Learning Technology Plan



ROTTERDAM INTERNATIONAL SECONDARY SCHOOL



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1. Vision on Education and Technology

Our Vision

Educating for self-awareness, curiosity and integrity in a changing world.

Our Mission

Our mission is for every student to enjoy their youth. We will do this by providing innovative approaches to learning, by encouraging achievement, by fostering international mindedness with local and global engagement, by modelling ethical behaviour and by acting respectfully and with honesty.

Key Strategic Drivers related to Technology

- Focus on ensuring resources, curriculum and leadership structures are not only fit for purpose but ensure that students leave well-prepared for the next stage of their life.
- Develop systems and approaches within RISS to ensure that all learners are able to maximise their potential, regardless of any learning needs or disabilities.
- Focus on producing a curriculum which fits the needs of learners beyond 2030.
- Encourage a positive approach to curiosity, inquiry, action and reflection across all areas of the school.
- Encourage teachers to try and share new practice, action research and alternative approaches to teaching and learning.
- Identify skill gaps within the staff and ensure training is provided.

At RISS, we seek to make a provision that goes beyond the classroom setting and explores the potential of technology to enhance the learning experiences of our students.

(RISS Teaching and Learning Policy)



2. Technology as a tool

RISS provides technological resources to its students, staff, parents and community for educational, administrative, and informational purposes. The goal in providing these resources is to promote educational excellence by facilitating resource sharing, innovation and communication with the support and supervision of parents, teachers and support staff. The use of technological resources is never a goal in itself but should support students and staff in their educational goals.

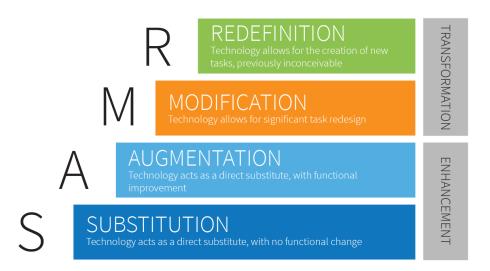
The use of technology should have a clear purpose in the lesson

At RISS we promote the use of technology in a manner that is

- evident but seamlessly integrated in the curriculum,
- accessible to all learners, used to facilitate classroom environments that are inclusive and diverse by design, and useful in enhancing curriculum design and lesson planning,
- adaptive to many contexts: cultural, physical and educational,
- supportive of intercultural understanding, global engagement and multilingualism,
- helpful in fostering the collection, creation, design and analysis of significant content.

(Teaching and learning with Technology, IB Continuum)

We aim to reach our goals and implement the use of technology in a manner presented by the SAMR framework as presented in picture 1. Lessons and activities sometimes lend themselves for substitution, augmentation, modification or redefinition and therefore the model should not be seen as a ladder in which the redefinition phase is always the desired step. The use of technology is not the goal itself, but a tool to assist students in their existing learning goals.



Picture 1 - The <u>SAMR framework</u>



Substitution

In the substitution stage, technology is substituted for a more traditional one, it is a simple and a direct replacement. For example: Rather than giving students a printed document of text, you now present this document to the students in a digital format (PDF, Word, Google Docs, Prezi, etc).

Augmentation

In this phase, the use of technology is still a replacement of a traditional tool, but there are functional improvements. For example: the user is now able to add interactive features to a document or presentation in the form of links and videos.

Modification

The modification phase is the first step in the transformative range where the use of technology allows for significant task redesign. For example: students are collaborating on a Google Document and create digital organisers to present their work. The students then share their document with the class allowing them to make comments on their work.

Redefinition

In this transformative phase, the use of technology allows for the creation of new tasks that were not possible without technology. The goal is to give students a new and unique experience by the implementation of technology. To continue with the previous example, after students created their work and allowed for peers to give them feedback: now students share their work with a community elsewhere in the world. To go even further in this phase, students could connect with students elsewhere in the world in real time to share their experiences.



3. Current situation

Hardware in the classroom

All classrooms are equipped with a Prowise interactive board, allowing for a large view angle as well as high performance audio and video. The multi-touch functionality allows collaboration to take place in the classroom. Teachers have access to Prowise Presenter, allowing them to create interactive and transformational lessons.

All teachers are provided a MacBook to help successfully fulfil their daily duties, including lesson planning and email communications with colleagues and students.

Additional hardware is available in the form of two fully equipped computer rooms, 3 mobile Chromebook carts, 1 mobile iPad cart and 1 mobile cart with Windows laptops. It is the teacher's discretion to decide on the use of cellphones during lessons.

Software and learning technology resources

Throughout our educational programmes, technology is used in different ways to enhance students' learning. The overview in <u>Appendix 1</u> shows an updated overview of all learning technology resources currently being used.



4. Short term goals

The short term goals in this Learning Technology Plan have been categorised in four categories. Each goal comes with an *Action* to give insight in how the goal is going to be achieved, the *Who* shows the responsible parties and the *Timeframe* gives information about when the goals are to be put into action. Finally, the *Outcome* is the desired result of the action.

The four categories:

- Curriculum, Instruction and Assessment
- Learning environment
- Professional development
- Other

Curriculum, Instruction and Assessment

• Provide emerging technology solutions to enhance the education programmes

Action	Who	Timeframe	Outcome
The IT department will investigate the different options to ensure the solution meets the expectations of the offered educational programmes.	Learning Technology Coordinator IT Technician Central IT department	Ongoing	Implementation of new technologies

Evaluation, July 2020:

This needs attention in 2020 and beyond.

Learning environment

• Learning technology provision in both campuses

Action	Who	Timeframe	Outcome
Check on hardware and software status of available devices to make sure it is in working order	Learning Technology Coordinator IT Technician	Ongoing	Hardware in working order, meeting the needs of the school

Evaluation, July 2020:

Hardware reaching the end of the lifecyle has been replaced. An additional Chromebook cart for the Junior Campus has been purchased.



Professional development

• Teachers will be able to perform 80% of the Teachers' Tech toolkit list

Action	Who	Timeframe	Outcome
Offer workshops and training sessions to support teachers in their tech skills according to the Teachers' Tech toolkit	Learning Technology Coordinator Teachers	Spring 2019, ongoing	Skilled teachers meeting the basic skills requirements

Evaluation, July 2020:

Google training has been offered this year. For the next year, the focus should be on all staff being able to use the Google tools effectively. In addition, more workshops throughout the year will be offered to inspire teachers to use technology in a transformative way.

Other

 Create a short term and long term IT budget in collaboration with the central IT department from Wolfert Schools

Action	Who	Timeframe	Outcome
	Learning Technology Coordinator CLs LT	Ongoing	Budget proposal

Evaluation, July 2020:

A budget overview of hardware and lifecycles has been established. Based on this overview we have been able to update some of the hardware that reached the end of the life cycle. This will be continued in the coming year to ensure up to date hardware and software throughout the school.

• Evaluate the Technology Plan

Action	Who	Timeframe	Outcome
meets the current standards	Learning Technology Coordinator Teachers Leadership Team	Yearly	Up to date Technology Plan

Evaluation July, 2020:



This document has been reviewed and changed where necessary to meet standards and has been updated to the current situation.



5. Long term goals

• Develop a plan to acquire devices for all students in grades 9-12 within 5 years

Action	Who		Outcome
_	Learning Technology Coordinator LT	Fall 2018, ongoing	

Evaluation:

After extensive research we have decided to not pursue this goal. We have increased our hardware in such a way that our teachers and students can use necessary hardware from the school.



6. Staff use of Learning Technology and Training

RISS staff are expected to have a proficient technological level. Each teacher is presented with a list of basic skills. Staff are expected to perform at an 80% minimum of the listed skills. (Appendix 2). Each academic year new staff will be trained on unmastered skills. Additionally, current staff is also welcome to attend these sessions. These training sessions will be scheduled at the beginning of the year in consultation with the LT.

Additional training sessions and mini-workshops will be organised regularly to boost staff confidence in the integration of technology into their practice.

It is our goal for all teachers to master these general competencies regarding the use of technology.

At RISS, teachers will be able to:

- Utilize the internet effectively to find resources for research and instruction
- Determine the credibility of sources and teach students about the credibility of sources
- Utilize technology tools to create authentic and engaging instruction presentations.
- Integrate student use of technology within lessons and unit plans.
- Utilize technology tools to assess student performance.
- Utilize online tools to enhance teaching and learning.
- Utilize technology to differentiate instruction and learning.
- Utilize technology for online teaching/blended learning/flipping the classroom.
- Apply basic troubleshooting to resolve technological issues and recognise who to contact as the need arises.
- Communicate using digital tools (including email).
- Utilize technology in a range of substitution, augmentation, modification, redefinition.

At RISS, we use the *Google Suite for Education* extensively. The Google Suite includes a range of tools that can help increase opportunities for critical thinking, communication, collaboration and creativity, while supporting the student learning objectives as well as managing administration tasks. These tools are free, ad-free, reliable and secure. These tools are relevant, easy to use and open doors to many new ways of learning.



7. Management of hardware and software

Hardware management is the IT technician's main task. The IT technician has to ensure that the hardware is in working order and kept up to date. All updates, improvements and upkeep is done in communication with the central Wolfert schools IT department. The IT technician will work closely with the Learning Technology Coordinator (LTC) to ensure the school is up to date in its IT provision at both campuses.

The IT technician manages software installation and updates. Staff requests for new software will be communicated to the LTC and the IT technician. The curriculum leader and leadership team need to first approve the purchase of licenses.

Departments can ask for LTC support regarding researching new technologies to use within departments. The LTC will assist the department with the research to look for a tool aligned with the learning goals. When approved and purchased, the IT technician will install the software so it is available to students and staff.

In case of technology errors or failures, the teacher will try to solve the problem first. If this is not possible, the IT technician needs to be contacted. All staff members can send their request to wrservicedesk@wolfert.nl. The request will be dealt with as soon as possible. Updates will be given via email. The IT requests will be collected in one location to ease the problem solving process for the future, allowing for the IT team to find common problems.



8. Evaluation

This Learning Technology Plan will be reviewed on a yearly basis, beginning in the fall of 2019. In between the yearly review sessions, there will be time allocated for evaluation moments to ensure the ongoing process of the short and long term goals. These goals can be adjusted, removed or new ones added as necessary.



Appendix 1 - Learning Technology Resources being used

Last updated: 09/05/2019	Learning Technology Resources							
Name	Used in the following grades	Used in the following subjects	Description of use	Onli ne	Soft ware	Арр	Stru ctual ly used	Regi strat ion purp oses
G-Suite for Education	6-12	All	G Suite is a brand of cloud computing, productivity and collaboration tools, software and products developed by Google	X		X	Х	×
Kahoot!	6-12	All	Kahoot! is a game-based learning platform, used as educational technology in schools and other educational institutions.					
GCSE Pod	9-10	English, Math	3-5 minute burst of audio-visual learning and specialist subject knowledge for 20+ curriculum areas.					
Kognity	9-12	Math, Science (all), Geo, Business Managemen t, TOK, Economics	Online interactive textbooks and exercises					
Quizizz	6-12	All	Online tool for formative assessment					
Edpuzzle	6-12	All	Add your own voice narration and questions to videos and track students learning from your videos					
Microsoft Office	6-12	All	Word, Excel, Powerpoint, Access, Publisher, Frontpage					



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						ECONDARY
Adobe Creative			All Adobe programs are available (Photoshop, Illustrator,		S	CHOOL
Suite	9-12	ICT / Art	Dreamweaver, InDesign, etc)			
EBSCO	9-12	English	Leading provider of research databases, e-journals, magazine subscriptions, ebooks and discovery service for academic libraries			
ManageBac	11-12	EE, CAS	Planning, assessment and reporting platform for the IB continuum.			Х
Turnltin	9-12	English, TOK, GPE, EE	Provides instructors with the tools to prevent plagiarism, engage students in the writing process, and provide personalized feedback.			x
Mylmaths	9-12	Math	Interactive online teaching and homework subscription website for schools that builds pupil engagement and consolidates maths knowledge.			
Off2Class	6-11	EAL	English proficiency testing. EAL online Lesson for EAL teachers.			Х
GetRevising	9-12		Revision tool			
Vocabulary.co m	6-12	English/EAL	Expand and practise vocabulary			
LiteracyPlanet (trial)	6-8	English	Differentiated language practice			
DigitalTheatre Plus	6-12	English, Drama	Drama performances and resources			
Goobric	6-12	English	Feedback tool compatible with G Suite			Х
Pamoja	11- 12	Psychology, Philosophy, Film Studies, Business	Online provider of IBDP subjects and assessments		X	Х



						ECONDARY CHOOL
		Managemen t, Spanish			J	O.IIGGE
FlipGrid	6-12	English	Online platform for audio and video sharing			
Mathsisfun.co						
m	6-12	Math				
Geogebra	6-12	Math	A dynamic mathematics software			
Desmos	8-12	Math	Online calculator			
Ti-Nspire	9-12	Math	Graphic calculator + app			
nrich.maths.or g	6-12	Math	Mathematics resources			
mathsplaygrou nd.com	6	Math	Mathematics resources			
MrNussbaum.c	6	Math	Mathematics resources			
Kangaroo app	6-9	Math	Mathematics resources			
illuminations.n ctm.org	6	Math	Mathematics resources			
Phet	6-12	Science	Excellent simulations for students to try NOTE: sometimes problematic as it needs Java for some simulations - https://phet.colorado.edu/			
falstad	9-12	Physics	good simulations - needs Java - http://www.falstad.com/			
Padlet	6-12	science (all?)	digital wall to collect student work			
TEDEd	6-12	science	useful sources to support learning - videos, lectures			
stem.co.uk	9-10	Science	graph shots-practicing motion graphs NOTE: Adobe is needed for this			
walter fendt	9-12	Physics	simulations https://www.walter-fendt.de/html5/ph en/acceleration_en.htm			
BBC BiteSize	6-8	science	learning and revision site			



						CONDARY
8-10	Science	videos, experiments, quizzes				
9-12	Chemistry	simulations, experiments NOTE: sometimes problematic as it needs Java for some simulations				
6-8	Science	videos, quizzes, simulations				
9-12	Science	simulations, quizzes NOTE: sometimes problematic as it needs Java for some simulations				
11-12	Biology	quizzes, online resources				
11-12	Biology	additional resources				
	Economics	blog, quizzes, revision, videos				
11-18	ICT	Info, notes, quizzes				
11-12	Economics	criteria I				
15-18	All	Revision, studying, resources. Revision planning and studying apps and advice, quizzes, revision cards etc				
60-18	All	CIE past papers etc				
All	All	Revision				
	9-12 6-8 9-12 11-12 11-12 11-13 11-12 15-18	9-12 Chemistry 6-8 Science 9-12 Science 11-12 Biology 11-12 Biology Economics 11-18 ICT 11-12 Economics 15-18 All 60-18 All	simulations, experiments NOTE: sometimes problematic as it needs Java for some simulations 6-8 Science videos, quizzes, simulations simulations, quizzes NOTE: sometimes problematic as it needs Java for some simulations 11-12 Biology quizzes, online resources 11-12 Biology additional resources Economics blog, quizzes, revision, videos 11-18 ICT Info, notes, quizzes 11-12 Economics criteria I Revision, studying, resources. Revision planning and studying apps and advice, quizzes, revision 15-18 All CIE past papers etc	simulations, experiments NOTE: sometimes problematic as it needs 9-12 Chemistry Java for some simulations 6-8 Science videos, quizzes, simulations simulations, quizzes NOTE: sometimes problematic as it needs 9-12 Science Java for some simulations 11-12 Biology quizzes, online resources 11-12 Biology additional resources Economics blog, quizzes, revision, videos 11-18 ICT Info, notes, quizzes 11-12 Economics criteria I Revision, studying, resources. Revision planning and studying apps and advice, quizzes, revision 15-18 All CIE past papers etc x 60-18 All CIE past papers etc	simulations, experiments NOTE: sometimes problematic as it needs Java for some simulations Science videos, quizzes, simulations simulations, quizzes NOTE: sometimes problematic as it needs 9-12 Science Java for some simulations 11-12 Biology quizzes, online resources Economics blog, quizzes, revision, videos 11-18 ICT Info, notes, quizzes 11-19 Economics criteria I Revision, studying, resources. Revision planning and studying apps and advice, quizzes, revision 15-18 All CIE past papers etc X 60-18 All CIE past papers etc	8-10 Science videos, experiments, quizzes simulations, experiments NOTE: sometimes problematic as it needs 9-12 Chemistry Java for some simulations 6-8 Science videos, quizzes, simulations simulations, quizzes NOTE: sometimes problematic as it needs 9-12 Science Java for some simulations 11-12 Biology quizzes, online resources 11-12 Biology additional resources Economics blog, quizzes, revision, videos 11-18 ICT Info, notes, quizzes 11-12 Economics criteria I Revision, studying, resources. Revision planning and studying apps and advice, quizzes, revision 15-18 All CIE past papers etc x x



Appendix 2 - Technology Basic Skills Checklist

Technology Basic Skills Checklist						
This checklist covers the basic skills we expect our teachers to master						
General use of MacBook						
I can turn on/off and sign in/out of my MacBook						
I can print documents to the printer						
I can use the Microsoft Office software						
I can create a Word document and save this as a PDF						
I can identify and use icons, windows, menus and shortcuts						
I can use the mouse pad to left/right/double click and scroll						
I can create and rename files and folders						
I can use keyboard shortcuts to operate the computer						
Gmail						
I can sign in/out of my email						
I can send emails and use the CC/BCC feature correctly						
I can create a contact group and use this group to send an email to a group of people efficiently						
I can create folders/labels to organise and store emails						
I understand I should not click on any links in emails coming from an unknown source to ensure the safety of my account						
Use of Prowise						
I can turn on/off the Prowise						
I can change the input to show my Macbook screen on the Prowise						
I can access my files on the Prowise to show lesson content/materials						
I can play a DVD on a Prowise (some Prowise boards need external DVD player)						
I can use the Sketch feature on the Prowise to use it as a whiteboard						
I can use the Prowise Presenter software to create interactive and engaging lessons						



Google Drive	
I am able to sign in to My Drive	
I am able to create and manage an organised folder structure	
I am able to create new files and name them appropriately	
I am able to move files between folders	
I am able to share folders and files with others	
I understand the different sharing options and can apply them correctly (edit, comment, view)	
I am able to make a copy of files	
I am able to upload files to Drive	
I am able to convert Microsoft Office files to Google files (Word to Doc, Excel to Sheets, PPT to Slides)	
I understand the difference between My Drive and Shared With Me	
Google Classroom	
I know how to navigate to Classroom	
I can create a new class	
I can enrol students in my classes	
I can create and edit topics to organise the content	
I can create new announcements, assignments, materials	
I can upload attachments from my computer	
I can upload attachments from Drive	
I can create assignments and understand the different ways of sharing attachments to students	
I can use Classroom to look at students work and provide individual feedback	
Google Docs	
I can create a new document	
I can add or change the title of a document	
I can change the font size and font colours	
I can adjust the page orientation	
I can adjust the page margins	
I can insert a table and merge cells	
I can add comments to a document	



I can use the version history of a document
Google Slides
I can create a new Slides presentation
I can apply a theme to a presentation
I can insert pictures or videos
I can create a hyperlink
I can add transitions to the slide
I can change the slide order
Using technology with students
I can navigate to the online check out form for iPads, Chromebooks, Laptops
I can reserve a mobile cart for a specific day and time
I know where to get the key to be able to open the cart
I know the procedure for taking the mobile cart to and from my lesson
I know that all devices need to be plugged in after use
I know that I have to plug in the mobile cart after I used it in my lesson
I know what a Chromebook is and what kind of activities the students can do with them
I know what an iPad is and what kind of activities the students can do with them
Questions about any of the above can be send to the Learning Technology Coordinator at: gou@wolfert.nl