto the end – when motivation and interest can be fading.

Both the Student's Book and this Teacher's Resource Book have been created to help you do these three things effectively. The pages that follow explain how to do this in more detail. They also set out the broader aims of the SHP GCSE course and this too can have a beneficial impact on exam performance. It is important that students understand why they are doing the Development Study on 'Medicine' and the Source Enquiry – this helps with motivation and increases students' sense of achievement if they can explain how this particular unit fits into their GCSE course and how it links to the world beyond the examination room. That is why this introductory material sets out those broader aims to guide those of you new to teaching this topic. Examination success and achieving broader aims are not in conflict – they are mutually supportive.

## Medicine and Treatment Through Time

### Source Enquiry: The Transformation of Surgery c.1845–c.1918

#### Key features of SHP's resources for Edexcel's GCSE units

Our aim has been to provide a range of materials (Student's Book, Teacher's Resource Book, CDs and website-based kinaesthetic activities) that help your students to succeed in their GCSE examinations. We have done this the obvious way, by providing detailed guidance on how to tackle the main types of exam questions. Equally, if not more importantly, we have used the experience and lessons of teaching as the framework. This has meant identifying the problems students stumble over each year and then building the resources around our understanding of how students learn most effectively. However we also want these resources to be about more than examination success so we have also set wider goals, including an awareness of how both the Development Study and Source Enquiry fit into the wider SHP course and how this kind of course provides perspective on today's events. Our aim therefore is for examination success and to make a contribution to students' broader education.

Here in more detail are the main features of these resources.

#### 1. *It's not a 'quick fix' book*

It would have been easier and quicker to reproduce SHP's 2001 *Medicine for Edexcel* book with some new pages tailored to the needs of the revised specifications. However that would have meant ignoring all that has been learned about how to help students learn more successfully. Therefore we decided on a complete rewrite, re-using material when it has stood the test of time but adopting a fundamentally different strategy, building the book's material from a strong teaching and learning base in conjunction with the necessary content and exam advice.

#### 2. *'Big Story' activities help students develop secure chronological understanding by charting key medical themes across time*

One problem for many students is building accurate chronological knowledge. Experience shows that they need a strong grasp of the overview before investigating each period in detail. Therefore 'Big Story' activities have been set at the beginning of the Student's Book to enable students to work out the pattern of the whole course, using five full-spread 'Medical Moments in Time' reconstruction drawings. Each chronological section then allows students to build up detail, consolidating this initial overview.

#### 3. *'Meet the Examiner' pages help students achieve better examination results*

'Meet the Examiner' pages provide detailed guidance on performing well in examinations. Pages are tailored to help with all the main question types in both the Development Study (Medicine and Treatment Through Time) and the Source Enquiry (The Transformation of Surgery c.1845–c.1918).

These pages identify common errors, showing students how to avoid them and write better answers, providing sample answers for analysis and guided activities. They also provide guidance on general exam skills such as time-keeping. These Meet the Examiner pages have been planned so they are integrated into enquiries, not bolted on artificially. They play a key role in concluding each section's major enquiry while, at the same time, preparing students for exam success.

⇒ See **page 14\*** of this book for details of 'Meet the Examiner' pages.

#### 4. *'Smarter Revision' pages help students build up revision materials from the very beginning of this course*

Revision can be a hit-or-miss affair, especially for some boys and particularly when planning revision doesn't begin until after the course has ended. We have therefore included activities that develop revision material from the very beginning of the course. By the time the course is completed students should have a full set of revision notes and materials. We have also provided a range of methods of recording information to suit different preferences and topics. For example 'Living Graphs' are used to record the patterns of themes over time, 'Memory Maps' record the key features of each period and 'Role of the Individual' charts record the impact of individuals from Galen to Beveridge.

⇒ See **page 13** of this book for details of 'Smarter Revision' pages.

#### 5. *Both GCSE units are built around central enquiries, which creates coherence and helps deepen students' understanding of how history is studied*

Enquiry is at the heart of Key Stage 3 History and its Attainment Target. It should be at the heart of GCSE too. In the Development Study students will not only

\* Page numbers refer to the Student's Book unless otherwise specified.

tackle period-based enquiries but will also use these enquiries to emerge with an answer to a much larger enquiry: ‘Why do people today have better health and live longer than people in the past?’ This provides a unifying theme through the Development Study and offers at the end a sense of satisfaction at having developed a clear though complex answer. This should then help students use what they have learned about ‘enquiry’ when undertaking their Source Enquiry. Students will also have had the chance to reinforce what we mean by enquiry and how this relates to the world beyond the classroom.

### **6. Outline, depth and saving time – choices for teachers and personalization for pupils**

Although we have included a lot less material than in previous SHP ‘Medicine’ books, there is still more material in the book and on the CDs than some teachers and students will use. Therefore at the beginning of each section of the Development Study we provide an outline activity identifying the key features of medicine in the period and the balance of changes and continuities. That outline provides the core knowledge that may be sufficient for some students, but which can be augmented by the more in-depth material that follows.

In the in-depth sections we have created activities that can be tackled by groups working on different aspects of a topic, pooling their results to create a bigger answer. This will be important in saving some students from getting lost in the detail while still giving them a sense of the key overall developments.

### **7. Effective integration of Student’s Book, CD, Teacher’s Resource Book and websites**

It is easy to focus on the Student’s Book and see the CD and other resources as secondary support acts, but we have used each of these elements for the things it is best at. For example, you will find decision-making activities (e.g. How would you have treated Charles II?) on the CD but not in the textbook, where they do not work nearly as well. The SHP and Thinkinghistory websites provide detailed descriptions of kinaesthetic activities, some of which are introduced by visuals in the Student’s Book.

⇒ See **page 00** for details of the contents of the CDs.

### **8. Visual and kinaesthetic – varied learning styles and experiences**

Every student benefits from variety. Some students respond better to visual and kinaesthetic activities, others enjoy reading and writing more. We have provided a wide range of different types of activity and presentational styles, aiming at both variety for all and at meeting the particular needs of individual learning styles.

### **9. Give pupils a real sense of achievement**

A sense of achievement comes from a good exam result. It also comes from understanding why you have been doing a particular course – in this case why the Development Study and Source Enquiry are parts of their GCSE History course and how they relate to the other parts of the course. Put most simply, we have tried to provide in the Student’s Book some answers to the age-old question, ‘Why are we doing this?’

⇒ See **pages 10–11** and **192–193**.

### **10. Enjoyment!**

Nobody learns if they don’t enjoy what they are doing. All the activities, whether in the book or CD, have been created to maximise involvement and enjoyment and to help pupils care about the questions they are investigating. And hopefully you will enjoy the material too!

## **SHP and the aims of the Study in Development**

The main aim of the original Schools History Project, established in the early 1970s, was to enhance students’ grasp of the historical concepts and skills that they would find valuable both in and beyond the classroom.

The original examination course had four main parts: a Study in Development, an Enquiry in Depth, a Modern World Study, and a study of ‘History Around Us’. Each part was designed with special reference to particular skills and concepts, though they also had some common objectives, such as an insistence on the importance of the use and analysis of sources.

Nowadays we would add that each section of the course is an enquiry in its own right, but what is special about the Study in Development is that it is an enquiry over a long span of time, showing students that this kind of enquiry is possible and what its benefits are. That is why the Student’s Book is an enquiry into ‘Why do people today have better health and live longer than people in the past?’ The wide-ranging nature of this enquiry may help you decide which of the two Extension Studies to choose, as the study of ‘Public Health c.1350 to the Present’ contributes much more to answering this core enquiry than does the alternative, ‘Medicine and Public Health from Roman Britain to c.1350’ (see **page 00** of this book for further discussion).

Since the early 1970s, and especially with the revised specifications of 2009, the exact nature of the GCSE course has changed, but the underlying principles of developing students’ understanding of

the nature of history and demonstrating how it is relevant and useful to their lives remains central.

The main aim of the Study in Development is to improve students' ideas of development, change, continuity and causation. For example, fourteen-year-olds can think of historical change as a series of disconnected episodes, or of development as an inevitable 'march of progress'. The Study in Development therefore aims to help students may develop a more sophisticated grasp of the processes and nature of historical change. It should also consolidate their grasp of the chronological 'map of the past'.

The originators of SHP set out the following rationale for the Study in Development in *A New Look at History*, published in 1976. While we might express this differently today, the core purposes remain the same.

'...the adolescent needs to understand how change occurs in human affairs. This is important partly because at the present time we live in an age of increasingly rapid and built-in change, but also because the young need to be made aware that change is possible. The young should gain some understanding that life is not pre-determined but that the human being is a self-determining animal – unlike the ant or the bee he can consciously change his way of life. This being so it is essential for the next generation to know what is involved in changing the human situation so that when they wish – as some inevitably will – to change the present for a better or a different world, they will stand a reasonable chance of achieving what they desire. Whatever else history is, it is a study of change and continuity in human affairs. In this way it can relate directly to adolescent needs. Other subjects obviously offer accounts of change in human affairs, but history has a peculiar contribution to make here for two reasons. First, it emphasises that change can only be understood in the context of time and secondly, it emphasises the complexity of causation in human affairs. Other subjects may seek to explain change in terms of

universal laws of general application, or by reference to particular and often short-term studies which are then made the basis for generalisations about change in human affairs. In so doing they may over-simplify the human situation, and offer a naive view of change. History can give adolescents a more realistic view of what change in human affairs involves.'

⇒ For further discussion of the principles of the SHP course see [www.schoolhistoryproject.org.uk](http://www.schoolhistoryproject.org.uk)

## Why 'Medicine through time?'

'Medicine through Time' was the first SHP Study in Development and has been taught in schools since 1974. It was chosen because it demonstrates continuities, provides examples of rapid and gradual change and is a topic of importance in all periods of history. It provides opportunities to show how general political, social and intellectual changes, such as the coming of the first literate societies or of the Industrial Revolution, had particular effects in one specific field. Few themes provide such obvious opportunities for revisiting key periods and so deepening students' sense of 'the map of the past.' However it is always worth remembering that the primary aim is not to learn all about the history of medicine and public health from ancient times.

The main aim is to understand the processes by which change takes place in human affairs and continuities from the past survive into the present. In addition students should gain some ability to place their own lives in perspective by making contrasts with the past, based on an appreciation of the disparities in health and life expectancy between past societies and our own. And more generally students should be aware that they have undertaken a historical enquiry and be able to talk explicitly about how they went about it. This transferability of the idea of enquiry is very important as it relates directly to one of the key transferable benefits of studying history.

## General teaching issues

### 1) Using and managing active learning

We have included reference to a number of kinaesthetic activities in the Student's Book and there are references to more such activities in this Teacher's Resource Book. Over the past few years we have seen how such activities can motivate learning and, for example, how effectively they help students build big pictures on which they can hang later learning. They range from small scale activities explaining, for example the Theory of the Four Humours, to more complex concept-mapping activities analysing the impact of factors.

We think it is important that all students have the opportunity to try these out. Everyone benefits from variety, but these kinds of activities often have a beneficial impact on the learning of students who struggle with traditional written tasks, or those with particular needs such as dyslexics. However, in managing such activities always think carefully in advance about the nature of the individual class, the space you have available and whether kinaesthetic activity suits the class, the time of day, what they have done in previous lessons and other variables. Never assume that because an activity worked last year or with another class it will necessarily work with all classes. To help class management, in the activities we list in the TRB, unnecessary and uncontrolled movement is cut out, keeping movement by students under your direction. This enables you to focus on students' thinking, their questions and your own questions to develop their understanding.

⇒ For more information about the principles and management of active learning and for a developing range of kinaesthetic versions, see [www.thinkinghistory.co.uk](http://www.thinkinghistory.co.uk) and [www.schoolshistoryproject.org.uk](http://www.schoolshistoryproject.org.uk)

### 2) Differentiation and personalisation

We have supported differentiation and personalisation in the Student's Book in a variety of ways:

- Activities vary in difficulty and in learning style. Some are writing-based; some are active; some can take place entirely in the computer suite. Different types of learners – visual, auditory or kinaesthetic – have opportunities to succeed and to show what they can do.
- Students are often asked to work in pairs or groups to do activities. You can structure the groups so that lower-ability students work alongside more able students or put students in same-ability groups.

- Interactive tasks allow students to demonstrate their ideas to each other, so they can learn from each other.
- Answers are modelled or opportunities are provided for teachers to model activities with the class, so students can see how to improve their performance.
- The major section enquiries are open-ended and can be tackled by all students. They allow differentiation by outcome.

### 3) Following a core enquiry

The Student's Book is built around a core enquiry: 'Why do people today have better health and live longer than people in the past?'

This enquiry is introduced in Section 1 ('The Big Story') and can be linked to the individual 'period' enquiries in the other sections of the book. This enquiry does not form part of the specification, so why have we structured the material around it?

- a) It unites the whole course and helps students to organize their knowledge. It is easier to build an overview narrative of medical history in relation to a specific question than in a vacuum where information is not used for explanation.
- b) It helps students see why the particular 'period' enquiries have been set up.
- c) It emphasises the centrality of enquiry in history, established at Key Stage 3 where enquiry is a major strand in the Attainment Target.
- d) It helps students relate their Development Study on 'Medicine' to the present day, showing how history provides a perspective on life today.
- e) It helps create a sense of achievement in developing a deeper answer to the enquiry through the course than students can offer at the beginning.

However there is one important warning – the need to get the balance between keeping this core enquiry in mind and not overdoing it so that it generates 'not that again' responses. The core enquiry needs to be maintained by regular, light touches, with a stronger emphasis at the start of the course, in the 'bridging' Section 5 (which summarises developments to c.1750 and looks at what lies ahead) and in the conclusion.

### 4) Helping students 'declutter' their minds

Everyday experience and research evidence suggests that many students can be easily swamped by information. Examinations show that candidates able to display conceptual understanding and historical skills or to memorise facts accurately will frequently fail to acquire an organised and usable 'map' of

content based on a coherent understanding of medical history as a whole.

It is therefore important to plan teaching:

- a) To prevent the plethora of data from clogging students' minds, so that they are unable to see the broad storyline and relate it to the core enquiry.
- b) To help students with the complex task of manipulating and organising large amounts of information.
- c) Around an overall enquiry which, by its nature, helps students decide which information is relevant and useful.

It is vital that students retain an overview of the 'Medicine through Time' story. They cannot begin to consider questions about cause, change and development or significance unless they possess a clear overview of the narrative relevant to the overall enquiry. But this overview must be 'uncluttered'. It need not be detailed but it must be organised and the items within it must be relevant. Disconnected facts are of little value.

It is thus essential to do the following.

- 1) Establish what counts as a minimum overview for this overall enquiry. This should be expressed as an answer to our core enquiry about changes in health and life expectancy which use concepts of change and development through time, not as a list of events.
- 2) Ensure that students record overview information in a way that clearly distinguishes it from 'disposable' notes and exercises.

- 3) Ensure that students can reproduce a minimal overview prior to detailed investigation of individual periods, analysis of factors and other conceptual problems.

Section 1 of the Student's Book, 'The Big Story', aims to help establish a minimum overview relating the book's core enquiry and we have provided a range of Smarter Revision activities, demonstrating techniques for recording information in overview forms.

### 5) What is the overall story?

Talk of a minimum overview is not of much help if this is the first time you are teaching 'Medicine' and your own grasp of the key events is in what could be politely described as 'a development phase.' Therefore the following overview is offered to aid new teachers but it can also be used by departments in discussing what counts as a minimum overview for particular classes. One of the benefits of the core enquiry is that it provides a focus which helps select what goes in the overview.

It is also important to note that the story becomes clearer if directed towards answering the book's overall enquiry 'Why do we have better health and live so much longer than people in the past?' Note that references to surgery have been omitted from the following outline because surgery does not figure in Edexcel's Development Study on medicine and treatment.

## Key events in the history of medicine

### Medicine in Roman Britain

Before the Roman conquest the people of Britain had built up a mass of practical knowledge of everyday medical care and especially medicinal herbs. They probably believed that their gods were responsible for illnesses and cures. Under the Romans these beliefs and methods continued. However the rulers and prosperous townspeople now had access to physicians trained to think about illness having natural causes rather than supernatural ones. Roman medicine was closely based on Greek ideas, especially Hippocrates' Theory of the Four Humours. This work did not produce dramatic cures, but the practice of clinical observation and practical advice based on rest, exercise and moderate diet led to the accumulation of more and more knowledge.

The most famous Graeco-Roman physician was Claudius Galen, who wrote a vast range of books, building on the work of Hippocrates and explaining the purpose of each part of the body in a way that fitted the rest of Greek scientific thought.

The growth of towns and the arrival of the Roman army created at least as many health problems as it solved. Soldiers spread disease as they travelled around the empire and towns were breeding grounds for diseases such as plague. The Romans did create public-health schemes that were advanced for their time but their effectiveness can be over-rated. Roman Britain was as vulnerable to plagues as medieval Britain. As a result life expectancy on average was no higher than 40.



**Medieval medicine**

The withdrawal of the Roman army meant that towns disintegrated and there fewer trained doctors but this mostly affected the better-off. Most people continued to rely, as before, on a mixture of religion, charms and common sense, provided by local healers whose training came from practice not books. Public health was not a priority for the warrior kings of Saxon England.

The growth of universities from the 1200s led to the re-emergence of a very small number of trained physicians whose knowledge was based on the writings of ancient authors, especially Galen, augmented by the writings of Arabic scholars. There was little new 'research' as physicians and the Catholic Church which controlled education believed that all worthwhile medical knowledge had already been discovered.

Public health conditions were poor with little effort by kings and their governments to improve conditions. Local town authorities did their best to keep towns clean but the vast array of animals in towns (for transport and food) together with the lack of funding made cleanliness impossible. As a result their attempts to stop plagues such as the Black Death relied on common sense and prayer and so life expectancy did not increase.

**The Renaissance, Scientific and Industrial Revolutions**

The first stepping stone to real change came with the changing attitudes of the Renaissance. Vesalius questioned and showed that Galen could be wrong on anatomical detail. The growth of scientific method, emphasising enquiry instead of belief in tradition, continued this process in the 1600s with Harvey's discovery of the circulation of the blood the outstanding example. The establishment of the Royal Society began to spread ideas about enquiry. Even so, new discoveries met a lot of opposition, and health and life expectancy did not improve.

Jenner's development of vaccination in the late 1790s demonstrated the continuing battle between enquiry and conservatism. His discovery was based on his use of enquiry and observation but it was met with considerable opposition. The lack of scientific understanding of the cause of disease meant that this discovery could not be transferred to combating other diseases.

In the 1800s the development of modern science and industry created a revolution in medicine. By the later 19th century, Pasteur had developed his germ theory, the most important turning point in medical history (until we discover the full impact of the discovery of DNA), and from this followed new vaccines. Engineers also contributed improved sewers and water supplies to industrial towns after 1850 as governments began to enforce public health reform. However, important though these new tools and ideas were, they were only beginning to have an impact on life expectancy by 1900, when average life expectancy was only just reaching 50.

**Medicine in the 20th century**

Since 1900 'high-technology' medicine has transformed treatment and prevention with new vaccines and drugs such as antibiotics. State medical services have made professional medical care available to all for the first time. The discovery of DNA and the development of new medical techniques based on DNA now promise at least as great a medical revolution as that stemming from germ theory. While many of these changes stem from major changes in science and technology, wars and the growth of democracy have also played major roles. Life expectancy and health are, on average, now much improved as a result.

At the same time 'high-tech' medicine has also created problems and produced a range of ethical debates and the distribution of good health services world-wide is extremely variable.

## 6) Prompting students to reflect upon their own assumptions and ideas

Students do not grasp concepts and acquire skills in history by learning definitions expounded to them by their teacher. They learn by using and refining the concepts and skills they already possess. Students invariably have ideas and assumptions about how and why things happened in the past. These can only be clarified as the students themselves experience difficulty in making sense of the past and come to recognise the limitations of and the contradictions between their existing ideas. This means that teachers need to do the following:

### a) Discover what is going on in students' minds.

From the fact that certain mistaken or inadequate responses appear to students to be sensible and adequate answers to questions, teachers can work out what assumptions students are making about the past and about what is involved in historical explanation.

### b) Encourage students to think about and discuss their own ideas. Some teachers have based class discussion on individual or group work, exploiting differences in conclusions, arguments and explanations, and inviting elaboration, support or criticism of the arguments advanced. In a discussion about whether or not certain developments should be considered examples of progress or regress, a class might first discuss the meaning of 'progress' before moving on to apply the concept to history.

### c) Pose problems and questions that genuinely reflect the difficulties encountered and the misconceptions held by the students themselves.

### d) Try to relate conceptual problems to 'core' questions capable of being posed over and over again with different material. Here are some examples of core questions:

- Why are wrong ideas and useless developments sometimes important in history? How can they matter if they are wrong or useless?
- Why did some things have to be discovered more than once?
- Why do people persist with practices that are inefficient or that do more harm than good?
- Things often happen that nobody wants, or things that many people want don't work out. Does this mean that people have no effect on history?
- If some bad effects for some people follow from every change, is there such a thing as 'progress'?

- If we say 'x was the cause of y', does this mean that once x happened then y was bound to happen?

## 7) Helping students understand why they are studying Medicine Through Time

When you get enmeshed in teaching (are we making fast enough progress? What do they really need to understand about the four humours? What kinds of exam questions do I need to prepare for?) it is easy to forget the bigger picture. By this we mean three things:

- How does this Development Study inform students' understanding of their world?
- How does the Development Study fit into the GCSE course as a whole?
- What have we learned about studying history?

Although these questions will not take up a lot of time, they are worth discussing with students, more on the 'little and occasional' basis than in a single 'once and for all' session because it's likely (and desirable) that students' ideas on these questions will develop as they progress through their course.

### a) How does this Development Study inform students' understanding of their world?

Bringing the history of medicine up-to-date is useful but it is not enough. It's more helpful to use students' newly acquired knowledge and understanding of how changes happen and how people react to events and changes to reflect upon current medical news items. Opportunities for linking from past to present exist at the ends of Sections 6–9 and in the Conclusion but you will want to up-date examples using events in the news during teaching. Equally you can also update and use your own personal examples as suggested on **page 00** of this book.

### b) How does the Development Study fit into the GCSE course as a whole?

One of the weaknesses of past SHP resources has been a failure to communicate to students and teachers how 'Medicine' fits into the overall GCSE scheme. This leads to students saying they have done 'Medicine, American West etc.' for GCSE and it seeming just a jumble of different bits of the past. The SHP set up this course for more specific purposes, to build conceptual understandings and skills through the study of a **deliberately diverse** set of approaches to history and a **deliberately diverse** set of topics. We have tried to address this by including **pages 10–13**, which briefly identify the course context and aims for the Development Study. We

hope you will come back to this little and often so that students understand how their whole GCSE course fits together and what the particular aims of the Development Study are.

### c) *What have we learned about studying history?*

While the Study in Development is an enquiry over a very long period of time it is an enquiry like any other

historical enquiry. The Big Story introduces the question ‘Why do people today have better health and live longer than people in the past?’ and by the end of the enquiry students should have a clear answer. They should also be able to see that this enquiry approach is common to the rest of the History they study and why this approach may be useful to them beyond the classroom.

### Where can you find Smarter Revision guidance?

Smarter Revision pages provide templates for creating revision materials. They are concentrated near the beginning of the book so that students can develop revision material from the very beginning of the course. The aim is that students should have a full set of revision notes and materials by the time the course is completed, rather than starting that process after the course has ended. Each revision format is used for a different purpose, as listed below, but students may wish to vary this if they find that for them particular methods of note-making are more effective than others.

Each of the following templates is provided in the Teacher’s Resource Book and on CD 3.

- **Living Graphs** – to record the development of key themes across time.  
⇒ Student’s Book **pages 8–9** and Activity Sheet 3<sup>†</sup>.
- **Memory Maps** – to record the key features of medicine in each period.  
⇒ Student’s Book **pages 20–21** and Activity Sheet 10.
- **Use your digital camera** – to record the key features of an individual’s work or of the developments in a period.  
⇒ Student’s Book **page 33** and Activity Sheet 13.
- **‘Role of the Individual’ charts** – to record the work and impact of key figures in medical history.  
⇒ Student’s Book **page 57** and Activity Sheet 14.
- **Concept maps** – to explain why changes take place or continuities persist.  
⇒ Student’s Book **pages 82–83** and Activity Sheet 24.
- **Factors Charts** – to analyse the impact of factors within a period. Student’s Book **pages 118–119** and Activity Sheet 37.

### Where can you find Medical Moments in Time activities?

These reconstruction drawings, the speech bubbles and information boxes, provide a visual record of the key features of Medicine in each period. These can be used:

- a) as part of the Big Story activities (**pages 4–9**) to help students build up an initial overview of the pattern of medical history
- b) as an introduction to each period
- c) as a template for students to create their own version for today.

These illustrations can also be found on CD 3, with actors providing voice-overs for the speech bubbles.

#### **Roman Londinium, AD200**

Student’s Book **pages 16–17** and Activity Sheet 7.

#### **London, 1347**

Student’s Book **pages 18–19** and **54–55** (they are identical) and Activity Sheet 8.

#### **London, 1665**

Student’s Book **pages 68–69** and Activity Sheet 23.

#### **London, 1848**

Student’s Book **pages 90–91** and Activity Sheet 27.

#### **London, 1935**

Student’s Book **pages 92–93** and Activity Sheet 28.

<sup>†</sup>Activity Sheets refer to this book (TRB) unless otherwise stated.

## Where can you find Meet the Examiner guidance?

These pages provide detailed guidance on performing well in Development Study examinations. They identify common errors, showing students how to avoid them and write better answers, providing sample answers for analysis and guided activities.

A list of Meet the Examiner pages for the Source Enquiry can be found on page 00 of this book.

### **Section 1: The Big Story**

**Pages 14–15** Understanding your Development Study exam paper – identifies exam structure and types of questions.

### **Section 2 (Extension Unit 1): Medicine and public health from Roman Britain to c.1350**

**Pages 34–35** How to de-code exam questions; tackling ‘key features’ questions.

**Pages 50–51** Analysing and evaluating change over time.

### **Section 4: The Renaissance**

**Pages 84–85** Decoding exam questions; tackling ‘key features’ questions.

**Pages 86–87** Analysing and evaluating the impact of factors.

### **Section 6: Understanding disease – which medical breakthrough deserves the gold medal?**

**Pages 112–13** Analysing the importance of a medical breakthrough or event.

**Pages 114–15** Developing inference skills to spot key changes in medicine.

### **Section 7: Why have methods of preventing and treating illness changed so much since 1750?**

**Pages 128–29** Analysing and evaluating the impact of factors.

### **Section 8: How have hospitals and medical training changed since 1750?**

**Pages 130 and 140** Developing inference skills to spot key changes in medicine.

### **Section 9 (Extension Unit 2): When did Public health finally improve?**

**Pages 160–61** Analysing and evaluating the importance of individuals.

**Pages 178–81** Comparing and evaluating change in different periods.

## How the Dynamic Learning activities relate to the Student's Book

### Medicine and Health Through Time Dynamic Learning 1: People and periods

By Ian Dawson and Dan Moorhouse

ISBN 978 0340 946 718

#### Common features in each chronological section

##### 1) 'Introducing ....' activities

There is an introductory activity for each major period. These are important activities because they get students into 'thinking mode' immediately rather than assuming that they can't think until they have acquired a lot of information. These activities focus on helping students to:

- identify key features of the period in general
- suggest the possible impact of these aspects on medicine
- reach an overall hypothesis about the likely extent of change in the period they are about to study in detail.

##### 2) 'What really changed?' activities

These provide a concluding activity for each period, enabling students to create a simple visual summary

showing which aspects of medicine changed the most and which did not change. Using the same style of summary activity several times will help students perform this task more effectively. These 'washing line' summaries can be annotated and either printed out or saved for revision.

##### 3) Links to Student's Book

The final column notes the pages or section to which each activity is most obviously linked, both for the Development Study and the Source Enquiry. However many of the CD activities can be used in a variety of ways, as introductions, as the main way of covering a topic or as a conclusion or revision. The approach you choose may well vary from class to class.

Activity title	Description of activity	Book section or page link
<b>The ancient world</b> – note that some material on Prehistoric and Egyptian medicine is not relevant to the Edexcel specification		
Introducing ancient medicine	A starter to get students thinking, providing clues on key aspects of societies for students to suggest their impact on medicine. Plus 'true or false' consolidation activity.	16–17
Will you survive in Ancient Rome?	Decision-making activity for use as introduction or conclusion to Roman Medicine.	16–17
What was new? What was old?	Three-part activity introducing key features of Egyptian, Greek and Roman medicine, asking students to identify changes and continuities.	20–21
Why were there changes and continuities in ancient medicine?	Four-part extended activity guiding students from 'spot the factor' to using a writing frame for extended conclusion.	Not applicable
What really changed in ancient medicine?	Summary asking students to place individual aspects of medicine (surgery, treatments etc) on a change–continuity washing line. Can be annotated and saved for comparing with other periods.	20–21
<b>The Middle Ages</b>		
Introducing medicine in the Middle Ages	A starter to get students thinking, providing clues on key aspects of society for students to suggest impact on medicine. Plus 'true or false' consolidation activity.	18–19 or 54–55

Can you stop the Black Death?	Decision-making activity tracing development of Black Death and introducing ideas about its causes and methods of stopping its spread.	<b>52–53</b>
Did they really care about keeping clean?	Asks students to use evidence to create hypothesis about the public health system, using an illustration of 14 <sup>th</sup> century London.	<b>46–47 or 144–45</b>
What really changed in medieval medicine?	Summary asking students to place individual aspects of medicine (surgery, treatments etc) on a change–continuity washing line. Can be annotated and saved for comparing with other periods.	<b>54–55 or 61</b>
<b>The Renaissance</b>		
Introducing medicine in the Renaissance	A starter to get students thinking, providing clues on key aspects of society for students to suggest impact on medicine. Plus ‘true or false’ consolidation activity.	<b>62–63</b>
Was the Renaissance an important period in medical history?	A web page to evaluate, redesign and rewrite to give a fuller and more accurate portrayal of the impact of the Renaissance on medicine.	<b>66–67</b>
Why did Pare change surgery?	Activity tells Pare’s story, with students identifying factors and recording their impact, then creating a diagram to show links between factors.	Background for Source Enquiry on surgery
What really changed in Renaissance medicine?	Summary asking students to place individual aspects of medicine (surgery, treatments etc.) on a change–continuity washing line. Can be annotated and saved for comparing with other periods.	<b>66–67</b>
<b>The Industrial Revolution</b>		
Introducing medicine, 1750–1900	A starter to get students thinking, providing clues on key aspects of society for students to suggest impact on medicine. Plus ‘true or false’ consolidation activity.	<b>90–91 or 94–95</b>
Spot the continuities!	Ten short video clips, filmed at the Thackray Medical Museum, asking students to identify how these features of 19 <sup>th</sup> century medicine were continuities from earlier periods.	<b>116–17</b>
Why were towns so unhealthy?	Investigation based on nine contemporary images, asking students to identify public health problems and why they existed.	<b>152–57</b>
Public health or Pasteur? Why did health begin to improve?	Summaries of health in 1700 and 1900 leading to a drag and drop activity comparing the impacts of developments in public health and germ theory.	After section 9
The revolution in surgery	An investigation of surgical problems and reforms leading to students amending and completing a draft PowerPoint presentation	in Dynamic Learning 2, divided by period.

What really changed in Medicine 1750–1900?	Summary asking students to place individual aspects of medicine (surgery, treatments etc) on a change–continuity washing line. Can be annotated and saved for comparing with other periods.	<b>94–95</b> or Conclusion
<b>The twentieth century</b>		
Introducing medicine since 1900	A starter to get students thinking, providing clues on key aspects of society for students to suggest impact on medicine. Plus ‘true or false’ consolidation activity.	<b>92–93</b> or <b>94–95</b>
Penicillin – who, when and why?	Students identify the range of factors involved and then rank them in importance.	<b>124–25</b>
Create your own story of the NHS	Students create a MovieMaker presentation using the images, source and weblinks provided.	<b>172ff</b>
What really changed in Medicine after 1900?	Summary asking students to place individual aspects of medicine (surgery, treatments etc.) on a change–continuity washing line. Can be annotated and saved for comparing with other periods.	<b>92–93</b> or <b>94–95</b>
The discovery of DNA: why did it happen then?	Activity tells the story of DNA with students identifying factors and recording their impact, then creating a diagram to show links between factors. Can be annotated and saved	<b>108ff</b>

## Medicine and Health Through Time Dynamic Learning 2: Review and Revise

By Ian Dawson and Dan Moorhouse  
ISBN 978 0340 946 725

### Image and Source banks

These sections bring together all the documents, artwork and photographs used in Dynamic Learning 1 and 2 for use by students and teachers in MovieMaker and PowerPoint presentations.

### Links to the Student's Book

These activities can all be used for revision, but some can be used on other occasions during the course, and you can use the Lesson Builder function to extract sections of activities for use when covering individual periods.

Activity title	Description of activity	Book section or page link
<b>Themes</b>		
Public health through time	Students are given a range of sources from which they first assess the quality of public health provision in each period. From this they can create their own MovieMaker presentation.	Section 9
Surgery through time	A summary activity. Five short activities reinforce students' knowledge of individual periods. The final activity requires thinking across the whole history of surgery.	Source Enquiry on surgery
<b>Factors</b>		
The impact of wars through time	Students build up a help–hindrance 'washing-line' from sources and pictures, showing the various effects of war across time. The completed activity and summary screen can be annotated, printed or saved.	188–9
The impact of governments through time	A research activity, possibly to be done as a class, with groups investigating different topics. Results are recorded on a summary screen, which can be annotated, printed or saved.	188–9
<b>Chronology</b>		
When do they come from?	Fifteen images are provided – the students' task is to identify the period each image comes from. This can be extended into an inference exercise – what does each image tell you about medicine at this time? Can be used as revision or just use two or three images as a sharp lesson-starter.	Conclusion or use Lesson Builder to extract items for use in period enquiries.
What happened first?	Twelve cards – click on pairs and decide which came earlier in history. Revision or a sharp lesson starter.	Conclusion
Healers and treatments through time	This activity is about anachronism – students choose a period, then select from a given set of options the items that do not belong in that period.	Conclusion

<b>Historical skills</b>		
Using sources	Students develop source skills using 'The Court of King Cholera' cartoon.	<b>152–155</b> or as preparation for Source Enquiry
Source analysis	Students develop source skills with two written sources and one visual source.	Source Enquiry preparation
Changes and continuities	This activity brings together the 'What really changed...?' activities in Dynamic Learning 1 so that students can create clear visual summaries of the major changes and continuities in each period.	Conclusion
Change or continuity?	Eight images and sources – decide whether they are evidence of rapid change, slow change, continuity or regression.	Conclusion
How have factors affected the development of medicine?	Eight developments – decide which factors were behind each development.	Conclusion
Why did it happen then?	Students create a factors chart showing why changes took place in the Renaissance period. There are two levels of difficulty.	<b>82–83</b>
<b>Test your knowledge</b>		
Why are they famous?	Students click on pairs of cards to see if they can link each individual to their achievement. Four screens cover a wide range of key individuals.	Conclusion
The history of medicine – Blockbusters	A simple Blockbusters revision game – for individuals or teams.	Conclusion
Quiz time	Quiz games on each of the major periods of medical history.	Conclusion
<b>Smarter Revision</b>		
Treatments and preventative measures in medicine	Create a set of Top Trumps cards on different aspects of treatments and prevention.	Conclusion
Individuals in medicine	A second Top Trump card activity – this time on individuals.	Conclusion
Medicine dingbats	Students create cards identifying key aspects of a person's work or a development, then play Dingbats with them.	Conclusion
Make your own revision cards	Students create cards helping revision of major themes, periods and factors.	Conclusion
How did life in Egypt affect medicine?	A structured inference activity using an illustration from the Student's Book, <b>page 22</b> .	Not applicable
Public health from the Romans to the Saxons	Students annotate artwork images to record key features of public health during and after the Roman period.	<b>46–47</b>

Pasteur, Koch and the development of germ theory	Students drag six sentences into the correct order to summarise this story.	<b>104–107</b>
Why did medicine and health change in the 19 <sup>th</sup> century?	Students choose from a list of factors to identify the factors leading to a series of developments in the 1800s.	Conclusion
Factors in medical history	Students label a factors diagram.	Conclusion
<b>Source bank</b>	All the documentary sources used in Dynamic Learning 2, divided by period.	
<b>Image bank</b>	All the artwork images and photographs used in Dynamic Learning 2, divided by period.	
<b>Animation bank</b>	Six short explanations with illustrations on: 1) Egyptian ideas about the causes of illness 2) Hippocrates and the four humours 3) Galen, dissection and anatomy 4) Harvey and the circulation of the blood 5) Jenner and vaccination 6) Magic bullets	
<b>Video bank</b>	Nine short pieces of film, made with the help of a re-enactment group, showing consultations between medieval healers – a physician, a surgeon and a wise woman – and their patients. Each section can be used separately.	<b>44–45 or 56–57</b>

## Medicine and Health Through Time Dynamic Learning 3: Exam Busters

By Ian Dawson and Dale Banham

ISBN 978 0340 991 411

Published in June 2010

### Links to Student's Book

Note – the final column notes the pages or section to which each activity is most obviously linked. However many of the CD activities can be used in a variety of ways, as introductions, as the main way

of covering a topic or as a conclusion or revision and which approach you choose may well vary from class to class.

Activity title	Description of activity	Book section or page link
<b>Smarter Revision templates</b>		
Living Graph	This type of graph can be used with the Big Story activity to build initial patterns of change and continuity, and can then be revisited and revised throughout the course.	<b>8–9</b>
Memory Map	This activity is set up in the book for the ancient period, to record the key features of medicine, but the template can be used for every period.	<b>20–21</b> and each section
Role of the Individual Chart	This chart is introduced for Hippocrates, but the template can be used to build up a set of charts for a range of individuals.	<b>57</b> and all important individuals
Factors Chart	This chart is introduced to record the impact of factors on ancient medicine, but the template can be used for all periods.	<b>118–119</b> and all other periods
<b>The Big Story</b>		
Medical moments in time	These screens reproduce the five reconstruction drawings, with speech bubbles voiced by actors. They can be used in conjunction with the Living Graph template.	<b>16–17, 18–19, 54–55, 68–69, 90–91 92–93</b>
Big story of medicine	Students build up a sense of the overview, pasting clues onto a timeline.	<b>4–9</b>
<b>Ancient medicine</b>		
Review story	Students can record or write their summary of ancient medicine, using a series of images provided on PowerPoint slides.	Not applicable
Natural or supernatural?	A review activity asking students to decide whether a series of treatments and ideas about illness were prompted by natural or supernatural ideas.	Section 2
How long did the ideas of Hippocrates and Galen last?	A timeline activity asking students to suggest which period a series of sources come from. The resulting timeline summarises the lasting impact of the ideas of Hippocrates and Galen.	Big Story and throughout

<b>The Middle Ages</b>		
Saving Galen	A voice-over account of how Galen's work was preserved in Europe and in Arab literature, leading students to annotate a map to summarise the key points.	<b>48–49</b>
What do they tell us about medieval medicine?	A series of visual and documentary sources to help students develop their inference skills. Each item can be annotated on screen and printed for revision.	Sections 2 and 3
<b>The Renaissance</b>		
How would you treat Charles II?	A decision-making activity leading into a summary activity identifying changes and continuities in Renaissance medicine.	<b>68–69</b>
How did they try to stop the plague spreading in 1665?	A research task asking students to identify the methods used in 1665 and compare them with those used in the 1340s.	<b>148–49</b>
<b>Medicine in 1800</b>		
What can we learn about Jenner?	Activities focusing on key visual sources, aimed at developing source skills.	<b>100–3</b> or as preparation for Source Enquiry
<b>Fighting disease</b>		
The story of Pasteur and Koch	The story told by Pasteur and Koch, each giving his view, followed by a set of PowerPoint illustrations on which students can record their version.	<b>104–7</b>
<b>Public health</b>		
The Mystery of the Water Pump	Students follow the footsteps of John Snow, uncovering evidence explaining why cholera hit some streets but not others.	<b>163</b>
<b>Surgery since 1800</b>		
Investigating the surgical revolution	An open-ended enquiry enabling students to explore in their own ways three possible questions: <ul style="list-style-type: none"> <li>• Why did these breakthroughs happen?</li> <li>• Why was there opposition?</li> <li>• Which breakthrough was most significant?</li> </ul>	Surgery Source Enquiry
<b>Conclusion</b>		
The road to Bacteriaville	Students can record a commentary on the reconstruction drawing, explaining the significance of each detail.	<b>182–83</b>
Factors football field	A summary activity enabling students to place the factors on the field to show their relative impact on medicine. The screen can be annotated with evidence.	<b>188–89</b>

## Dynamic Learning Lesson Builder

In *Medicine and Health Through Time Dynamic Learning* you will also find a Lesson Builder like the one shown below. This allows you to mix together into a single lesson or lesson sequence any of the following:

- time CDs
- resources from your own virtual learning environment (VLE)
- web-based resources and investigations.

## Familiarise yourself with the CD

Think of the Student's Book, the Teacher's Resource Book and the Dynamic Learning CD as parts of a whole. They belong together. Make sure you have familiarised yourself with the Dynamic Learning activities as well as the contents of the

books. These sometimes provide different ways of tackling the same task. **Pages 00–00** of this book summarise all the activities that are on *Medicine and Health Through Time Dynamic Learning* 1, 2 and 3. We have gone to town, with dozens of innovative and engaging ICT-based interactive activities, Flash animations, demonstrations, starters and plenaries and more. These are designed for use on the interactive whiteboard or on computer networks and VLEs. Variety of approach is clearly important in maintaining pupils' interest and motivation, but this whole set of resources has been put together to help you plan coherently without sacrificing varied learning styles. The choice of which resources to use has got to be determined by the nature of each class, the context of the lesson and the learning needs of the pupils – and that is where your professional judgement will make the best of the variety of resources on offer.

DL Home

A contents screen from Dynamic Learning 1.

Type	Name of Resource	Title	
<b>Lesson notes</b>			
1	Sample lesson notes: Black Death	Medicine and Health Through Time 1	N/A
<b>Starter Activity: What was medicine like in the Middle Ages?</b>			
1	2.1 Hotel Dieu	Medicine and Health Through Time 1	Middle Ages Image Bank
2	2.3 Physician tending to patients	Medicine and Health Through Time 1	Middle Ages Image Bank
3	2.2 Arab diagram of herbs	Medicine and Health Through Time 1	Middle Ages Image Bank
4	Middle Ages 1B: Introducing medicine in the Middle Ages	Medicine and Health Through Time 1	Middle Ages Activity 1
<b>Study in Depth: The Black Death (Section 1)</b>			
1	2.5 Edward III	Medicine and Health Through Time 1	Middle Ages Image Bank
2	Middle Ages Activity 2A: Can you stop the Black Death?	Medicine and Health Through Time 1	Middle Ages Activity 2
3	Middle Ages 2: Voting Activity 1	Medicine and Health Through Time 1	Middle Ages Activity 2
4	Middle Ages 2: Voting Activity 2	Medicine and Health Through Time 1	Middle Ages Activity 2
5	Middle Ages 2: Voting Activity 3	Medicine and Health Through Time 1	Middle Ages Activity 2

## Useful books and websites

### Books

Ian Dawson and Ian Coulson, *Medicine for Edexcel*, Hodder Education, 2001.

This book contains some detailed information and some activities that have been omitted from this new publication. The accompanying TRB also contains a wide variety of activities that can supplement this book.

*Teaching History*, the quarterly journal of the Historical Association, contains many articles of importance for teaching the history of medicine even if they don't deal with the specific content. Successful teaching depends on a good understanding of a wide range of aspects of teaching and learning – building effective discussion, helping students develop extended writing skills, building understanding of individual concepts and many more. So a subscription is a really worthwhile investment and members of the HA can read back-numbers on the HA website [www.history.org.uk](http://www.history.org.uk)

### Websites

[www.schoolshistoryproject.org.uk](http://www.schoolshistoryproject.org.uk)

SHP website providing information on SHP's aims and principles plus news of the annual conference, courses and publications and a range of resources from course planning to teaching activities.

<http://www.thinkinghistory.co.uk/>

Run by Ian Dawson, providing a wide range of kinaesthetic activities for all ages, including a wide range of 'Medicine' activities.

<http://www.edexcel.com/Pages/home.aspx>

The website for the Edexcel examining group.

<http://www.qcda.gov.uk/>

Qualifications and Curriculum Development Agency (QCDA) website.

<http://www.qcda.org.uk/history/innovating/>  
History-specific site with a lot of good ideas.

<http://medicinethroughtime.co.uk/>

Run by Dan Moorhouse, focusing on ideas and resources for teaching 'Medicine'.

<http://www.thackraymuseum.org/>

Thackray Museum, Leeds, a 'must visit' site for many schools doing 'Medicine'. Ian Dawson, former SHP Director and one of the authors of this book, helped design the museum and wrote the first GCSE resource pack. Resources available by post include the Hannah Dyson ordeal DVD/video on early 19<sup>th</sup> century surgery. You can now also download lectures on medical history.

<http://www.sciencemuseum.org.uk/broughttolife.aspx>

Online from 2009, this site provides a very wide range of sources, organized partly with teachers in Mind. Chris Culpin, former SHP Director, played a part in its planning.

<http://www.medicalmuseums.org/>

Site providing information on a range of medical museums in London.