

Knowledge, Attitude, and Practices (KAP) Survey

Background

In the context of the SCRATCH 2050 pilot project, a KAP survey was designed to elicit what is known (knowledge), believed (attitude), and done (practiced) in the context of this topic of interest.

KAP survey was designed to capture the following at baseline for comparison with endline data collected at project completion:

- **KNOWLEDGE:** Teacher knowledge of both digital literacy and Scratch coding (as per the VVOB SCRATCH²H 2050 Pedagogical Guide).
- **ATTITUDES:** Teacher attitudes regarding the perceived benefits of SCRATCH²H clubs for learners and personal enjoyment of using Scratch.
- **BELIEFS OR SELF EFFICACY:** Teacher’s beliefs in their ability to use Scratch, lead SCRATCH²H 2050 coding clubs, and integrate Scratch in the classroom.
- **PRACTICES:** Teacher practices, including leading SCRATCH²H clubs (as per the VVOB SCRATCH²H 2050 Pedagogical Guide) and incorporating Scratch into the STEM/ICT curriculum.
- **TEACHER ENVIRONMENT:** External factors that may influence the knowledge, attitudes, beliefs and practices of teachers including the school-enabling environment for use of ICT, both in terms of school ICT infrastructure and capacity as well as school leadership support for use of digital technology and Scratch in the classroom (based on the SELFIE tool), the school-enabling environment for clubs, and school environment (i.e., school location, status, type, and academic designation).
- **TEACHER DEMOGRAPHICS:** Teacher demographics, including education background, number of years teaching, age and gender influence teacher knowledge, attitudes and practices to initiate and facilitate clubs and integrate Scratch into the STEM/ICT curriculum.

In addition, the model in Figure 1 reflects the importance of environmental factors, especially the teacher’s background, school environment, and school leadership support, on a teacher’s ability to have the capacity (including knowledge, belief in self-efficacy and attitude) to facilitate SCRATCH²H 2050 clubs and integrate Scratch in the classroom. The model also reflects the continued learning and problem solving expected during the implementation of the SCRATCH²H 2050 project through on-going engagement with students during the practice of facilitating clubs and integration of Scratch in the classroom.

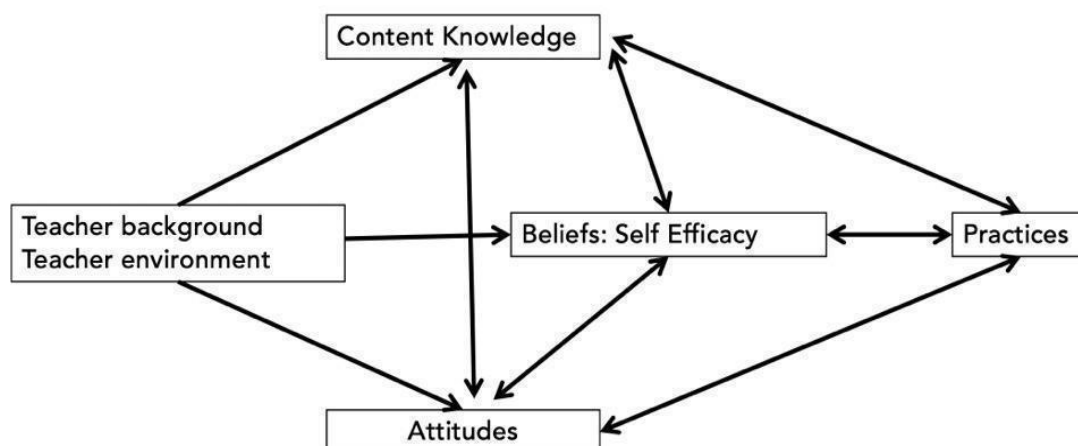


Figure 1: Study Design (Developed During the Inception Phase)

Section 1: Demographics		**Igice cya1: Imyirondoro**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
__1.1. National ID__	TEXT	**1.1. Numero y'irangamuntu**			
1.2. First name	TEXT	**1.2. Izina**			
1.3. Last name	TEXT	**1.3. Izina ry'umuryango**			
1.4. Sex	1. Female 2. Male	**1.4. Igitsina**	1. Gore 2. Gabo		
1.5. Age	INTEGER	**1.5. Imyaka**			
1.6. Highest Level of Education	1. A2 in Education 2. Diploma in Education 3. Bachelor's degree 4. Post-Graduate Diploma in Education 5. Master's degree	**1.6. Amashuri ahanitse mwize**	1. Impamyabumenyi y'amashuri y'isumbuye mu burezi 2. Impamyabumenyi mu burezi 3. pamyabumenyi y'icyiciro cya kabiri cya kaminuza 4. Impamyabumenyi ihanitse mu burezi (PGDE) 5. Impamyabumenyi y'icyiciro cya gatatu cya kaminuza		
Specify [Other]	TEXT	**Sobanura [Ibindi]**			
1.7. School Name	TEXT	**1.7. Izina ry'ishuri**			
1.8. Sector in which school is located	TEXT	**1.8. Umurenge ishuri rihereyemo**			
1.9 School Status	1. Public 2. Government Aided 3. Private	**1.9 Imimerere y'ishuri**	1. Ishuri rya leta 2. Ishuri rifashwa na leta 3. Ishuri ryigenga		
1.10. School Type	1. Day School 2. Boarding School 3. Special Needs School	**1.10. Ubwoko bw'ishuri**	1. Aho biga bataha 2. Aho biga babayo 3. Amashuri y'abana bakenera ubufasha bwihariye		
1.11. School Academic Designation	1. 9YBE 2. 12YBE 3. Secondary only	**1.11. Imiterere y'ishuri**	1. Imyaka 9 y'ibanze 2. Imyaka 12 y'ibanze 3. Ishuri ry'isumbuye		
1.12 School Gender	1. Mixed gender 2. Girls only 3. Boys only	**1.12. Igitsina**	1. Harimo Ibitsina byombi 2. Abakobwa gusa 3. Abahungu gusa		




1.13. Teaching subject(s)	1. Chemistry 2. Physics 3. Biology 4. Mathematics 5. ICT	**1.13. Amasomo wigisha, hitamo ayo wigisha yose**	1. Ubutabire 2. Ubugenge 3. Ibinyabuzima 4. Imibare 5. Ikoranabuhanga		
Other [Specify]	TEXT	**Sobanura [Ibindi]**			
1.14. Number of years teaching at this school	INTEGER	**1.14. Imyaka umaze wigisha kuri rino shuri**			
1.15. Number of years teaching (if different from above) **	INTEGER	**1.15. Imyaka umaze wigisha(niba itandukanye niyo wavuze haruguru)			
**1.16. Did you participate in or are you currently participating in the Continuous Professional Development Certificate Program in Educational Mentoring and Coaching for STEM Teachers provided by UR-CE and VVOB? **	1. Yes: I participated in the in-person course 2. Yes, I participated in the course that had both in-person and online sessions 3. Yes, I participated in or I am currently participating in the online course 4. No 98. Don't know	**1.16. Ese waba waritabiriye cyangwa uri kwitabira gahundayo kongera ubumenyi n'ubushobozi mu mwuga itangampamyabushobozi mu bufashyumu vire n'ubutoza ku bayobozi b'ishami ry'amasomo ya siyansi itangwa na kaminuza y'u Rwanda ifatanyije na VVOB? **	1. Yego, nitabiriye amahugurwa y'imbonankubone 2. Yego nitabiriye amahugurwa yatanzwe imbonankubone hariharimo nayatanzwe hifashishijwe ikoranabuhanga 3. Yego nitabiriye cyangwa ndi kwitabira amahugurwa atangwa hifashishijwe ikoranabuhanga 4. Oya 98. Ntanarimwe		




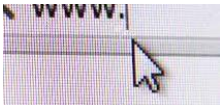
Section 2: Digital Literacy		**Igice cya 2**			
Section 2A		**Igice cya 2A**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
**2. A.1. Does your school have electricity? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.1. Ishuri ryanyu mufite umuriro w'amashanyarazi? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	
**2. A.2. Are there digital devices available to you at school to use when teaching? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.2. Haba hari ibikoresho by'ikoranabuhanga biboneka kw'ishuri ryanyu mwifashisha igihe muri kwigisha? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code B2: Digital Devices for Teaching
**2.A.3. At school, do you have access to the Internet for teaching and learning? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.3. Kw'ishuri, mujya mubona uburyo bwo gukoresha murandasi mu myigishirize no mu myigire? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on: SELFIE Questionnaire Secondary Schools. Code B3: Internet Access
**2.A.4. Is there technical support available at the school in case of problems with digital technologies? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.4. Mwaba mujya mubona ubufasha buri tekinike igihe muhuye n'ibibazo ku bikoresho by'ikoranabuhanga? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code B4: Technical support
**2.A.5. Are there school owned/ managed computers (either desktops or laptops) available for students to use when they need them? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.5. Haba hari mudasobwa z'ikigo/zicungwa n'ishuri (yaba izitagandanwa cyangwa izigandanwa) zakoresha n'abanyeshuri mu gihe bazikeneye? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code B6: Digital Devices for Learning


**2.A.5.a. How many computers does your school have? **	INTEGER	**2.A.5.a. Mufite mudasobwa zingahe kw'ishuri ryanyu? **			
**2.A.6. Does your school have any Smart Classrooms? **	1. Yes, sufficient 2. Yes, but not sufficient 3. No 98. Don't know	**2.A.6. Ese ishuri ryanyu rifite ibyumba by'ikoranabuhanga? **	1. Yego, birahagije 2. Yego, ariko ntibihagije 3. Oya 4. Simbizi	1. Yes, sufficient (4 points) 2. Yes, but not sufficient (2 points) 3. No (0 points) 98. Don't know (0 points)	
**2.A.6.a. How many Smart Classrooms does your school have? **	INTEGER	**2.A.6.a. Ese ishuri ryanyu rifite ibyumba by'ikoranabuhanga bingaha? **			
**2.A.7. Do students in need of special support have access to assistive devices for use with technology such as text to speech, voice recognition, alternative key boards, etc. **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.7. Ese abanyeshuri bakenera ubufasha bwihariye babona ibikoresho bijyanye n'ikoranabuhanga byo kubafasha? Aha twavugaga nk'akuma gafasha kumva amajwi, agafasha kwandika ibivuzwe, kibodi/kraviye y'ihariye... **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code B9OP: Assistive Technologies
**2.A.8. Do school leaders support you to try out new ways of teaching using digital technologies? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.8. Ese abayobozi b'ishuri bagushyigikira mu kugerageza gukoresha uburyo bushya mu kwigisha wifashishije ibikoresho by'ikoranabuhanga? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code A3: new ways of teaching
**2.A.9. Do school leaders discuss with you your CPD needs for teaching with digital technologies? **	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**2.A.9. Ese abayobozi b'ishuri babaganiriza ku bijyanye n'ibyo mukeneye mu kongera ubumenyi n'ubushobozi mu mwuga (CPD) mu kwigisha mwifashishije ibikoresho by'ikoranabuhanga? **	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Based on SELFIE Questionnaire Secondary Schools. Code C1: CPD Needs

<p>**2.A.10. Do school leaders support you to share experiences within the school (with other teachers) about teaching with digital technologies?*</p>	<ol style="list-style-type: none"> 1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always 	<p>**2.A.10. Ese abayobozi b'ishuri babafasha gusangira ubunararibonye mu kigo (hamwe n'abandi barimu) uburwo bwo kwigisha wifashishije ibikoresho by'ikoranabuhanga?*</p>	<ol style="list-style-type: none"> 1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe 	<ol style="list-style-type: none"> 1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. Code C3: Sharing Experiences</p>
<p>**2.A.11. Within the past year, have you participated in any of the following CPD activities, on the pedagogical use of digital technologies? Select all that apply.*</p>	<ol style="list-style-type: none"> 1. Face-to-face courses, seminars or conferences outside of school 2. Online courses, webinars or online conferences 3. Learning from other teachers within the school through online or offline collaboration 4. Learning from other teachers through online teachers' networks or communities of practice 5. School-based mentoring or coaching, as a part of a formal school arrangement 6. Other in-house training sessions organized by the school 7. Study visits (to other schools, businesses or organizations) 8. Accredited programs (short accredited courses, degree programs) 99. Other 	<p>**2.A.11. Mu mwaka ushize, mwaba mwaritabiriye bimwe mu ibikorwa bya CPD bikurikira ku nyigisho zijyanye n'ikoreshwa ry'ibikoresho by'ikoranabuhanga? Hitamo ibisubizo wemera byose**</p>	<ol style="list-style-type: none"> 1. Inyigisho zitangwa imbonankubone, amahugurwa, inama hanze y'ishuri. 2. Inyigisho zitangirwa hifashishijwe ikoranaburanga, amahugurwa cyangwa inama zitangwa hifashishijwe ikoranaburanga 3. Kwigira ku bandi barimu bo mu kigo hifashishijwe ikoranaburanga cyangwa ubufatanye imbonankubone. 4. Kwigira ku bandi barimu mu mahuriro ahuza abarimu (CoP cyangwa PLCs) ahura hifashishijwe ikoranabuhanga 5. Ubujyanama cyangwa ubutoza bukorerwa kw'ishuri, nka zimwe muri gahunda zitegurwa n'ishuri. 6. Andi mahugurwa yateguwe n'ishuri anabera ku ishuri. 7. Ingendo shuri (ku yandi mashuri, ibigo by'ubucuruzi cyangwa ibindi bigo). 8. Porogaramu zemewe (inyigisho zemewe z'igihe gito, porogaramu zitanga impamyabumenyi. 99. Ibindi 		<p>Based on SELFIE Questionnaire Secondary Schools. Code C: CPD Activities</p>
<p>**Other [Specify]**</p>	<p>TEXT</p>	<p>**Sobanura[ibindi]**</p>			

Section 2B	**Igice cya 2B**				
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes

<p>**2.B.1. Can you match the following term to the correct picture?**</p>		<p>**2.B.1. Ese wahuza amagambo akurikira n'amashusho yayo?*</p>		<p>Each correct response is worth 1 point</p>	
<p>**2.B.1.a Keyboard**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>**2.B.1.a Karaviye/kibodi (Keyboard)**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpeg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 		<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)</p>
<p>**2.B.1.b. Mouse**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>**2.B.1.b. Imbeba ya mudasobwa (suri/mawusi) (mouse)**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpeg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>7</p> 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)</p>
<p>**2.B.1.c. Monitor**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>**2.B.1.c. Ekara/Monita (monitor)**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>6</p> 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)</p>

2.B.1.d. Power cable	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	**2.B.1.d. Urutsinga rujyana umuriro w' amashanyarazi muri mudasobwa (Power cable)**	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	1 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)
2.B.1.e. Printer	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	**2.B.1.e. Impurimante (printer)**	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	4 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)
2.B.1.f. Ethernet port	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	**2.B.1.f. Aho bacomeka umuguzi wa interineti (Ethernet port)**	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	3 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)
2.B.1.g. Cursor	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	**2.B.1.g. Kiriseri (Cursor)**	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	2 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)

<p>**2.B.1.h. USB port**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>**2.B.1.h. Aho bacomeka fulashi disike (flash disque) (USB port)**</p>	<ol style="list-style-type: none"> 1. cable.jpeg 2. cursor.jpg 3. ethernet_port.jpg 4. printer.jpeg 5. usb.jpeg 6. monitor.jpeg 7. mouse.jpeg 8. keyboard.jpeg 	<p>5</p> 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.1)</p>
<p>**2.B.2. I can perform the following basic edits in Word: bold, italics, underline, spell checks and grammar checks.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.2. Nshobora guhindura inyandiko zikurikira muri Word: gutsindagira amagambo, kuyaberamisha, kuyacaho akarongo, gukosora imyandikire y'amagambo n'ikibonezamvugo.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)</p>
<p>**2.B.3. I can perform the following formatting in Word: change font size and type, adjust margins, justify, and indent text.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.3. Nshobora gukora ibi bikurikira muri Word: guhindura ingano cyangwa imiterere y'inyuguti, guhindura ingano ya marije, kuringaniza inyandiko no guhindura aho interuro ya mbere ya buri gika itangirira.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)</p>
<p>**2.B.4. I can insert images and tables into a Word document.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.4. Nshobora gushyiramo amashusho hamwe n'imbonerahamwe muri dokima ya wadi (Word). (Word document)**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)</p>

2.B.5. I can develop a presentation in Powerpoint.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.5. Nshobora gutegura inyandiko mbwirwaruhame nkoresheje Porogaramu ya Powerpoint.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)
2.B.6. I can create and format a table in Excel.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.6. Nshobora gukora nka nahindura imiterere y'imbonerahamwe muri Excel.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)
2.B.7. I can use a formula in excel to calculate a sum.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.7. Nshobora gukoresha forumire muri Excel ndi gushaka igiteranyo.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)
2.B.8. I can connect my computer to the internet using Wi-Fi.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.8. Nshobora guhuza mudasobwa yange kuri murandasi nkoresheje Wifi.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)

<p>**2.B.9. I know how to open a browser on the internet.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.9. Nzi gufungura ishakiro kuri murandasi.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 0: Devices and software operations (0.2)</p>
<p>**2.B.10. I know how to use a search engine to find information and resources on the internet.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.10. Nzi gukoresha ishakiro kuri murandasi nshaka amakuru n'inkomoko yayo.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 1: Information and Data Literacy (1.1)</p>
<p>**2.B.11. I can download and install applications from the internet on my computer**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.11. Nshobora gukura no gushyira aplicasiyo nkuye kuri murandasi kuri mudasobwa yange.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 1: Information and Data Literacy (1.3)</p>
<p>**2.B.12. I know how to evaluate the quality and validity of the source of information obtained from web-based resources.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.12. Nzi gusuzuma akamaro n'ireme by'amakuru yaba yaturutse kuri murandasi.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 1: Information and Data Literacy (1.2)</p>

2.B.13. I can compose and send an email.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.13. Nshobora kwandika ndetse no kohereza imeri/email.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 2: Communication and Collaboration (2.1)
2.B.14. I can reply to or forward an email.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.14. Nshobora gusubiza cyangwa kohereza imeri/email nakiriye ku bandi bantu**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 2: Communication and Collaboration (2.1)
2.B.15. I can use digital technology (email, etc.) for school-related communication.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.15. Nshobora gukoresha ibikoresho by'ikorabuhanga (imeri/email, ibindi) mw'iherekanya kw'amakuru yerekeranye n'ishuri**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	Based on SELFIE Questionnaire Secondary Schools. D4 Communication with the school community DIGITAL LITERACY Competency 2: Communication and Collaboration (2.2)
2.B.16. I can post or reply to a message in the Moodle forum.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**2.B.16. Nshobora gushyira cyangwa gusubiza ubutumwa buri muri forum ya moodle.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 2: Communication and Collaboration (2.2)

<p>**2.B.17. I can upload a document in Moodle.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.17. Nshobora gushyira dokima muri moodle.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 2: Communication and Collaboration (2.2)</p>
<p>**2.B.18. I can download and install a free anti-virus software program.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.18. Nshobora gukurura porogaramu irwanya virusi y'ubuntu nkayishyira muri mudasobwa.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>From VVOB Digital Literacy Survey DIGITAL LITERACY Competency 4: Safety (4.1)</p>
<p>**2.B.19. I can ensure the privacy of my personal information when using digital technology.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.19. Nshobora kurinda/kubungabunga umutekano w'umwironoro wanjye igihe ndi gukoresha ibikoresho by'ikoranabuhanga.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 4: Safety (4.2)</p>
<p>**2.B.20. I know when I should and shouldn't share information when online.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.20. Nzi igihe nshobora gusangiza cyangwa kudasangiza amakuru igihe ndi gukoresha murandasi.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 4: Safety (4.2)</p>

<p>**2.B.21. I can keep school related digital data secure.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.21. Nshobora kubika amakuru y'ishuri ajyanye nikoranabuhanga mu mutekano.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>Questionnaire Secondary Schools. D5 Keeping Data Secure DIGITAL LITERACY Competency 4: Safety (4.2)</p>
<p>**2.B.22. I can use digital resources to support my teaching in the classroom.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.22. Shobora kwifashisha ibikoresho by'ikoranabuhanga mu gutanga inyigisho mw'ishuri.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 6: Career-Related Competences (6.1)</p>
<p>**2.B.23. I can search online for digital educational resources.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.23. Shobora gushakira kuri murandasi amakuru ajyanye n'ikoranabuhanga mu burezi.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. D1 Online educational resources DIGITAL LITERACY Competency 6: Career-Related Competences (6.1)</p>
<p>**2.B.24. I can use digital resources to develop educational material for use in the classroom.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**2.B.24. Shobora gukoresha ibikoresho by'ikoranabuhanga mu gutegura ibya kwifashishwa mw'ishuri.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 6: Career-Related Competences (6.1)</p>

Section 3: Coding/Scratch Competences		Igice cya 3: Kwandika code/ubumenyi kuri scratch			
Section 3A		**Igice cya 3A**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
3.A.1. I can code using at least one coding language (Python, Java scripts, Scratch etc.)	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**3.A.1. Nshobora kwandika kode nkoreshye byibuze uburyo bumwe (Python, Java Script, Scratch, n'ibindi...)**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	DIGITAL LITERACY Competency 3: Digital Content Creation (3.4)
3.A.2. I can explain the basic concepts of coding in scratch	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**3.A.2. Nshobora gusobanura ibitekerezo by'ibanze bya kodingi muri Scratch**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	Expected Competency: Having the digital literacy skills and technical competences to explain basic concepts of coding in Scratch DIGITAL LITERACY Competency 3: Digital Content Creation (3.4)
3.A.3. I can develop stories or animations in Scratch.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**3.A.3. Nshobora gukora inkuru cyangwa inkuru ivuga muri Scratch.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	DIGITAL LITERACY Competency 3: Digital Content Creation (3.4)

<p>**3.A.4. I can develop simple games in Scratch.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**3.A.4. Nshobora gukora imikino muri Scratch.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 3: Digital Content Creation (3.4)</p>
<p>**3.A.5. I can apply mathematical concepts in Scratch (for example: drawing a polygon or solving a multiplication problem).**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**3.A.5. Nshobora gukora amahurizo y'imibare muri Scratch (urugero gushushanya ikinyampande cyangwa gusubiza ikibazo kirimo gukuba)**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>DIGITAL LITERACY Competency 3: Digital Content Creation (3.4)</p>
<p>**3.A.6. I can experiment and iterate (or develop bit by bit) in Scratch.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**3.A.6. Nshobora gusuzuma cyangwa nkanasubiramo (cyangwa nakora agace ku kandi) muri Scratch.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>Computational Thinking DIGITAL LITERACY Competency 5: Problem Solving (5.5)</p>
<p>**3.A.7. I can test and debug (or find and solve problems) in Scratch.**</p>	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	<p>**3.A.7. Nshobora gusuzuma nka na debuginga (gushaka cyangwa no gukemura ibibazo) muri Scratch.**</p>	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	<p>Computational Thinking DIGITAL LITERACY Competency 5: Problem Solving (5.5)</p>


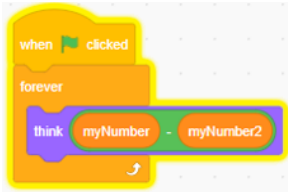
3.A.8. I can reuse and remix (or building on existing projects) in Scratch.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**3.A.8. Nshobora kongera gukoresha cyangwa kongera kuvanga (cyangwa kubakira kuri porogaramu isanzwe ikora) muri Scratch.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	Computational Thinking DIGITAL LITERACY Competency 5: Problem Solving (5.5)
3.A.9. I can abstract and modularize (or explore connections between the whole and parts) in Scratch.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**3.A.9. Nshobora gutandukanya cyangwa nkamenya byinshi (cyangwa nkasuzuma conegisiyo (connections) mu mpande zose) za Scratch.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	Computational Thinking DIGITAL LITERACY Competency 5: Problem Solving (5.5)
3.A.10. I enjoy coding using Scratch.	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. I have never used scratch 	**3.A.10. Nishimira gu kodinga nkoreshaje Scratch.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	ATTITUDE: Enjoyment of using scratch might be a predictor of Practices.

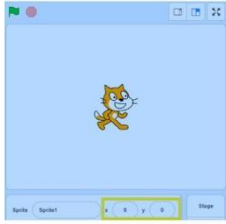

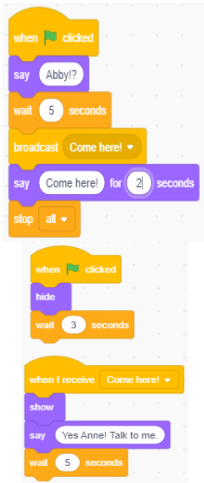
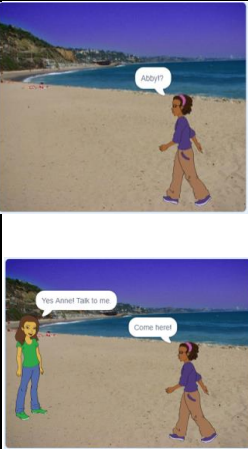
Section 3B		**Igice cya 3B**			
Please do not guess. If you do not know the answer, please select "Don't Know". **		**Ntugereranye. Niba utazi igisubizo hitamo "Simbizi"**. **			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes


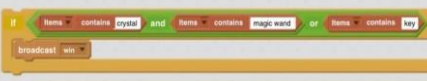
**3.B.1. In Scratch what is a sprite? **	<ol style="list-style-type: none"> 1. A coding language 2. An element or character to use in a story 3. Puzzle piece shapes that are used to create codes 4. An operating system 98. Don't know 	**3.B.2. Muri Scratch, Sprite ni iki? **	<ol style="list-style-type: none"> 1. ururimi rukoreshwa mu gukora kode 2. Ikintu cyangwa se umuntuy ukoreshwa mu nkuru 3. Uduce duto twamahuriza dukoresha mugukorea kode 4. Sisitemu y'imikorere 98. Simbizi 	2. An element or character to use in a story (1 point)	Sprites Module 1, Lesson 1: Overview of Scratch Interface Elements
**3.B.2. Match the computational concept to the description. **		**3.B.2. Huza igitekerezo cyo kubara n'igisobanuro. **		Each correct response is worth 1 point	Computational Concepts (from Scratched.gse.harvard)
**3.B.2.a. Sequence **	<ol style="list-style-type: none"> 1. Running the same sequence multiple times 2. One thing causing another thing to happen 3. Making decision based on conditions 4. Storing, retrieving and updating values 5. Identifying a series of steps for a task 6. Making things happen at the same time 7. Support for mathematics and logical expressions 98. Don't know 	**3.B.2.a. Sequence (Urukurikiran) **	<ol style="list-style-type: none"> 1. Running the same sequence multiple times (Gukoresha urutonde rumwe inshuro nyinshi) 2. One thing causing another thing to happen (Ikintu kimwe gitera ikindi kubaho) 3. Making decisions based on conditions (Gufata ibyemezo hakurikijwe ibisabwa) 4. Storing, retrieving, and updating values (Kubika, kugarura, no kuvugurura indangagaciro) 5. Identifying a series of steps for a task (Kugaragaza urukurikiran rw'intambwe zibikorwa) 6. Making things happen at the same time (Gukorera ibintu icyarimwe) 7. Support for mathematical and logical expressions (Ubufasha mu mvugo y'imibare n' imitekerereze) 98. Simbizi 	5. Identifying a series of steps for a task	
**3.B.2.b. Loops **	Same as above	**3.B.2.b. Loops (Umuzingi) **	Same as above	1. Running the same sequence multiple times	
**3.B.2.c. Parallelism **	Same as above	**3.B.2.c. Parallelism (Urubangikane) **	Same as above	6. Making things happen at the same time	
**3.B.2.d. Events **	Same as above	**3.B.2.d. Events (Ibyabaye) **	Same as above	2. One thing causing another thing to happen	

3.B.2.e. Conditionals	Same as above	**3.B.2.e. Conditionals (Ibisabwa)**	Same as above	3. Making decision based on conditions	
3.B.2.f. Operators	Same as above	**3.B.2.f. Operators (Abakoresha)**	Same as above	7. Support for mathematics and logical expressions	
3.B.2.g. Data	Same as above	**3.B.2.g. Data (Amakuru)**	Same as above	4. Storing, retrieving and updating values	
3.B.3 to 3.B.10. Match the strategy to the computational practice.		**3.B.3-3.B.10. Huza ingamba nuburyo bwo kubara**		Each correct response is worth 1 point	Computational Practices (from Scratched.gse.harvard)
3.B.3. Decide what scripts are needed for your project and what they should do	1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know	**3.B.3 Guhitamo inyandiko zifashishwa mu mushinga wawe nicyo zizakora.**	1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongerera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi	4. Abstracting and modularizing	
3.B.4. Read through the scripts to investigate the cause of the problem	1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know	**3.B.4. Gusoma inyandiko zose no gusesengura icyateye ikibazo.**	1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongerera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi	1. Testing and debugging	

<p>**3.B.5. Try things out as you go**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know 	<p>**3.B.5. Kugenda ugerageza ibintu uko bize**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>3. Experimenting and iterating</p>	
<p>**3.B.6. Try new ways to do things or try new things**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know 	<p>**3.B.6. Kugerageza uburyo bushya bwo gukoramo ibintu cyangwa kugerageza ibishya.**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>3. Experimenting and iterating</p>	
<p>**3.B.7. Find ideas and inspiration by trying other projects and reading the scripts**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know 	<p>**3.B.7. Gushaka ibitekerezo bishya binyuze mu kugerageza indi mishanga no gusoma inyandiko.**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>2. Reusing and remixing</p>	
<p>**3.B.8. Observe what happens when you run your project**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing 98. Don't know 	<p>**3.B.8. Kureba uko bigenda igihe utangije umushinga wawe**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>1. Testing and debugging</p>	

<p>**3.B.9. Organize the scripts in ways that make sense to you and to others**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing <p>98. Don't know</p>	<p>**3.B.9. Gushyira inyandiko kumurongo kuburyo zigira igisobanuro haba kuri wowe no kubandi.**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>"4. Abstracting and modularizing"</p>	
<p>**3.B.10. Give credit to people whose work you build on or are inspired by**</p>	<ol style="list-style-type: none"> 1. Testing and debugging 2. Reusing and remixing 3. Experimenting and iterating 4. Abstracting and modularizing <p>98. Don't know</p>	<p>**3.B.10. Gushimira ba nyiri mishinga washingiyeho ukora umushinga wawe cg abaguhaye igitekerezo.**</p>	<ol style="list-style-type: none"> 1. Testing and debugging (kugerageza no gukemura) 2. Reusing and remixing (Kongera gukoresha no kongera kuvanga) 3. Experimenting and iterating (kugerageza no gusubiramo) 4. Abstracting and modularizing (Gukuramo no Guhindura) 5. Simbizi 	<p>2. Reusing and remixing</p>	
<p>**3.B.11.</p>					
<p>**3.B.11. In this example, what will the puppy say?**</p>	<ol style="list-style-type: none"> 1. Hello 2. 22 3. 4 4. NaN <p>98. Don't know</p>	<p>**3.B.11. Muri izi ngeri, wakwerekana imbwa?*</p>	<ol style="list-style-type: none"> 1. Hello 2. 22 3. 4 4. NaN <p>98. Simbizi</p>	<p>3. 4 (4 points)</p>	<p>Using Math Operator Blocks. Module 1</p>

<p>**3.B.12.</p>					
<p>**3.B.12. If the code is entered, in which direction will the cat moved?*</p>	<ol style="list-style-type: none"> 1. Upper right of the screen 2. Lower right of the screen 3. Upper left of the screen 4. Lower left of the screen 98. Don't know 	<p>**3.B.12. Uramutse ushyizemo iyi kode, iyi njangwe yajya mu kihe cyerekezo?*</p>	<ol style="list-style-type: none"> 1. Upper right of the screen (Hejuru iburyo bwa ekara) 2. Lower right of the screen (Hasi iburyo bwa ekara) 3. Upper left of the screen (Hejuru ibumoso bwa ekara) 4. Lower left of the screen (Hasi ibumoso bwa ekara) 5. Simbizi 	<p>2. Lower right of the screen (4 points)</p>	<p>Module 2: Motion and Direction in XY Coordinates</p>
<p>**3.B.13.</p>					

<p>**3.B.13. When does Abby appear in this story?**</p>	<ol style="list-style-type: none"> 1. When the green flag is clicked 2. When Anne says "Come here!" 3. When Anne says "Abby?" 4. After 5 seconds <p>98. Don't know</p>	<p>**3.B.13. Ni ryari Abby agaragara muri iyi nkuru?**</p>	<ol style="list-style-type: none"> 1. Iyo ibendera ryicyatsi rikanzwe 2. Iyo Anne avuze ati "Come here" 3. Iyo Anne avuze ati "Abby!" 4. Nyuma y'amasengonda atanu <p>98. Simbizi</p>	<ol style="list-style-type: none"> 2. When Anne says "Come here!" (4 points) 	<p>Module 3 and 4: Story Creation and Animation in Scratch</p>
<p>**3.B.14.</p>					
<p>**3.B.14. What shape will the following code make?**</p>	<ol style="list-style-type: none"> 1. Circle 2. Square 3. Triangle 4. Octagon <p>98. Don't know</p>	<p>**3.B.14. Aya makode akurikira araza gukora iyihe shusho?**</p>	<ol style="list-style-type: none"> 1. uruziga 2. Mpande enye 3. Mpandeshatu 4. Icyinyampande cy'impande umunani <p>98. Simbizi</p>	<ol style="list-style-type: none"> 3. Triangle (4 points) 	<p>Module 5: Polygons and Flowers</p>
<p>**3.B.15.</p>					
<p>**3.B.15. Based on this Scratch Code, which of the list of items would not allow the player to win the game?</p>	<ol style="list-style-type: none"> 1. Crystal, flaming sword, ring of power, potion of invulnerability 2. Crystal, magic wand, flaming sword 3. Crystal, magic wand, key 4. Key, ring of power <p>98. Don't know</p>	<p>**3.B.15. Uhereye kuri iyi kode ni uruhe rutonde rw'ibintu bitagomba kwemerera umukinnyi gutsinda uyumukino.**</p>	<ol style="list-style-type: none"> 1. Crystal, flaming sword, ring of power, potion of invulnerability 2. Crystal, magic wand, flaming sword 3. Crystal, magic wand, key 4. Key, ring of power <p>98. Don't know</p>	<ol style="list-style-type: none"> 4. Key, ring of power (4 points) 	<p>Module 6 and 7: Games Question modified from "Randomized Controlled Trial and Process Evaluation of Code Clubs"</p>



Section 3C		**Igice cya 3C**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
3.C.1. I use online and offline resources to improve my coding/scratching skills	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**3.C.1. Nifashisha ibikoresho/ubumenyi mvanye kuri murandasi n'ibitavuye kuri murandasi kugira ngo niongerere ubumenyi mubijyanye no kodingi cyangwa Scratch.**	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Global Framework 5.1 Problem Solving and Global Framework 5.4 Identifying digital competence gaps
3.C.2. When I have a question about coding/Scratch, I use an on-line discussion forum.	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**3.C.2. Iyo mfite ikibazo kubijyanye na kodingi cyangwa Scratch, nkoresha ibiganiro by'ihuriro bikorerwa kuri murandasi.**	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Global Framework 5.1 Problem Solving and Global Framework 5.4 Identifying digital competence gaps
3.C.3. When I have a question about coding/Scratch, there is someone at my school that I talk to.	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**3.C.3. Iyo mfite ikibazo kubijyanye na kodingi cyangwa Scratch, hari umuntu ku ishuli ngenda nkabaza.**	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	Community of Practice
3.C.4. I am confident in my ability to resolve any challenges that I may face when coding/using Scratch.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. I have never used scratch	**3.C.4. Nifitiye ikizere mu bushobozi bwanyje bwo gukemura ikibazo cyose nahura nacyo mu bijyanye no gukodinga cyangwa gukoresha Scratch.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 6. Sinigize nkoresha Scratch	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 6. I have never used scratch (0 points)	DIGITAL LITERACY Competency 5: Problem Solving (5.1)

Section 4: School Scratch Clubs		Igice cya 4: Amahuriro y'ishuri ya scratch			
Section 4A		**Igice cya 4A**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
4.A.1. My school has student clubs	1. Yes 2. No 3. Don't know	**4.A.1. Ishuri ryanjye rifite amahuriro/amaclub y'abanyeshuli.**	1. Yego 2. Oya 3. Simbizi	1. Yego (4 points) 2. Oya (0 points) 3. Simbizi (0 points)	
4.A.2. Clubs at my school are on the school timetable	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**4.A.2. Amahuriro/amaclub ku ishuri ryanjye aba ku ngengabihe y'ishuri.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	
4.A.3. Student clubs take place	1. More than 1 time per week 2. Weekly 3. Every 2 weeks 4. Monthly 99. Other	**4.A.3. Amahuriro/amaclub y'abanyeshuli arakorwa.**	1. Inshuro irenze imwe mu cyumweru 2. Buri cyumweru 3. Buri byumweru bibiri 4. Buri kwezi 99. ibindi		
4.A.4. Student clubs run for	1. Less than 1 hour 2. 1 hour 3. 1-2 hours 4. More than 2 hours	**4.A.4. Amahuriro/amaclub y'abanyeshuli amara**	1. Muni y'isaha 2. Isaha imwe 3. Hagati y'isaha imwe n'ebyiri 4. Hejuru y'amasaha abiri		
4.A.5. Students actively participate in clubs at my school	1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always	**4.A.5. Abanyeshuli bitabira amahuriro/amaclub ku ishuri ryanjye.**	1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe	1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points)	
4.A.6. My school has STEM and/or ICT clubs	1. Yes 2. No 3. Don't know	**4.A.6. Ishuri ryanjye rifite ihuriro/club rya siyansi cyangwa iry'ikoranabuhanga (ICT)**	1. Yego 2. Oya 3. Simbizi	1. Yes (4 points) 2. No (0 points) 3. Don't know (0 points)	

<p>**4.A.7. Students participate in STEM and/or ICT clubs at my school**</p>	<ol style="list-style-type: none"> 1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always 	<p>**4.A.7. Ku ishuli ryanjye banyeshuli bitabira amahuriro/amaclub ya siyansi n'ikorabuhanga.**</p>	<ol style="list-style-type: none"> 1. Gake cyane 2. Akenshi 3. Buri gihe 4. Ntabwo mbizi 5. Ntanarimwe 	<ol style="list-style-type: none"> 1. Never (0 points) 2. Rarely (1 point) 3. Sometimes (2 points) 4. Very Often (3 points) 5. Always (4 points) 	
<p>**4.A.8. Girls and boys participate equally in clubs at my school**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**4.A.8. Ku ishuli ryanjye bahungu n'abakobwa bitabira amahuriro/amaclub kimwe.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	
<p>**4.A.9. I have in the past or am currently leading a student club at my school**</p>	<ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know 	<p>**4.A.9. Ku ishuli ryanjye nayoboye cg ubu nyobora ihuriro/club ry'abanyeshuli.**</p>	<ol style="list-style-type: none"> 1. Yego 2. Oya 3. Simbizi 	<ol style="list-style-type: none"> 1. Yes (4 points) 2. No (0 points) 3. Don't know (0 points) 	

Section 4B		**Igice cya 4B**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
4.B.1. I lead a STEM/ICT (or scratch club) at my school	1. Yes 2. No	**4.B.1. Nyobora uhuriro/club rya siyansi cyangwa ikoranabuhanga (cyangwa ihuriro rya Scratch) ku ishuli ryanjye.**	1. Yego 2. Oya	1. Yes (4 points) 2. No (0 points)	
4.B.2. I actively encourage girls to join STEM (Science, technology, engineering, and mathematics)/ICT (or Scratch) clubs at my school	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. Not applicable	**4.B.2. Nshishikariza abakobwa kwitabira amahuriro/amaclub ya siyansi n'ikorabuhanga (cyangwa ihuriro rya Scratch) ku ishuri ryanjye.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 6. Ntibijyanye	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 6. Not applicable (0 points)	Expected Competency: Motivating learners, especially girls, to join the clubs and remain active in them
4.B.3 I give students roles in the club to give them a sense of pride in the club and help with motivating other students to join.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. Not applicable	**4.B.3. Mpa abanyeshuri inshingano muri club kugirango bagire ishema muri club kandi bamfashe gushishikariza abandi banyeshuri kwitabira.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 6. Ntibijyanye	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 6. Not applicable (0 points)	STEM.Org.UK Stem Clubs Handbook
4.B.4.I let students decide on the activities that happen in the club.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. Not applicable	**4.B.4. Ndeka abanyeshuri bakaba aribo bafata umwanzuro ku bikorwa twakora mw'ihuriro/ muri club.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 6. Ntibijyanye	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 6. Not applicable (0 points)	STEM.Org.UK Stem Clubs Handbook Expected Competency: Facilitating clubs in a learner-centered way, focusing on collaboration, problem-based learning and self-regulation

Section 4C		**Igice cya 4C**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
4.C.1. I can lead a Scratch Club at my school.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**4.C.1. Nshobora kuyobora ihuriro/club rya Scratch ku ishuli ryanjye.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	Indicator 2: Percentage of trained teachers who report to feel competent to facilitate after school Scratch2h 2050 coding clubs
4.C.2. I can motivate boys and girls to participate in a Scratch Club at my school.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**4.C.2. Nshobora gushishikariza abahungu n'abakobwa kwitabira amahuriro/amaclub ya scratch ku ishuli ryanjye.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	
4.C.3. I can set learning targets for the Scratch Club with the club members.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**4.C.3. Nshobora gushyiraho intego y'ibygwa mu ihuro/muri club rya scratch mfatanyije n'abagize ihuriro/club.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points) 	
4.C.4. I can develop an agenda for each Scratch Club session.	<ol style="list-style-type: none"> 1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident 	**4.C.4. Nshobora gutegura gahunda ya buri huriro/club rya scratch.**	<ol style="list-style-type: none"> 1. Ntago niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane 	<ol style="list-style-type: none"> 1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 	

				5. Completely confident (4 points)	
4.C.5. I can evaluate Scratch Club achievement against the learning targets.	1. Not at all confident 2. Slightly confident 3. Somewhat confident 4. Moderately confident 5. Completely confident	**4.C.5. Nshobora gusuzuma ibyo buri huriro/club rya scratch ryagezeho ngendeye ku ntego y'ibyo bagombaga kwiga.**	1. Ntaho niyizeye 2. Nifitiye icyizere gike 3. Niyizeye mu rugero 4. Ndiyizeye 5. Ndiyizeye cyane	1. Not at all confident (0 points) 2. Slightly confident (1 point) 3. Somewhat confident (2 points) 4. Moderately confident (3 points) 5. Completely confident (4 points)	

Section 5: Teaching Scratch		Igice cya 5: Gufasha abanyeshuli kuzamura ubumenyi kuri scratch.			
Section 5A		**Igice cya 5A**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
5.A.1. Both boys and girls can benefit from learning how to code.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**5.A.1. Abahungu n'abakobwa bashobora kungukira mu kwiga gukodinga.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	

<p>**5.A.2. Coding/Scratch can help students learn problem solving skills.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.A.2. Gukodinga/ Scratch bishobora gufasha abanyeshuli kugira ubumenyi bwo gukemura ibibazo.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	
<p>**5.A.3. Learning coding/Scratch and participation in Scratch clubs can help students better understand future career options.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.A.3. Kwigira ibijyanye na kodingi/ scratch no kwitabira amahuriro/amaclub ya scratch bishobora gufasha abanyeshuli kumenya neza guhitamo icyo bazakora mu gihe kizaza.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	
<p>**5.A.4. Boys are naturally better at coding than the girls at my school.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.A.4. Ku ishuri ryanjye, muri kamere bahungu bazi gukodinga kurusha abakobwa.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (4 points) 2. Disagree (3 point) 3. Neither agree nor disagree (2 points) 4. Agree (1 points) 5. Strongly agree (0 points) 	REVERSE
<p>**5.A.5. It is not important to incorporate digital technologies like Scratch into the classroom if the school already has Coding or Scratch clubs.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**6.A.3. Ntabwo ari ingenzi kongeramo ikoranabuhanga rigezweho nka scratch mu cyumba cy' ishuri mu gihe ishuri rifite amahuriro ya Scratch.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (4 points) 2. Disagree (3 point) 3. Neither agree nor disagree (2 points) 4. Agree (1 points) 5. Strongly agree (0 points) 	REVERSE

Section 5B		**Igice cya 5B**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
5.B.1. I set digital learning activities that engage my students.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**5.B.1. Nashyizeho uburyo bwo kongera uruhare rw'abanyeshuri mu isomo ryanjye nifashishije ibikorwa byo kwigisha nkoresha ikoranabuhanga**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	Based on SELFIE Questionnaire Secondary Schools. D8 engaging students
5.B.2. I incorporate digital technologies/Scratch into my lesson plans	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**5.B.2. Nkoresha/nshyira ikoranabuhanga/ Scratch muri gahunda z'amasomo yanjye.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	Indicator 3: Percentage of trained teachers who report to feel competent to integrate scratch into STEM/ICT lessons plans
5.B.3. I use digital technologies/Scratch to tailor my teaching to students' individual needs	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**5.B.3. Nkoresha ikoranabuhanga/ Scratch mu guhuza uburyo nigishamo n'ibyo buri munyeshuri ku giti cye akeneye.**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	Based on SELFIE Questionnaire Secondary Schools. D6 Tailoring to students' needs
5.B.4. I use digital technologies/Scratch to encourage my students to identify and solve problems	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	**5.B.4. Nkoresha ikoranabuhanga/ Scratch mu gushishikariza abanyeshuri banjye kugaragaza no gukemura ibibazo**	1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane	1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points)	Inquiry Based Learning / 5 Es instructional model DIGITAL LITERACY Competency 5: Problem Solving (5.2)

<p>**5.B.5. I use digital technologies/Scratch to facilitate student collaboration.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.B.5. Nkoresha ikoranabuhanga/Scratch mu gufasha abanyeshuri gukorera hamwe**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. D9 Student collaboration DIGITAL LITERACY Competency 2: Communication and Collaboration (2.4)</p>
<p>**5.B.6. I use digital technologies/ Scratch to foster students' creativity.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.B.6. Nkoresha ikoranabuhanga/Scratch mu kuzamura ubumenyi/ubushobozi bw'abanyeshuri bwo guhanga udushya.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. D7 Fostering creativity</p>
<p>**5.B.7. I teach my students how to behave safely online.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.B.7. Nigisha abanyeshuri banjye uko bagomba kwitwararika bari gukoresha murandasi.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. F2: Safe behavior DIGITAL LITERACY Competency 4: Safety (4.3)</p>
<p>**5.B.8. I teach my students how to give credit to others' work.**</p>	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	<p>**5.B.8. Nigisha abanyeshuri banjye uko bagomba kubaha ibikorwa by'abandi.**</p>	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	<p>Based on SELFIE Questionnaire Secondary Schools. F5: Giving credit to others' work DIGITAL LITERACY Competency 2: Communication</p>

					and Collaboration (2.2)
5.B.9. When my students have questions about digital technologies/Scratch, I direct them to online/offline resources to find their answers.	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	**5.B.9. Igihe abanyeshuri banjye bafite ibibazo bijyanye n'ikorabuhanga/ Scratch mbohereza kujya gukoresha imbuga zo kuri murandasi mu gushaka ibisubizo byabo.**	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	Expected Competency: Pointing members to resources to continue developing their coding skills DIGITAL LITERACY Competency 5: Problem-Solving (5.4)

Section 5C		**Igice cya 5C**			
Question (English)	Response Options (English)	Question (Kinyarwanda)	Response Options (Kinyarwanda)	Score	Question Notes
5.C.1. I have the skills to incorporate Scratch into my lesson plans.	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	**5.C.1. Mfite ubumenyi bwo kongeramo/gushyira Scratch muri gahunda z'amasomo yanjye**	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	Indicator 3: Percentage of trained teachers who report to feel competent to integrate scratch into STEM/ICT lessons plans
5.C.2. My school leaders support me to use digital technologies/Scratch in the classroom	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	**5.C.2. Abayobozi b'ikigo bamfasha gukoresha ikoranabuhanga/ Scratch ndi kwigisha.**	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	Based on SELFIE Questionnaire Secondary Schools. A3: New ways of teaching
5.C.3. Teachers at my school talk about using digital technologies/ Scratch in the classroom	<ol style="list-style-type: none"> 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 	**5.C.3. Abarimu ku ishuri ryanjye baganira ku bijyanye no gukoresha ikoranabuhanga/ Scratch mu ishuri.**	<ol style="list-style-type: none"> 1. Simbyemera namba 2. Simbyemera 3. Simbyemera sinabihakana 4. Ndabyemera 5. Ndabyemera cyane 	<ol style="list-style-type: none"> 1. Strongly disagree (0 points) 2. Disagree (1 point) 3. Neither agree nor disagree (2 points) 4. Agree (3 points) 5. Strongly agree (4 points) 	Community of Practice