



# HEALTHY HEROES

## *Teachers Guide*

### *Sleep*

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# 1. Introduction to the SimplyHealthy@Schools program

The Healthy Heroes toolkit is part of the Philips SimplyHealthy@Schools program. SimplyHealthy@Schools is a worldwide sustainability program from Philips to teach children aged 8-12 years how to improve their health and well-being in a simple way and thereby improve their school performance and fitness levels.

Research has shown that environmental factors (such as light and air quality) can be improved significantly, as can children's habits (e.g. drinking more, getting more exercise or improving sleep habits). Once these factors have been improved, children perform better and their overall mental and physical well-being also improves.

The 'power of sleep' is an extra module in the SimplyHealthy@Schools program. It is based on important research about children and sleep from the Australian Centre for Education in Sleep (ACES - [www.sleepeducation.net.au](http://www.sleepeducation.net.au)). The module on sleep can be used as part of teaching the full Healthy Heroes game, or can be used as stand alone module in the classroom.

## 2. The *Healthy Heroes* Sleep module

The aim of the Sleep module is to introduce primary school children to the importance of sleep and how to maintain good sleep habits. The program is based on many years of research and presents the latest evidence about sleep. Detailed below are instructions for delivering the Sleep module in class.

### **2.1 The Healthy Heroes Sleep Module in your class**

The Healthy Heroes Sleep module has 5 free resources that are all available online and downloadable:

Resource 1 - A teacher's guide to the Healthy Heroes Sleep module.

Resource 2 - A poster of Joey.

Resource 3 - A powerpoint presentation with slides covering 7 topics about sleep. Each topic has 4 slides.

Resource 4 - The assignments that go with each topic. Each assignment has 2 slides.

Resource 5 - A parent information brochure.

**Before starting, read Resource 1 - the complete Teachers Guide.** Resources 2 to 4 are for the students. They can be either printed out and given to the students or beamed via the Internet through the website - [www.simplyhealthyatschools.com.au](http://www.simplyhealthyatschools.com.au)

Resource 5 is for the parents or caregivers. Health education research shows that if parents are involved in their child's learning and understand it, they are more likely to support it. So if you wish, you can also print this special handout for parents from the website. The handout is very useful with lots of tips and suggestions about the power of sleep, avoiding sleep problems and good sleep hygiene. The children can take this handout home during or after the program so their parents know what the children have learned and can support them to become (or stay) good sleepers.

For running the special sleep module, you will need large sheets of paper per group(s) to be used as Group Activity Posters, individual smaller pieces of paper for writing the lists in topic 2, 3 and 4, pens and pencils and you may need some additional tools such a stopwatch. Make sure you have this guide with you so you can check your student's answers and provide extra information when appropriate.

## **2.2 How to run the program**

### **Groups**

To allow for the most interaction and to enhance group work skills, we suggest splitting the class into groups. Every group has to sit together and must choose a group representative. The groups will then work on the assignments and their Group Activity Posters together. If this is not preferred, it is of course also possible to discuss the assignments and do the activities with the entire class as a whole.

### **Explanation of the program**

Each topic has four slides [for example, Topic 1 has slide 1A, 1B, 1C and 1D). The topic and its assignment can be completed in approximately 10-15 minutes. This is without taking into account time spent in classroom discussions.

You, the teacher will introduce each assignment topic. There are 7 topics:

Topic 1 - Why Joey needs sleep

Topic 2 - Trouble falling asleep

Topic 3 - Sleep hygiene

Topic 4 - Before bed

Topic 5 - The stages of sleep

Topic 6 - Snoring

Topic 7 - How much sleep do we need?

Each of the 7 topics has four slides with similar components:

1. One or two slides giving the basic information about the topic (Resource 3)
2. Information gathering activities and links to online resources, as well as group classroom activities and discussions that will help the students to get additional information about the topic. For this there must be an Internet connection and there may be equipment needed (explained below). When there is an activity to do, you will see the Joey symbol:



3. Each of the topics will require the group(s) to add information onto their Group Activity Posters
4. When the class has finished the topic and the class activities that go with it, they are then to complete the assignment allocated to the topic (Resource 4 - assignments and the answers to the assignments are described in detail below). When there is an assignment to do, you will see this star symbol:



### **Rewards**

At the end of each assignment, the teacher can allocate “Joey points” to students or groups for correct answers to the assignments. You can assign points to each member of each group for work well done, or good contributions to the class discussion or just for the correct codes to the assignment answers. You can then tally the Joey points for each group and install a “Healthy Sleep Competition” game in the classroom. Additional points may be given for good work when presenting information to the class.

What reward will the group with the most points get?

Perhaps, when the children have been allocated their Joey points for the correct codes, they can stick up their results on the poster of Joey (Resource 2). If you have decided not to print the poster of Joey, you can beam the poster of Joey.

## Duration

You, the teacher can deliver the program in a variety of ways depending on your schedule and time allocation. The options are:

1. *Each topic can last for an entire class period*

Dedicate one lesson per day or per week to one sleep topic. You can also include sleep information into other curricula areas (see below). This method can therefore include homework activities for students to do with parents. Engaging parents is necessary if children's sleep habits are to be healthy.

2. *Condensed version - Short version*

Beam or distribute the first four assignments to the group(s) and allow a certain time to do them. As each assignment takes about 10-15 minutes then 4 assignments will take up to one hour. You can distribute the assignments and then start a timer.

After an allocated time distribute the last three assignments to the group(s) and start the timer again

3. *Long version (90 minutes)*

Beam or distribute the first assignment – every group gets the same assignment – and start the timer. After 10-15 minutes you can distribute the next assignment and start the timer until all 7 assignments are complete.

## Now you are ready to start

Once you have read this manual and understand how the program works, you are ready to start. Introduce Joey to your class. You can print his image on the poster or beam the online pdf. Now read out the introductory text to the children or read out a text of your own.

### Introductory text

*“Hello boys and girls, I would like to introduce you to Joey. Here he is on your classroom wall. Joey is about your age and he is smart, funny and happy, just like you. You might think that nothing is wrong, BUT... there is a secret that almost nobody knows. The secret is that Joey has special powers. One of those powers is the power of sleep. Joey has the power of sleep.*

*The thing is... before you can use the power of sleep, you must first know where to find it. I am asking you today to help me find the power of sleep, just like Joey. We're going to make him stronger, make his brain think faster, make his body fitter, make his eyes shine brighter, make his concentration level higher. And the best part is yet to come... once we've discovered the powers, we can use them to empower ourselves too! Sounds like a good plan, doesn't it? So let's get started and find the power of sleep!”*

Introduce the theme of sleep (you can find an introduction on the theme in Section 3 of this guide or you can source additional information from [www.sleepeducation.net.au](http://www.sleepeducation.net.au)).

Explain to the children what they are going to do as described above.

Explain to them about the assignments and how they will be rewarded with Joey points for correct answer codes.

### 3. About the assignments

Practical assignments provide children with the tools to immediately apply what they have learned in practice. Conceptual assignments will allow the students to think independently in order to find the solution. Each topic has a corresponding assignment. Students must find the “power of sleep” by doing the 7 special assignments.

Look at the assignments (Resource 4). On the first slide there is a summary of the information learned in the topic. On the second slide there are two questions with two possible answers each. Each possible answer is numbered. The correct answers should be written down in order.

For example: The right code for Assignment 1 is: ■ 3

This is because the correct answer to the first question in Assignment 1 is the number 1 and the correct answer to the second question in Assignment 1 is the number 3. This gives a code of ■ 3

Correct codes for each assignment are listed at the end of this Teacher’s Guide. When assignments are finished get the answers and allocate “Joey points” for correct answers.

When each assignment is completed, information about the topic can be added onto the Group Activity Poster. It is best to do this in the classroom but homework activities can be added if required.

As there are 7 assignments, Group Activity Posters will have (at least) 7 sections.

No.	Topic	Equipment needed	
1	Why Joey needs sleep	NA	ALL 7 assignments require Group Activity Posters and Internet connection is needed for all topics
2	Trouble falling asleep	Pen and paper	
3	Sleep hygiene	Pen and paper	
4	Sleep hygiene before bed	Pen and paper	
5	The stages of sleep	NA	
6	Snoring	Stopwatch or timer	
7	How much sleep do we need?	Sleep diary (from <a href="http://www.sleepeducationnet.au">www.sleepeducationnet.au</a> )	

## 4. About the 7 topics and answers to the assignments

### **Topic 1**

#### **Why Joey needs sleep**

Joey doesn't like to go to bed in the evening, because he thinks sleeping is a waste of time. But he is wrong! His body and his brain need 10 to 12 hours of sleep each night to stay healthy, smart and happy. His body needs sleep to rest (recharging the battery); to grow (new cells are made, Joey grows at night!); to heal (bruises and injuries); and to stay well. Joey's brain uses the time he sleeps to store all the information he got during the day. This is why Joey can remember things and is able to learn difficult things such as mathematics and foreign languages and has good attention in class.

### **Topic 2**

#### **Trouble falling asleep**

Joey has problems falling asleep because he doesn't feel tired in the evening. That's why he is secretly playing games or reading comics in bed, which make the problem only worse. There are lots of things that keep us from falling asleep easily. For the best sleep Joey needs to turn off television and any other screens about an hour before sleep time so his body has the time to relax. Sometimes things INSIDE Joey can also stop him from sleeping such as feeling scared or worried. Joey uses relaxation exercises if he has trouble falling asleep.

Questions for group discussion before starting the assignment: Who has problems falling asleep? What kind of problems?

### **Topic 3**

#### **Sleep hygiene**

To make sure Joey falls asleep more easily and can benefit from a good night's rest, he has to improve his sleep hygiene. This could start by washing his face, hands and teeth. His bed has to be a nice place to sleep in; perhaps clean sheets, no crumbs from his crisps. His room should be filled with fresh air (opening some windows in the morning). At night, his room should be quite dark (curtains closed, a small night light only). Joey has to prepare himself for the night by relaxing a little (no racing games before going to bed) and he should be careful of what he eats or drinks (no fizzy drinks or crisps right before sleeping). Going to bed at the same time each night is also part of good sleep hygiene.

Questions for group discussion before starting the assignment: Tell us about YOUR sleep hygiene?

### **Topic 4**

#### **Before bed**

In the evening Joey has problems falling asleep. He is alert and not sleepy and does things and sometimes gets scared. He needs to learn to relax. All these things, and many more, can keep Joey awake. On a piece of paper, the class will list on the left side, the things that stop Joey from falling asleep and on the right the things that help him to fall asleep.

Although relaxation was discussed in the previous assignment, it is important that we know how to relax. If you wish, you can take your class through this relaxation exercise. You can do the relaxation exercise described below or you can do the one described in the link on slide 4C.

Choose one group member to be the 'relax teacher', the other members are the pupils. All pupils have to lie down on the floor, facing the ceiling, eyes closed. Now the relax teacher must read the following text, very slowly with long pauses.

- All right everybody, this is what you should do if you can't fall asleep.
- Keep your eyes closed and breathe slowly... breathe in.... breathe out...breathe in...breathe out...very good...Count your breaths in and out. Every time your mind wanders, start counting your breaths again.
- Imagine you are standing on a mountaintop...the wind blows through your hair... it blows over your arms... your legs... your feet...
- You are as light as a feather... slowly the wind lifts you from the ground...
- There you go...flying over the valley... light as a bird...

Questions for group discussion before starting the assignment: Who is secretly awake while your parents think that you are sleeping? Why do you do that?

### **Topic 5**

#### **Sleep Stages**

When Joey sleeps, he goes through 5 stages of sleep.

- Stages 1 and 2 are light sleep.
- Stages 3 and 4 are deep sleep (almost no activity in his brain).
- Stage 5 is called the stage of REM-sleep.

REM means Rapid Eye Movement (Joey's eyes move rapidly, although they are still closed). This is a sign of brain activity and we store memories during Stage 5 - the brain is slowly waking up. REM sleep is when we dream and sometimes have nightmares. We often have a quick wake up after each REM cycle.

The graph on slide 20 shows the progression of the sleep stages. School aged children (and adults) go to sleep through Stage 1 and progressively move through to Stage 4. This takes about one hour. Then they go back up through the lighter stages to REM sleep (Rapid Eye Movement Sleep). This is when we dream. This is the completion of one sleep cycle and takes about 90 minutes altogether. This happens one more time. Then the sleep cycles stay mostly in stage 2 for the rest of the night and early morning, with increasing REM cycles. We often have a quick wake up after each REM cycle.

### **Topic 6**

#### **Snoring**

Joey's father snores REALLY, REALLY loudly! His father's sleep is not very good because he snores.

Joey's mother wakes up several times at night to make Joey's father stop snoring. Why does Joey's father snore?

The diagram on slide 24 explains why we snore. It is important to understand that sometimes if snoring is constant and regular, that this may need medical attention. People who snore a lot make a lot of effort during their sleep and their sleep is usually not restful. That is why we have tried to do a snoring experiment to show how much 'work' it is to snore and how it can make you tired.

### **Topic 7**

#### **How much sleep do we need?**

Joey needs the power of sleep to stay healthy, smart and happy. But he can only benefit from this power, if he sleeps long enough to pass all the five Stages of sleep during the night. Do you get the sleep you need?

Getting the right amount of sleep helps Joey to do better at mathematics, science and other subjects at school. Joey, who is the same age as you, needs between 10-12 hours per night to be his best.

Investigation of your sleep habits:

- What time did you go to bed last night?
- What time did you get up?
- How many hours did you sleep last night?
- How many hours of sleep do you think you need?

The students can discuss this in the class or they can go home and record their sleep (their bedtimes, their wake times, what they did before bed etc.) as a homework activity.

Answers could be presented to the class in arrange of formats such as graphs, tables and other diagrams which will enhance their mathematical skills in such things as averages, graphing, data sets, mean, mode and median, and predicting.

### **Optional Critical Enquiry Projects**

At the end of their 7 topics, teachers can choose to give the students a larger project based on sleep – a Critical Enquiry Project based on the question:

“How much sleep is enough?”

The assignments they have done can be integrated into a classroom, group or individual project. This can be in one of a few ways:

1. Each day they complete an assignment they will add information about that topic onto their Group Activity Poster. The Group Activity Poster can be used as the basis for a group presentation to the class, school or parent community. As there are 7 assignments, so their Group Activity Posters will need at least 7 sections.
2. A separate project where the students can use one of the topics and present it to the class, school or parent community via a delivery method of their choice. For example: **poems** or **songs** about sleep/ dreams, **persuasive writing** on ‘A full night’s sleep is important’ or a **newsletter article** explaining to the community about the importance of sleep.
3. Other topics for classroom projects are available at [www.sleepeducation.net.au/downloads.php](http://www.sleepeducation.net.au/downloads.php) in the Teacher section.

### **Answers to the SLEEP assignment**

	Answers to question A	Answers to question B	CODE
Assignment 1	1	3	<b>1 3</b>
Assignment 2	2	3	<b>2 3</b>
Assignment 3	2	4	<b>2 4</b>
Assignment 4	2	3	<b>2 3</b>
Assignment 5	1	4	<b>1 4</b>
Assignment 6	2	3	<b>2 3</b>
Assignment 7	1	4	<b>1 4</b>

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