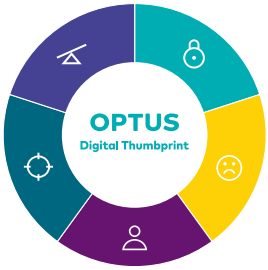
Digital Balance Resource Pack

October 2019

OPTUS | Digital Thumbprint

Introduction

The **Optus Digital Thumbprint** program teaches young people to be safe, responsible and positive online through free, curriculum-aligned workshops that are fun and interactive. The Digital Thumbprint program has five key topics:



- **Cyber Security**
- **Cyberbullying and Respectful Relationships**
- **Online Digital Identity**
- **Digital Discernment**
- **Digital Balance**

Each workshop focuses on two of these topics as Core Concepts.

This document contains the teacher resources, top tips and take home sheet that support Digital Balance - the benefits of a balanced online/offline life.

The two lesson plans are to be used by teachers in providing students with an interesting and engaging lesson around how technology can help you study better and learn more. Each section of the lesson plan contains: the overall aim of the section, an approximate timing for the section, the interaction between teachers and students, as well as a description of the material and suggestions of how it should be delivered for maximum impact.

Lesson Plans:
These lesson plans are organised by section, interaction type, and description. The section contains important information about the purpose of each phase as well as an estimated time allocation. The interaction describes the ideal flow of information between teachers (T) and students (S). For example, a T-S interaction could be a teacher asking questions and a student replying. An S-S interaction could be students working in pairs. The description explains the actions and questions or concepts that are communicated throughout the lesson. Teachers can use this information as a 'run sheet' for the session to ensure it runs smoothly.

Student Top Tips:
The top tips include some of the most important points students will have learnt in the Digital Thumbprint workshop. These tips will help students to assist them in being productive with their studies.

Parent Take Home:
The take home sheet is a resource for parents that allows them to have a structured conversation with their children about difficult topics. Parents are provided with example sentences and answers which can help them navigate a conversation about how technology can help you study better and learn more. These resources can be printed and sent home with students and/or included in school newsletters.

Digital Balance Lesson Plan 1

Section	Interaction	Description
Intro Lead-in to set the context 3 min	**T-S**	Tell the students that today you're going to look at how technology can help them study better and learn more. "First, we're going to have a quick poll about how much study everyone does and how effective everyone thinks it is." Ask students to raise their hands if they: 1. Cram a few weeks before a big exam or assignment. 2. Study less than half an hour every night. 3. Study between a half hour and an hour every night. 4. Study between one hour and two hours every night. 5. Study more than two hours every night. For each group, 1 to 4, ask everyone who would like to study less for the same results? "In this lesson, we're going to look at how you can get more out of the hours you do study."

Section	Interaction	Description
Knowledge To give students understanding of how technology can be used to help learn something 25 min	S-S	Teachers arrange students into groups based on the following "weird" subjects: • History of the films of Chuck Norris • The influence of Mongolians on Professional Sumo Wrestling • History and meaning of Mexican Soap Operas 1990 to 2003 • Mayan counting systems • Japanese doll types The teachers will then ask students to imagine that they will be given an exam on the subjects in six months. They will pretend that the subject will be taught like a regular subject by the teacher and that they will have a textbook on that subject. Ask the groups to discuss how they might study for the "exam" like it was one of their regular school subjects. Each student should discuss the following questions: • How would they use technology to help them study for that subject? (i.e. how might technology remove distractions?) • How might technology make it harder to study for that subject? (i.e. how might technology distract them?) Ask the students to identify one positive change and one negative concern involving technology that they could apply to studying for their regular school subjects.
Self-efficacy To allow students to identify how they can improve their study habits by using technology 10 min	T	Ask students to think about the "weird" subject that was introduced earlier in the lesson and ask them to think about: • When they will study? (i.e. every night, a few weeks before the exam, etc.) • How long they study for each time? • How will they study? (i.e. read a book on the subject and highlight what they think is important, etc.) • Where will they study? Teachers will then hand out a bunch of "learning tips" (based on education and learning research) divided into the do's and don'ts (see below). These tips include sections on applications and programs that can help you implement the "DO" tips. **DO** • Use retrieval practice. Retrieval practice is testing yourself regularly about the key ideas in anything new you're learning. One common way of this is creating flashcards of the key ideas as you're reading the material for the first time and then testing yourself regularly. • Use the spacing effect to help you learn. The spacing effect is the phenomenon where you spread out studying what you need to learn over time, regularly revising material that you've previously studied. There is an algorithm that determines the best way of spacing out study materials and many of the programs listed below use this algorithm. • Look for desirable difficulties in your study methods. The more difficult it is to study a certain way (i.e. the more you must think), the more likely it is to lead to long term learning. Creating quizzes is harder than highlighting key passages, but you're more likely to learn more over the long term. • Make sure you get feedback on how you're performing and concentrate on the areas where you're struggling. Studying material you already know well is counterproductive.

Self-efficacy
continued...

DO - continued...

- Delay feedback where possible.
  While you need feedback to see where you need improvement, don't look at the question and answer at the same time. One example of how to study this way is completing a mock exam and then waiting until the next night to review the answers.
- Interleave different, but related types of problem during a study session.
  For example, say that you are learning how to calculate the volume of a three-dimensional solid. Instead of trying to solve how to calculate the volume of three different sized pyramids in one study session and leaving problems involving cylinders and cubes to another night, you're better off trying to solve how to calculate the volume of a cylinder, pyramid and cube all in one study session. Interleaving problems this way is like using the spacing effect and also means you learn the underlying principles quicker.
- Reward yourself after focusing for a reasonable block of time.
  There is a limit to how long you can concentrate, so reward yourself with five minutes of social media, internet, etc. after twenty-five minutes of intense focus. Use a Pomodoro timer.
- Organise your learning by ensuring that you're studying in the most efficient and effective way possible.

DON'T

- Re-read the materials again and again until you feel you've "mastered it".
  Reading takes a lot of effort for very little long-term memory return and it is easy to mistake familiarity for understanding. It's a very inefficient way of studying, even though it feels like you're working hard.
- Re-reading highlighted passages.
  Highlighting key passages in a textbook is somewhat productive for understanding the text (though not as effective as rewriting the passage in your own words), but re-reading the highlighted passages is the same is reading it again.
- Try and memorise things by cramming before the exam.
  Cramming is effective for one or two days, but results in forgetting more after that time period (i.e. you'll end up remembering less than if you'd studied a little over a long period). Unless you can study everything that might be in an exam the day before, you'll actually perform worse by cramming.
- Try to multi-task.
  Multi-tasking increases stress hormones and overstimulates the brain. We're designed to focus on one thing at a time. While switching between subjects during one study session is a good way of interleaving, you're still focusing on one thing during that time. Reduce distractions using some of the technology listed below.

How technology can help you study

Spacing effect, feedback, delayed feedback and desirable difficulties

These free programs allow you to create your own flashcards or quizzes and then use an algorithm to determine when you should use them.

They utilise the principles behind retrieval practice, the spacing effect, feedback, delayed feedback and desirable difficulties to help improve your learning.

- Anki (ankisrs.net)
- Cobocards (cobocards.com)
- Brainscape (brainscape.com)
- Memrise (memrise.com)
- Mnemosyne (mnemosyne-proj.org)
- Supermemo (supermemo.com)
- Synap (synap.ac)

Section	Interaction	Description
Self-efficacy continued...	**T**	**Reduce distractions** The following programs may be helpful for ensuring that you don't have any distractions: • **Rescuetime:** This program shows you how you're using your time on the computer and gives you detailed reports and data based on your computer activity. It can also block certain websites or applications if you spend too much time on 'distracting time'. It doesn't work on iphones. (rescuetime.com) • **Toggl:** This program gives you an overview of how much time you have spent for different tasks. (toggl.com) • **Freedom:** This program enables you to block websites and apps based on "blocklists" that you create. You can set them for any time and place. (freedom.to) • **Leechblock (Firefox) and StayFocusd (Chrome):** These browser add-ons organise websites into categories and lets you set how and when to block them. **Organise your learning** • **Todoist:** This program allows you to manage your study schedule. (todoist.com) • **Evernote:** This program is designed for note-taking, organising and archiving. (evernote.com) **Pomodoro timer** • The Pomodoro technique is a study technique where you study for 25 minutes, then take a 5-minute break, and then continue studying for another 25 minutes. Using this technique enables you to avoid multi-tasking and concentrate for 25 minutes before taking a break. (gigaom.com/2010/11/10/9-free-pomodoro-timers)
	S-S	After you've gone through the DO'S and DON'TS, ask the same pairs to then act as "life coach" for each other, suggesting ways to improve each other's time management and study habits using the technology listed in the hints sheet. In acting as a life coach, students should answer the following questions: 1. What do they think is the most effective way to study? 2. How much of their time is spent in the most effective way to study? Why/why don't they spend all their time studying that way? 3. How can technology help them improve their studying?

Section	Interaction	Description
Conclusion Ensures students have understood the knowledge given and are prepared to improve their study habits 5 min	**T-S**	Give students a quick, verbal true-false test about study myths (i.e. questions on the DO'S and DON'TS): 1. It's better to study for three hours, for two nights before a test than study for one hour, once a week, for six weeks leading up to the test. [False - Research shows that it is better to allow yourself to forget some material before testing yourself after a short interval. By cramming a couple of nights before the exam, you will actually remember less of the material.] 2. After highlighting key passages of a textbook, it is best to create a flash card or quiz about the meaning of each highlighted passage. [True - Highlighting a passage is useful for identifying what a particular part of the textbook means. To remember the contents though, is much more effective to test yourself than it is to try and memorise it by rereading.] 3. If I'm studying for a mathematics exam, it's best to dedicate an entire night mastering one kind of problem before moving on to new types of problems. rather than trying to study different kinds of problems. [False - Interleaving is a form of study where you practice different, but related types of problem during a study session. Interleaving problems this way is using the spacing effect as well as teaching yourself the underlying principles quicker.] 4. If you are finding it difficult to study a certain way, it's always best to switch to a study method that feels a lot easier. [False - While there are some cases where it's good to make studying easier, the general principle is that anything that requires more effort and that slows down learning usually makes your learning stronger, more detailed and longer lasting. The methods I've suggested in this lesson are all good examples of "desirable difficulties" that will lead to an improvement in your study even though they seem harder.] Ask students if today's lesson will change how they study.

Digital Balance Lesson Plan 2

Section	Interaction	Description
Intro Lead-in to set the context 3 min	**T-S**	Tell the students that today you're going to look at how technology can help them study better and learn more as well as how technology might hurt their study. Start the class by asking the following two questions: 1. Put up your hand if you think technology helps your study? 2. How much do you think technology hurts your study?
Knowledge To give students understanding of their study habits and how they might improve their own study habits using technology 12 min	**T-S**	Teacher asks the students to vote (by show of hands) for their favourite subject from a list of subjects offered at the school as well as their least favourite subject. The teacher will discuss with the students how they study for the two subjects during a regular school week, i.e. • When they study. • How long they study the subject for each time. • How they study the subject. • Where they study the subject. • Why do they enjoy studying their favourite subject? • Why don't they enjoy studying their least favourite subject? What are the differences?
	S-S	The teacher will then divide the students into teams. After discussing the details of study habits for each subject (good and bad), the students will then "create an app" that will help students study their most and least favourite subjects. They will then describe this app to the rest of the class. In "creating" the app, the students will provide an 'elevator pitch' that outlines: • What the problem they have with studying the subject (most and least favourite). • What the app does. • How the app will solve their "study problem". **Example** "Our team doesn't like studying geometry, because we get bored and draw in our textbooks instead of doing each exercise. The app we've designed gives students reward points for every geometry exercise they complete online and it'll make it much more interesting if we get something out of concentrating on the exercises." The students will vote by show of hands for which app they think will most help them study for their least favourite subject.

Section	Interaction	Description
Self-efficacy To allow students to identify what steps they can take to improve their study habits 10 min	**T**	Tell your students: • Programs that help you measure how you spend your time on your computer and/or mobile device. • Programs that help you block certain websites or applications on your computer/mobile device. • Programs that help you save anything you view on your computer/mobile device and then file them away for later use. • Programs that make it easy to create flashcards or quiz questions and then delivers those flashcards/questions at the right time to ensure long-term memory.
	S-S	The teacher will then divide the students into pairs. The students can then discuss how each of the apps might help them study the +ive subject and the -ive subject with reference to each of the questions answered above (i.e. how will it change when they study, etc.).
Conclusion Ensures students have understood the knowledge given and are prepared to improve their study habits 5 min	**T-S**	Students are asked what type of apps they are likely to use in the immediate future. For the type of apps they don't intend to use in the near future, the teacher will ask why they think they won't use it.

Handouts

Digital Thumbprint

Student Top Tips: Digital Balance

Finding a balance with your screen time and study habits is really important. The following tips will assist you in being productive with your studies.

Use retrieval practice to test yourself on new material.

- Retrieval practice is testing yourself regularly about the key ideas in anything new you're learning. One common way of this is creating flashcards of the key ideas as you're reading the material for the first time and then testing yourself regularly.

Using study methods that make you think.

- The more difficult it is to study a certain way (i.e. the more you must think), the more likely it is to lead to long term learning.
- Creating quizzes is harder than highlighting key passages, but you're more likely to learn more over the long term.
- Re-reading your textbooks is inefficient.

Organise your learning.

- Manage your time so that you're studying when you're focused.
- Make sure that the only thing that is difficult is the process of studying itself.
- Some applications/programs can help you identify when you're most productive.

Don't cram.

- Cramming is only effective if you can cover everything you might be asked about within the day of an exam. After the first day, it leads to a higher rate of forgetting than spaced study.

Don't try to multi-task during study.

- Reduce distractions (using programs or applications if you wish) so that you're not tempted to multi-task.

Mix up your problem types.

- Make sure you switch between different but related types of problems or questions in order to help you understand the underlying principles quicker.

Space out your study.

- The spacing effect is the phenomenon where you spread out studying what you need to learn over time, regularly revising material that you've previously studied. There is an algorithm that determines the best way of spacing out study materials and many of the programs listed below use this algorithm.

Get feedback.

- Get feedback on how you're performing and concentrate on the areas where you're struggling. Software that helps you create quizzes or flashcards is often useful here.
- While you need feedback to see where you need improvement, wait until you've made a genuine attempt to solve the problem before seeking feedback.

If you need more help or information contact:

Kids Helpline
call **1800 55 1800**
visit kidshelpline.com.au

or

Office of the eSafety Commissioner
visit esafety.gov.au

Digital Balance Parent Discussion Guide

The **Optus Digital Thumbprint** program teaches young people to be safe, responsible and positive online through free, curriculum-aligned workshops that are fun and interactive. The Digital Thumbprint program has five key topics:

- **Cyber Security**
- **Cyberbullying and Respectful Relationships**
- **Online Digital Identity**
- **Digital Discernment**
- **Digital Balance**

This sheet is intended to help you have a conversation with your child about how to study in the most effective way and balancing their online/offline life. Below, we have a number of useful study applications and suggested questions that you and your child can ask each other about how you both learn to do new things and manage your time. By sharing your experiences with your child, we hope that you both improve your productivity in both study and work. Each question should be answered by your child AND yourself.

Applications to help you organise yourself

Todoist:

- This program allows you to manage what you need to do. todoist.com

Evernote:

- This program is designed for note-taking, organising and archiving. evernote.com

Pomodoro Timer:

- The Pomodoro technique is a technique where you focus for 25 minutes, then take a 5-minute break, and then continue focusing for another 25 minutes. Using this technique enables you to avoid multi-tasking and concentrate for 25 minutes before taking a break. gigaom.com/2010/11/10/9-free-pomodoro-timers

If you are unsure about any of the information contained in this document or want to know more, check out the resources section of the **Optus Digital Thumbprint** website: digitalthumbprint.com.au/resources

Questions about managing your time

1. How do you learn to do new things at work/school?
2. What is the biggest reason you're not productive at work/school?
3. When do you think you're most productive? Is there anything different in that situation that you can use to improve your productivity at other times?
4. How do you think technology helps your productivity at work/school? How do you think technology hurts your productivity at work/school?
5. Are there any "productivity hacks" from work/school that you can learn from each other?
6. How do you manage your time at work/school?

Applications that help you create flashcards/quizzes and study schedules

Research has shown that retrieval practice is one of the most effective ways of studying. Retrieval practice is testing yourself regularly about the key ideas in anything new you're learning. One common way of this is creating flashcards on the key ideas as you're reading the material for the first time and then testing yourself as a way of studying the material.

Research also shows that if you spread out what you are studying so that you revise material just before you're about to forget it, your long-term learning will be much better.

These free programs allow you to create your own flashcards or quizzes and then use an algorithm to estimate when it's best to show the flashcards or quizzes for long-term learning.

- **Anki** ankisrs.net
- **Cobocards** cobocards.com
- **Brainscape** brainscape.com
- **Memrise** memrise.com
- **Mnemosyne** mnemosyne-proj.org
- **Supermemo** supermemo.com
- **Synap** synap.ac

Applications that reduce/block distractions

One of the biggest problems for modern students is the number of online and mobile distractions that hinder effective study.

Many of these websites and programs have hundreds of engineers designing them to figure out the best way to get people to use them and keep using them, so it's not a surprise that many students give into the temptation to check their phone or surf the web for a minute and then find out that they've wasted most of their study time.

Rescuetime:
- This program shows you how you're using your time and gives you detailed reports and data based on your computer activity.
  rescuetime.com

Toggl:
- This program gives you an overview of how much time you have spent on different tasks.
  toggl.com

Freedom:
- This program enables you to block websites and apps based on "blocklists" that you create. You can set them for any time and place.
  freedom.to

Leechblock (Firefox) and StayFocusd (Chrome):
- These browser ad-ons organise websites into categories and lets you set how and when to block them.

If you need more help

Optus Digital Thumbprint

For more free parent resources and conversation guides visit the Optus Digital Thumbprint website.

digitalthumbprint.com.au/resources

Optus Digital Thumbprint | kidshelpline Anytime | Any Reason

If you need more help or information contact Kids Helpline.

1800 55 1800
kidshelpline.com.au

Australian Government | Office of the eSafety Commissioner

For more resources and information, visit the Office of the eSafety Commissioner website.

esafety.gov.au