



**SUOMI
FINLAND**

Myanmar Pre-service Teacher Education Programme

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Curriculum and Pedagogy Studies:

Local Curriculum

Primary/Middle School Specialisation Track

Student Teacher Textbook

PREFACE

The Pre-service Teacher Education Curriculum consists of several components: the curriculum framework, syllabi, Student Teacher Textbooks, and Teacher Educator Guides. This curriculum for the four-year Pre-service Teacher Education Programme was designed and structured to align with the Basic Education Curriculum and to equip student teachers with the competencies needed to teach effectively in Myanmar’s primary and middle school classrooms. It is based on a Teacher Competency Standards Framework (TCSF) which articulates the expectations for what a teacher should know and be able to do in the classroom.

The curriculum follows a spiral curriculum approach which means that throughout the four years, student teachers return to familiar concepts, each time deepening their knowledge and understanding. To achieve this, the four-year Pre-service Teacher Education programme is divided into two cycles. The first cycle (Years 1 and 2) is repeated at a deeper level in the second cycle (Years 3 and 4) to enable student teachers to return to ideas, experiment with them, and share with their peers a wider range of practices in the classroom, with the option to follow up on specific aspects of their teaching at a deeper level.

The curriculum structure provides an integrated approach where teaching of subject knowledge and understanding educational theories are learnt through a supportive learning process of relevant preparation and practical application and experience. The focus is, therefore, not just on subject content, but also on the skills and attitudes needed to effectively apply their knowledge, skills, and attitudes in teaching and learning situations, with specific age groups. As the focus is on all components of a ‘competency’ – knowledge, skills, attitudes and their effective application – it is referred to as a competency-based curriculum.

Accordingly, a competency-based curriculum is learner-centred and adaptive to the changing needs of students, teachers, and society. Where new concepts are learnt, they are then applied and reflected on:

1. Learn (plan what and how to teach);
2. Apply (practise teaching and learning behaviours); and
3. Reflect (evaluate teaching practice).

Beyond the Pre-service Teacher Education programme coursework, it is intended that student teacher graduates will be able to take and apply this cycle of ‘learn, apply, and reflect’ to their own teaching to effectively facilitate the learning and development of Myanmar’s next generation.

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HOW TO USE THIS TEXTBOOK

Who will use this Local Curriculum Student Teacher Textbook?

This textbook sets out how the learning is sequenced in the Year 3 Local Curriculum subject. It consists of readings, suggested activities, summary questions and opportunities for reflection. While these materials have been designed for each unit and lesson, your teacher educators may adapt some of the material according to your interests and needs and their professional judgement.

This textbook has been designed to guide you, as a student teacher, through Year 3 of the Local Curriculum subject. In this textbook, you will find foundational information about Local Curriculum. The textbook also includes learning activities and additional resources to help you develop the knowledge, skills, and attitudes you need to be an effective teacher in Myanmar. You will use the textbook as a key resource in class; you can also use the textbook for independent self-study.

While the content in the textbook is addressed to you, as a student teacher, it is also a resource for your teacher educators, who will serve as your facilitators and mentors as you develop key competencies in Local Curriculum. Throughout this subject, you and your teacher educator will work together, using this textbook as a tool for learning.

When and where does Local Curriculum take place?

A total of 20 teaching periods (Semester 1: 12 teaching periods; Semester 2: 8 teaching periods) are allotted for Year 3 Local Curriculum of the four-year Education Degree College programme. Classes will be held on the Education Degree College campus.

What is included in the Year 3 Local Curriculum Student Teacher Textbook?

The organisation and content of Local Curriculum Student Teacher Textbook align with Local Curriculum subject syllabus of the four-year Education Degree College programme.

Year 3 Local Curriculum contains the following topics:

- Introduction to Year 3 Local Curriculum
- Ethnic Language, Culture and Local Economy
- Agriculture
- Career Development and Career Skills
- Home Management Skills
- Teaching, Learning and Assessment

For each unit, you will be working through learning activities, both individually and with your peers as well as teacher educators, to deepen your knowledge, skills, and attitudes on the topic. The content map below highlights the expected learning outcomes and time allocations for each unit in this textbook.

Table A. Year 3, Semester 2, Local Curriculum content map

Units	Sub-units	Lessons	Learning outcomes	TCSF		Periods
				Minimum requirements	Indicators	
4. Career Development and Career Skills	4.1. Career Skills and Career Opportunities	4.1.1. Building 21 st century career skills	<ul style="list-style-type: none"> • Develop strategies suitable for primary and middle school students to build their 21st century skills • Identify and reflect on how to integrate the teaching of these skills across the curriculum 	B1.1 C2.1 C3.1 D1.1	B1.1.1 B1.1.2 C2.1.1 C3.1.1 C3.1.2 D1.1.2	1
		4.1.2. Local and regional career opportunities	<ul style="list-style-type: none"> • Identify ways in which roles in the community draw on 21st century skills in their day-to-day work • Develop a teaching resource that builds 21st century skills for primary and middle school students that are appropriate for sustainable development in the region 	C3.1 C3.3 D1.1	C3.1.1 C3.1.2 C3.3.1 D1.1.2	1

Units	Sub-units	Lessons	Learning outcomes	TCSF		Periods
				Minimum requirements	Indicators	
5. Home Management Skills	5.1. Wellness and Food	5.1.1. Traditional food practices for wellness	<ul style="list-style-type: none"> Describe a healthy lifestyle Outline key objectives and strategies for the promotion, incorporation and protection of traditional food medicines and practices Prepare a traditional Myanmar meal that will have minimal impact on the environment, including its waste Promote the incorporation and protection of traditional food medicines and practices 	A5.1 B3.1 C1.3 C3.3	A5.1.1 A5.1.3 B3.1.3 C1.3.1 C3.3.1	1
	5.2. Financial Literacy	5.2.1. Strategies of financial management	<ul style="list-style-type: none"> Explain the importance of budgeting, investment and financial management skills Demonstrate a range of financial management strategies 	A5.1 B1.2 C3.3	A5.1.3 B1.2.2 B1.2.3 C3.3.1	1
	5.3. Sustainable Living	5.3.1. Home economics skills and sustainable development	<ul style="list-style-type: none"> Demonstrate home management and home economics skills Promote sustainable practices in line with sustainable living 	A2.1 A5.1 B1.2 C1.4	A2.1.2 A5.1.3 B1.2.3 C1.4.1	1

Units	Sub-units	Lessons	Learning outcomes	TCSF		Periods
				Minimum requirements	Indicators	
6. Teaching, Learning and Assessment	6.1. Teaching, learning and Assessment for Local Curriculum	6.1.1. Lesson planning and microteaching	<ul style="list-style-type: none"> Collaboratively develop a Local Curriculum lesson plan for a selected grade level, maximising formative assessment opportunities Deliver one stage of the lesson in a group microteaching session setting 	A1.1 B2.1 C3.1 C3.2	A1.1.1 B2.1.1 B2.1.2 C3.1.1 C3.1.2 C3.2.1	2
		6.1.2. Assessment approaches for Local Curriculum	<ul style="list-style-type: none"> Reflect on micro-teaching sessions to identify effective and inclusive teaching learning strategies for Local Curriculum lessons Outline a range of formative and summative assessment tools that can foster students' learning and inclusion in Local Curriculum 	B2.1 C3.1 D1.1 D2.1	B2.1.1 C3.1.1 D1.1.1 D1.1.3 D2.1.1	1
Total number of periods						8

This course will prepare student teachers with the competencies required to teach the Local Curriculum subject through modelling the values and attitudes promoted in the basic education curriculum for the types of citizens and society Myanmar envisions to create. It is important for student teachers to apprehend the position of Local Curriculum in the new Basic Education Curriculum and in creating inclusive learning environment for all Myanmar children, and how this curriculum is developed by and responds to local needs. Student teachers will acquire knowledge and skills in the range of topics identified for Local Curriculum, such as local ethnic languages, history, traditions and cultures, and local economy and business, particularly agriculture. They will further develop a deep understanding on the ultimate purpose and importance of Local Curriculum, for the relevance of education in Myanmar local contexts and its contribution to students' learning progress and further

to the intercultural respect and peacebuilding. With reference to the Education Degree College Curriculum Framework, in Years 1 and 2 student teachers are expected to develop their fundamental knowledge of Local Curriculum and basic pedagogical knowledge and competencies for teaching Local Curriculum. In Years 3 and 4, they will further strengthen deeper understanding of Local Curriculum subject knowledge and gain a more systematic grasp of the effective implementation of Local Curriculum subject curriculum, instruction and assessment.

The implication of the Local Curriculum is to connect the classrooms to the real world, by making the learning relevant to the daily lives of the learners. Student teachers will experience various teaching/learning strategies, such as learning-by-doing, cooperative learning, and problem-solving, presentation, peer-learning and self-reflection, that can be adapted for teaching in their own classroom. Both formative and summative assessment will take place during and at the end of student teachers' learning process. This will be carried out through creating lesson plans, practicing delivery of lessons, video discussions, and self-/peer-assessment. A variety of teaching and learning resources, including textbook, worksheets, and online resources will be used to promote learning process. In addition, inviting local experts or leaders to the class and visiting local business, as well as exploring local and regional landmarks, historical and heritage site will make the student teachers' learning more relevant and meaningful. These teaching/learning and assessment approaches as well as the resources will guide student teachers reflect on the diverse needs of the middle school students (gifted, in special needs, disaffected or reticent, gender, ethnicity, religion, resource constrained, multilingual, etc.) and be able to personalise learning for each student.

Learning outcomes for student teachers for Local Curriculum subject:

- To construct a better understanding of the alignment of Local Curriculum subject to the basic education curriculum framework and learning resources, and apply this to ensure the continuity and the progression of students' competencies developed across the grade level.
- To apply the competencies gained around Local Curriculum subject in their teaching practice to effectively support their students' learning process to achieve the learning objectives for Local Curriculum subject as stated below.

Teacher competencies in focus

The content of this textbook is based on the Myanmar Teacher Competency Standards Framework (TCSF) which articulates the expectations for what you should know and be able to do in the classroom. The teacher competencies in focus for the Local Curriculum subject include:

Table B. Teacher competencies in focus: Year 3 Local Curriculum

Competency standard	Minimum requirements	Indicators
A1: Know how students learn	A1.1 Demonstrate understanding of how students learn relevant to their age and developmental stage	A1.1.1 Give examples of how the students' cognitive, physical, social, emotional and moral development may affect their learning
A2: Know appropriate use of educational technologies	A2.1 Demonstrate understanding of appropriate use of a variety of teaching and learning strategies and resources	A2.1.2 Use teaching methods, strategies and materials as specified in the textbooks and additional low cost support materials, to support student learning
A3: Know how to communicate well with students and their families	A3.2 Demonstrate respect for the social, linguistic and cultural diversity of the students and their communities	A3.2.1 Give examples of inclusive communication to support all students' participation and engagement in classroom activities A3.2.2 Be aware of social, linguistic and cultural background of parents, community elders and leaders when interacting with them
A4: Know the curriculum	A4.1 Demonstrate understanding of the structure, content and expected learning outcomes of the basic education curriculum	A4.1.1 Describe key concepts, content, learning objectives and outcomes of the lower secondary curriculum for the subjects and grade level/s taught
A5: Know the subject content	A5.1 Demonstrate understanding of the subject matter to teach the assigned subject/s for the specified grade level/s	A5.1.1 Describe key concepts, skills, techniques and applications for the subjects covered in the grade levels taught A5.1.2 Include in lessons accurate and relevant information, examples and exercises to support student learning of core subject content, skills and procedures A5.1.3 Link key concepts, principles and theories to real life applications to build discipline specific foundations and skills for different classes and grade levels taught
	A5.2 Demonstrate understanding of how to vary delivery of subject content to meet students' learning needs and the learning context	A5.2.2 Explain how lessons are contextualised to include localised information and examples related to the subject content, concepts and themes A5.2.3 Describe approaches to model the use of content specific language, technical terms and skills by providing examples of use in real life contexts

Competency standard	Minimum requirements	Indicators
B1: Teach curriculum content using various teaching strategies	B1.1 Demonstrate capacity to teach subject-related concepts clearly and engagingly	B1.1.1 Use different ways to explain the subject matter, related ideas and concepts to meet a range of learning abilities and intended learning outcomes B1.1.2 Select instructional material to link learning with students' prior knowledge, interests, daily life and local needs
	B1.2 Demonstrate capacity to apply educational technologies and different strategies for teaching and learning	B1.2.1 Use teaching methods and learning strategies appropriate for the class – culture, size and type B1.2.2 Use knowledge of different literacy teaching strategies to support development of subject matter literacy B1.2.3 Create opportunities for students to investigate subject-related content and concepts through practical activities
B2: Assess, monitor, and report on students' learning	B2.1 Demonstrate capacity to monitor and assess student learning	B2.1.1 Use assessment techniques as part of lessons to support students to achieve learning outcomes B2.1.2 Use assessment information to plan lessons
B3: Create a supportive and safe learning environment for students	B3.1 Demonstrate capacity to create a safe and effective learning environment for all students	B3.1.3 Model and promote good health and safety practices to ensure students' wellbeing and safety within the classroom and school
C1: Service to profession	C1.3 Demonstrate understanding of the possible effect of local culture and context on student participation in school	C1.3.1 Show interest in and take time to learn about the students' culture, language and community
	C1.4 Demonstrate responsibility and accountability for the use of education resources	C1.4.1 Use school supplies and resources appropriately
C2: Service to community leadership	C2.1 Demonstrate commitment to serving the school and community as a professional member of the teaching profession	C2.1.1 Contribute actively to a range of school and community activities C2.1.2 Demonstrate model behaviour as a teacher serving and working in school and community responsibly and accountably
C3: Promote quality and equity in education for all students	C3.1 Demonstrate a high regard for each student's right to education and treat all students equitably	C3.1.1 Show awareness of the right to education of every child and a commitment to nurturing the potential in each student C3.1.2 Recognise the different social situations and background of students and treat all students equally
	C3.2 Demonstrate respect for diversity of students and the belief that all students can learn according to their capacities	C3.2.1 Organise the classroom to encourage all students' participation in the lesson content, activities and interactions with the teacher
	C3.3 Demonstrate capacity to build students' understanding of different cultures and global citizenship	C3.3.1 Integrate concepts of sustainability, equality, justice and the rights and responsibilities of students into class and school activities

Competency standard	Minimum requirements	Indicators
D1: Reflect on own teaching practice	D1.1 Regularly reflect on own teaching practice and its impact on student learning	D1.1.1 Use evidence of students learning to reflect on the impact of own teaching practice D1.1.2 Use information from a variety of sources to improve teaching practice and student learning D1.1.3 Regularly reflect on a wide range of actions and experiences to identify areas for own continuous professional development as a teacher
D2: Engage with colleagues in improving teaching practice	D2.1 Improve own teaching practice through learning from other teachers and professional development opportunity	D2.1.1 Discuss teaching practices with supervisors and colleagues, and willingly seek constructive feedback
D3: Participate in professional learning to improve teaching practice	D3.1 Demonstrate understanding of the importance of inquiry and research-based learning to improve teaching practice	D3.1.2 Search and analyse online or offline information on current trends and research based practices in lower secondary education and for specific subjects taught to improve one's own content knowledge and teaching practice

Source: Myanmar Teacher Competency Standards Framework (TCSF) - Beginning Teachers, 2020, pp. 79 – 140

How do I use this textbook?

You can use this textbook both for your own self-study and as an in-class resource for learning activities facilitated by your teacher educator. Each unit in the textbook includes:



Expected learning outcomes: These are listed at the beginning of each unit and at the beginning of each lesson. The expected learning outcomes indicate what you should know and be able to do by the end of the lesson or unit.



Competencies gained: This list of the selected Teacher Competency Standards Framework (TCSF) competencies are what you should know and be able to do by the end of the lesson or unit as a beginning teacher.

Learning content: The learning content for each unit is broken down into sub-units and lessons that cover subject content knowledge that is important for teachers to know.



Learning activities: The learning activities included in the textbook are individual activities that you can do to help reinforce and deepen your knowledge and understanding of a topic. Your teacher educator will also facilitate learning activities during class. These may be individual, partner, small group, or whole class activities designed to help you achieve the learning outcomes for each lesson.



Review questions: You can use the unit review questions to test your own understanding of the unit content, or to help you study for an exam.



Key messages: At the end of the unit, under Unit Summary, there is a brief summary of the main points of the unit to help you review and remember the most important information.



Unit reflection: Taking the time to deliberately think about, or reflect, on what you have learnt will help you remember and apply that learning, and make connections with other subject areas and real-life. Each unit ends with some suggestions on how you can reflect and follow-up on what you have learnt in the unit.



Further reading: Each unit lists suggestions of additional resources on the topic. You can look these up in the library, on the internet, or in your Education Degree College's e-library to learn more about the topic.



Key terms: Important words or concepts from the Unit that are highlighted in the beginning of each Unit.

At the end of this textbook, you will find a **Glossary** with the definitions of these key words found throughout the textbook that might be new to you. These words are listed in alphabetical order. You will also find a list of all the **Bibliography**, which are the original sources of information used throughout the textbook.

Remember, your teacher educator is there to help facilitate your learning in this module. If there is material you do not understand in the textbook, be sure to ask your teacher educator, or your classmates, for help. As a student teacher, you are part of a community of collaborative learning within your Education Degree College as you work – together with your peers and guided by your teacher educators – to earn your teaching qualification.

Unit 4

Career Development and Career Skills

Career skills and development involve learning the information, skills, and talents needed for a career. It covers résumé writing, interviewing, networking, and professional growth. Everyone needs career skills to find meaningful work and develop in their area. It also helps people choose careers, create goals, and maximise their potential. This is crucial to personal growth and self-fulfillment and will help people lead happier, healthier, and more successful lives.

This unit describes how you can develop the skills students need to develop their desired vocational skills and how you can initiate career guidance from an early age. Research has shown how important it is to begin career education from the early years of schooling. Research also shows that, in a rapidly developing world, it is important to build students' general skills throughout their education. These are sometimes referred to as 21st century skills or general competencies. The unit provides strategies to find about the various job opportunities available in different regions and states of Myanmar, with the understanding that these change over time, and focuses on building broad competencies to be responsive to evolving employment opportunities for the sustainable development of the country.

Expected learning outcomes

By the end of this unit, you will be able to:

- Develop strategies suitable for primary and middle school students to build their 21st century skills;
- Identify and reflect on how to integrate the teaching of these skills across the curriculum;
- Identify ways in which roles in the community draw on 21st century skills in their day-to-day work; and
- Develop a teaching resource that builds 21st century skills for primary and middle school students that are appropriate for sustainable development in the region.





Competencies gained

B1.1 Demonstrate capacity to teach subject-related concepts clearly and engagingly

C2.1 Demonstrate commitment to serving the school and community as a professional member of the teaching profession

C3.1 Demonstrate a high regard for each student's right to education and treat all students equitably

C3.3 Demonstrate capacity to build students' understanding of different cultures and global citizenship

D1.1 Regularly reflect on own teaching practice and its impact on student learning



Key terms

Global citizen, sustainable development, career counselling

4.1. Career Skills and Career Opportunities

This sub-unit introduces how to improve students' 21st century skills to improve careers and job management for middle school students. It also covers the role of identifying and addressing issues related to career guidance counselling.

4.1.1. Building 21st century career skills

Expected learning outcomes

By the end of this lesson, you will be able to:

- Develop strategies suitable for primary and middle school students to build their 21st century skills; and
- Identify and reflect on how to integrate the teaching of these skills across the curriculum.



21st century skills

Developing students' 21st century skills, such as critical thinking, problem-solving, and collaboration, are essential for success in the modern workforce¹. Students who are taught to think critically and solve problems are more likely to be employed and earn higher wages². Similarly, students who develop collaboration skills are more likely to be successful in their careers.

In the past, schooling only needed to prepare students to be literate and numerate and have knowledge of disciplinary content in areas such as Science and History in order to be “educated”. This is because these were the required skills for citizens to be productive members of society. Today's increasingly complex societies and globalised economy require individuals who are able to think critically,

¹ Dede, C., & Ketelhut, D. J. (2015).

² OECD. (2016).

communicate effectively, collaborate with diverse peers, solve complex problems, have a global mindset, and actively engage with information and communications technologies³. These skills are often referred to as 21st century skills.

A useful definition of 21st century skills is provided by Scoular and Care⁴

21st century skills are tools that can be universally applied to enhance ways of thinking, learning, working, and living in the world. The skills include critical thinking/reasoning, creativity/creative thinking, problem-solving, metacognition, collaboration, communication and global citizenship. 21st century skills also include literacies such as reading literacy, writing literacy, numeracy, information literacy, ICT [information and communications technologies] digital literacy, communication and can be described broadly as learning domains.

Sometimes these skills are referred to as the 4Cs: Critical Thinking, Communication, Collaboration, and Creativity. or 5Cs: Critical Thinking & Problem-solving, Communication, Collaboration, Citizenship (global and local) and Creativity & Innovation. It is argued that underpinning these skills is another C- curiosity.

The “Myanmar’s 5Cs and 5 Strengths” is a topic discussed in the Reflective Practice and Essential Skills Year 1 Semester 1 Unit 1.1. The 5Cs and 5 Strengths are important concepts in 21st century education and are outlined in a student teacher textbook for further reading and understanding. The 5Cs stand for critical thinking and problem-solving, communication, collaboration, creativity, and citizenship.

As shown in Figure (4.1) below, the Basic Education curriculum has been developed around a ‘five strengths’ framework: intellectual strength, physical strength, moral and ethical strength, social strength, and economic strength. As a teacher, you will learn ways to support to foster the 5Cs and 5 strengths in your students, and other skills such as learning skills, life skills, information and media skills, intercultural skills, and technological skills. These concepts and skills are crucial for preparing students for success in the modern world and promoting lifelong learning.

3 Vivekanandan, R. (2019, February 14).

4 Scoular, C., & Care, E. (2018).




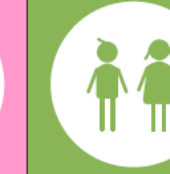

FIVE STRENGTHS TARGETED FOR LEARNING IN THE 21ST CENTURY				
for the development of national and global citizenship with competencies				
Intellectual Strength	Physical Strength	Moral and Ethical Strength	Social Strength	Economic Strength
				
KNOWLEDGE BASED LITERACIES <ul style="list-style-type: none"> • Academic Literacies: <ul style="list-style-type: none"> - language - mathematics - sciences • Environmental literacy SKILLS AND COMPETENCIES <ul style="list-style-type: none"> • Language/ Literacy Skills • Mathematical Skills • Scientific Skills • ICT Skills • Creativity and Innovation Skills 	KNOWLEDGE BASED LITERACIES <ul style="list-style-type: none"> • Health Literacy SKILLS AND COMPETENCIES <ul style="list-style-type: none"> • Health-Related Life Skills • Healthy and sustainable environment 	VALUES-BASED LITERACIES <ul style="list-style-type: none"> • Global awareness and civic literacy • Moral, Ethical and Aesthetic Literacy 	SKILLS AND COMPETENCIES <ul style="list-style-type: none"> • Interpersonal Skills including social skills, peace building skills and communication skills • Intrapersonal Skills (e.g. self motivated learning, life-long learning, etc) 	KNOWLEDGE BASED LITERACIES <ul style="list-style-type: none"> • Financial Literacy • Economic Literacy • Business Literacy • Entrepreneurial literacy SKILLS AND COMPETENCIES <ul style="list-style-type: none"> • Vocationally relevant skills • Employability (soft) skills
Cross Cutting Skills and Competencies: <ul style="list-style-type: none"> • Higher Order Thinking Skills • Cognitive skills, creative thinking skills, problem solving skills • Leadership Skills 				

Figure 4.1. The ‘Five Strengths’ in Basic Education Curriculum Framework

Source: CREATE Project (The project for Curriculum Reform at Primary Level of Basic Education in Myanmar)

Here are some ways to develop these skills:

Ways to support the development of curiosity

The teacher:

- Invites and encourages all students to actively participate with an attitude that they can achieve. The teacher also guides them to achieve their expectations.
- Plans higher cognitive level questions including open questions, based on students' cognitive levels.
- Creates opportunities for the students to ask questions individually.
- Links the lesson topic with students' daily life.
- Pauses during the lesson and asks questions that lead to a group discussion or an individual reflection.

Ways to support the development of critical thinking

The teacher:

- Uses different cognitive levels of questioning along with various questioning techniques to both individuals and groups so that students may understand, analyse, apply, and synthesise information covered in the lesson.
- Encourages students to see connections between the content of the lessons and their lives.
- Defines target behaviours for students so that they may track learning progress, self-assessment, feedback and achievement.
- Encourages students to see their assumptions and biases within their point-of-view and to understand how that might differ from others.
- Uses follow-up and probing questions to drive students get deeper and more complete answers.
- Uses activities that prompt analytical, systems, judgmental and predictive cognitive engagement.

Ways to support the development of creative thinking

The teacher:

- Creates a flexible classroom environment that is safe and empowering for all students and celebrates both effort and learning.

- Uses a variety of learning process and activities within their classes including visual tools, tools from design thinking, metaphorical and analogous thinking and creative team building activities.
- Encourages students to ask open questions and do action research (internet or within their community) on topics of interest to them.
- Encourages and leads open sharing of ideas.
- Focuses on opportunities to learn and is not overly focused on right and wrong or seeing mistakes.

Ways to support the development of communication

The teacher:

- Creates a safe environment for students to communicate and learn with full confidence.
- Models empathetic listening in the classroom.
- Encourages mindfulness and self-reflection through journaling and reflective questions.
- Uses classroom rules and expectations to create a culture of mutual respect and openness to different points-of-view.
- Is aware of students' energy and body language and finds ways to engage with them individually to motivate them.
- Takes time to make individual connections with students.
- Gives feedback during group discussions.
- Uses humour in their presentations and students' talk.

Ways to support the development of collaboration

The teacher:

- Encourages all students to participate enthusiastically answers questions and praises success.
- Emphasises different perspectives and experiences.
- Combines collaboration with real world problems and project or problem-based learning.
- Helps students build skills in group process (team formation, roles and responsibilities, project management, setting goals and facilitation) within their class along with subject content.

Moreover, another important area of research has been on digital skills development, as the increasing use of technology in the workplace has made these skills highly valuable. A report found that digital skills, such as coding and data analysis, are in high demand by employers.⁵

In addition, providing students with career counselling and guidance can help them make more informed decisions about their career paths and increase their chances of success. Career guidance can help students to develop the skills and knowledge they need to succeed in the job market.

Connecting 21st century skills with career planning and development

Work and professional growth have benefited from the many developments and innovations that the 21st century has brought forth. Everyone needs a set of talents to succeed professionally and in life in today's ever-evolving environment. These abilities, sometimes grouped under the umbrella term "21st century talents," are crucial for success in today's competitive job market and broader society.⁶

Success in any sector requires careful consideration of one's career path and consistent effort to improve it. Successful individuals in their chosen professions have a firm grasp of the knowledge, abilities, and strategies to lead them where they want to go. This is where expertise in the modern world comes in handy.

This broad category of 21st century talents includes the following: the ability to think critically and solve problems; the ability to work effectively in teams; the ability to use technology effectively; the ability to be creative and innovative; and the ability to effectively communicate these ideas. These abilities are not restricted to any profession or industry but may be used in almost any setting.

For instance, careers in engineering and finance place importance on thinking critically and creatively to address complicated issues. Professional fields, including project management and healthcare increasingly value cooperation and collaboration abilities. Jobs like graphic design and IT need a certain level of digital literacy from their employees. Advertising and marketing, two fields that rely heavily on original thought and solution generation, are good examples of professions that value

5 World Economic Forum. (2016).

6 Cevik, M. (2019); Iyoha, D. (2023); Widiastuti, A. (2022, December).

creativity and originality. Finally, the ability to explain oneself clearly and transmit knowledge to others is an absolute must in every profession.

In conclusion, planning, establishing, and advancing one's career in the 21st century requires having the requisite 21st century talents. These abilities help people advance in their jobs, increase their employability, and prepare them for future changes in the job market. Each person should make it a professional goal to acquire and hone these abilities and do so consistently throughout the course of their careers.

Career counselling

Research shows that career counselling needs to start early in education and that it is particularly important for marginalised students. It is important to make links between a child's education and a successful future. Activities which link students to a wider world can help them imagine themselves in different roles. Helping students identify their interests and talents and relating this to particular careers is important. There is a range of strategies teachers can use to encourage and enthuse students and encourage thinking about their futures, for example:

- If a child enjoys painting, discuss with the child how adults use visual art to design houses, clothing, magazine advertisements, movies, and toys. Explain that paintings are also used for cartoons, flower arrangements, and for magazines and books.
- If the child enjoys the outdoor activities, the teacher can discuss how he/she can make a living by working outside, such as in landscape architecture, forestry, archaeology, construction work, marine biology and commercial fishing.
- If the child has good social skills, discuss with them that those who enjoy talking and working are more likely to be successful as teachers or mentors, lawyers, members of services or service representatives, receptionists, hotel managers, or meeting organisers. If a child wants to help people, explain that there are ways he/she can work in a career, such as a nurse, a doctor, a sports coach, a family counsellor, or a babysitter.
- If a child enjoys mathematics, they can become an accountant, a computer programmer, or an engineer. Discuss what an engineer or an accountant can do. Children should know that this is a very important skill because almost all careers require the use of basic mathematics.

- A veterinarian uses mathematical skills to calculate the amount of medicine a cat will need to recover from an illness.
- A journalist needs writing skills to write newspaper articles.
- A marine biologist must have the scientific knowledge to study marine life.

How can you guide primary and middle school students?

Make them aware of what they are interested in. They can be happy at work when their career matches their interests. Ask them to answer the following questions to get a clear idea of their interests.

- What are your favourite school subjects?
- What do you like to do in your spare time?
- Would you rather work alone or in a group?
- Would you prefer working outside the building?
- Would you prefer working during the day or during the night?
- Would you mind wearing a uniform?
- Would you like buying and selling products?
- Which job do you prefer, the job that is near to your house or far from your house?
- Would you like to work using your energy and hands?
- Do you like the job that needs to follow the instructions?

Personality traits are also important. Encourage students to reflect on whether they:

- Are a leader or follower?
- Prefer to work alone or in a group?
- Prefer to cooperate or compete with others?
- Like helping others or empowering them to do things themselves?
- Are an imaginative thinker or practitioner?
- Are a creative artist or thrive with structure and routine?

Provide opportunities for students to reflect on their values. Everyone has values or things that are important to them, such as financial security, social justice, or work-life balance. These values can help them decide what type of career to pursue. For example, if they value financial wellbeing, consider a high-paying career.

If they want to succeed in their job, let them choose a job that suits them and their skills and interests.

Let them know what kind of education, skills and training they might need for the job they aspire to. Some jobs require higher education and financial investment. For example, becoming a doctor typically requires a minimum of 11 to 14 years of education and training. This includes obtaining a bachelor's degree (4 years), completing seven years of medical school (studies and house surgeon), and completing a residency program typically lasting three to seven years. The actual length of time to become a doctor can vary depending on the individual and the medical field they choose to specialise in. On the other hand, the length of time to obtain a management degree varies depending on several factors, such as the type of management degree, the educational institution, and the student's pace of study. A bachelor's degree in management can take 4 years of full-time study, while a Master of Business Administration (MBA) typically takes 2 years. However, there are also executive MBA programs designed for working professionals that may take longer to complete or part-time programs that may take longer to complete. They have to think about the time and money required to pursue a career as they make their decision.

Make sure they know where they want to live. Some jobs are easier to get and can only be available in certain places. For example, if they want to work as a gardener or a farmer, they have to live in a rural area and if they plan to look for money and fashion jobs, they have to live in an urban area. Make sure they plan to work where they want to live.

Ask students to reflect on their career aspirations.

Career counselling challenges

Effective career guidance demands the expertise of trained professionals. Professionals in the field of career guidance can benefit from a deeper understanding of their clients' requirements and increased efficiency in their services by anticipating and reflecting on any roadblocks that may develop during the counselling process.

One of the biggest obstacles professionals may encounter is guiding students to clearly define and explain their professional aspirations. Many people have difficulty determining what they want to do with their lives professionally, thus practitioners

need to be adept at guiding clients through exercises designed to help them discover their passions and develop their talents.

Helping students overcome obstacles that stand in the way of their professional success is another problem practitioners may confront. Discrimination, a lack of education or training, or even mental health problems are just a few of the obstacles that people may confront on their path to professional success.

Also, professionals may have difficulties interacting with students from various cultural backgrounds, making cultural competence an essential component of efficient career guidance. Effective career counselling requires understanding and sensitivity to the cultural contexts in which clients are situated.

As a final point, the career coaching process's ethical and legal implications may be difficult for practitioners. In order to give suitable and successful career counselling services, professionals must be familiar with the relevant ethical and legal frameworks.



Learning activity 1. Think-pair-share: Developing 21st century Skills

The purpose of this learning activity is for you to discuss learning activities and strategies for developing primary and middle school students' 21st century skills through a think-pair-share format. You will understand the importance of 21st century skills and be able to identify learning activities and strategies that can help them develop these skills.

1. Brainstorm a list of skills important for success and write them on A4 paper.
2. Think about the list of skills generated and to consider which of these skills are the most important for primary students to develop.
3. Then, pair up with a partner and share your thoughts. Each pair share one or two of the skills discussed. Write these skills on a separate A4 paper.
4. Brainstorm a list of learning activities and strategies that can help primary students develop the skills listed on A4 paper. Be creative and think of different ways to engage students in the learning process.
5. Share one of your ideas with the class. Write these ideas on the board.

Here is a rubric with success criteria to guide you through the assessment:

Table 4.1. Rubric for the lesson: Think-pair-share – Developing 21st century skills

Criteria	4	3	2	1
Knowledge and understanding	Student teachers demonstrate a thorough understanding of the learning activities and strategies for developing 21 st century skills.	Student teachers demonstrate a good understanding of the learning activities and strategies for developing 21 st century skills.	Student teachers demonstrate a basic understanding of the learning activities and strategies for developing 21 st century skills.	Student teachers demonstrate a limited understanding of the learning activities and strategies for developing 21 st century skills.
Participation and engagement	Student teachers actively participate in the think-pair-share activity and show engagement in their learning.	Student teachers participate in the think-pair-share activity and show some engagement in their learning.	Student teachers participate in the think-pair-share activity but do not show much engagement in their learning.	Student teachers do not participate in the think-pair-share activity or show little engagement in their learning.
Reflection and application	Student teachers reflect on their learning and can apply the 21 st century skills in their day-to-day work.	Student teachers reflect on their learning and can apply the 21 st century skills in their day-to-day work.	Student teachers reflect on their learning and can apply the 21 st century skills in their day-to-day work.	Student teachers reflect on their learning and can apply the 21 st century skills in their day-to-day work.
Creativity and innovation	Student teachers come up with creative and innovative ideas for integrating 21 st century skills across the curriculum.	Student teachers come up with some creative and innovative ideas for integrating 21 st century skills across the curriculum.	Student teachers come up with a few creative and innovative ideas for integrating 21 st century skills across the curriculum.	Student teachers do not come up with any creative or innovative ideas for integrating 21 st century skills across the curriculum.

Table 4.2. Rubric context verification

Review the rubric and confirm to the teacher educator whether it is suitable to your context and level. The rubric is a sample and may need to be adjusted to fit your specific needs. Adjustment of the rubric requires verification and collaboration with the teacher educator.
Does the rubric suit your context? <input type="checkbox"/> YES <input type="checkbox"/> NO Does the rubric suit your level? <input type="checkbox"/> YES <input type="checkbox"/> NO
Suggestions for improvement (make sure to show this to your teacher educator):



Learning activity 2. Identifying and reflecting: Integration across the curriculum

The purpose of this learning activity is for you to identify 21st century skills being integrated across the curriculum and reflect on your learning and development of these skills.

- 1. Identification activity:** You will be provided with paper and markers. On the paper, brainstorm examples of how each 21st century skill is being integrated into learning across different subjects (e.g., communication skills in language Art, collaboration skills in Science, critical thinking skills in Social Studies, etc.).

Suggested T-chart for organisation

Subject/Area of discipline	Examples of 21 st century skill are being integrated into the learning
Language (English and Myanmar)	Communication skills

2. **Sharing and Discussion:** After the groups have finished their charts, each group share their examples with the class and discuss as a group.
3. **Reflection:** On a sheet, reflect on which 21st century skills you have developed the most and which you need to work on. Reflect on how you can integrate them across curriculum in your future schools to develop the skills of your future learners.

Here is a rubric with success criteria to guide you through the assessment:

Table 4.3. Rubric for the lesson: Identifying and reflecting – Integration across the curriculum

Success criteria	4 – Exemplary	3 – Proficient	2 – Developing	1 – Beginning
Identification of 21 st century skills	Student teachers accurately identify and explain multiple 21 st century skills and how they align with the curriculum.	Student teachers accurately identify and explain several 21 st century skills and how they align with the curriculum.	Student teachers accurately identify and explain a few 21 st century skills and how they align with the curriculum.	Student teachers struggle to accurately identify and explain 21 st century skills and how they align with the curriculum.
Reflection on integration	Student teachers provide thoughtful and detailed reflection on how 21 st century skills can be integrated across the curriculum, including specific examples and strategies.	Student teachers provide some reflection on how 21 st century skills can be integrated across the curriculum, including some specific examples and strategies.	Student teachers provide basic reflection on how 21 st century skills can be integrated across the curriculum, but lack specific examples and strategies.	Student teachers struggle to provide any meaningful reflection on how 21 st century skills can be integrated across the curriculum.
Overall presentation	Student teachers present their work in a clear, organised, and visually appealing manner that effectively communicates their understanding.	Student teachers present their work in a clear and organised manner that effectively communicates their understanding.	Student teachers present their work in a manner that is somewhat clear and organised, but could be improved.	Student teachers present their work in a manner that is unclear and disorganised, making it difficult to understand their understanding.

Table 4.4. Rubric context verification

Review the rubric and confirm to the teacher educator whether it is suitable to your context and level. The rubric is a sample and may need to be adjusted to fit your specific needs. Adjustment of the rubric requires verification and collaboration with the teacher educator.
Does the rubric suit your context? <input type="checkbox"/> YES <input type="checkbox"/> NO
Does the rubric suit your level? <input type="checkbox"/> YES <input type="checkbox"/> NO
Suggestions for improvement (make sure to show this to your teacher educator):

Homework activity

In the following session, you will dress up according to your chosen career. Your homework task is to research on a career of your choice and dress up in attire that represents that career. Suggestions are as follows:

- Career in healthcare, dress up as a doctor, nurse, or other healthcare professional. This could include wearing scrubs, a lab coat, or a stethoscope.
- Career in engineering, dress up as an engineer. This could include wearing a hard hat, safety goggles, and a work vest or carrying a toolbox.
- Career in finance, dress up as a banker or financial analyst. This could include wearing a suit and tie or carrying a briefcase.
- Career in teaching, dress up as a teacher. This could include wearing a dress or blouse and skirt and carrying a pointer or a book.
- Career in law, dress up as a lawyer. This could include wearing a suit and carrying a briefcase.
- Career in science, dress up as a scientist. This could include wearing a lab coat, goggles, and carrying a microscope or a beaker.
- Career in fashion, dress up as a fashion designer. This could include wearing a fashionable outfit and carrying a sketchbook and pencils.
- Career in journalism, dress up as a journalist. This could include wearing a press badge, carrying a notebook and a camera.
- Career in sports, dress up in the uniform of their favorite sports team or in workout clothing and carrying sports equipment.

Note: It is important to consider cultural, ethnic, and religious sensitivity while planning the dress-up part of the lesson.

4.1.2. Local and regional career opportunities

Expected learning outcomes



By the end of this lesson, you will be able to:

- Identify ways in which roles in the community draw on 21st century skills in their day-to-day work; and
- Develop a teaching resource that builds 21st century skills for primary and middle school students that are appropriate for sustainable development in the region.

Other career options

Various career options can be taught to primary and middle school students, and it can be beneficial to expose them to a wide range of possibilities.

Healthcare careers: Healthcare is a broad field with a wide range of career options. These healthcare careers require different levels of education and training and have different responsibilities and job outlooks. Some factors driving the growth in healthcare jobs include an aging population and an increased demand for healthcare services and treatments. The healthcare workforce is projected to grow in response to the increasing demand for healthcare services, and healthcare professionals will play a vital role in addressing the population's health needs⁷.

7 Shi, L., & Singh, D. A. (2019).

Box 4.1 Healthcare career and roles

Physicians and Surgeons: These healthcare professionals diagnose and treat illnesses and injuries. They may specialise in a particular area of medicine, such as pediatrics, surgery, or internal medicine.

Nurses: Nurses provide care and support to patients in hospitals, clinics, and other healthcare settings. They may work as registered nurses (RNs), licensed practical nurses (LPNs), or advanced practice nurses (APNs).

Pharmacists: Pharmacists dispense medications and provide information about their use and potential side effects. They may also provide advice on healthy living and disease prevention.

Physical Therapists: Physical therapists help patients regain mobility and manage pain after an injury or illness. They may also provide advice on exercise and healthy living to prevent future injuries.

Medical and Health Services Managers: These professionals plan, direct, and coordinate the delivery of healthcare services. They may work in hospitals, clinics, or other healthcare organisations.

Public Health Professionals: Public health professionals work to improve the health of communities by promoting healthy behaviours, preventing disease, and developing policies to improve health outcomes.

Box 4.2. How healthcare workers draw on 21st century skills in their day-to-day work

Technology: Healthcare workers use a wide range of technology in their day-to-day work, including electronic health records, diagnostic equipment, and telemedicine systems. This requires them to have strong technological literacy and the ability to quickly learn and adapt to new systems.

Critical thinking and problem-solving: Healthcare workers are often required to make complex decisions and solve problems promptly. They use critical thinking and problem-solving skills to analyse patient information, make diagnoses, and develop treatment plans.

Collaboration: Healthcare workers often work in teams, and they need to be able to effectively communicate and collaborate with other healthcare professionals, as well as patients and their families.

Adaptability: Healthcare is constantly evolving, with new treatments, procedures, and technologies being developed all the time. Healthcare workers must be able to adapt to changes in their field and continue to learn throughout their careers.

Cultural competence: Healthcare workers are often required to provide care for patients from diverse backgrounds and cultures, and they need to be able to understand and appreciate these differences to provide the best possible care.

Emotional intelligence: Healthcare workers need to be able to manage their own emotions and respond appropriately to the emotions of others, including patients and colleagues.

Digital literacy: Healthcare workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other healthcare professionals and communicate with patients remotely or online.

Leadership: Healthcare workers, particularly those in management or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: Healthcare workers need to be able to communicate effectively with patients, families, and other healthcare professionals, as well as to establish trust and rapport.

Creativity: Healthcare workers need to be able to think creatively and come up with innovative solutions to problems, to improve the healthcare delivery and patient outcomes.

Overall, healthcare workers use a wide range of 21st century skills in their day-to-day work, and these skills are essential for providing high-quality, patient-centered care.

Science, Technology, Engineering, and Mathematics (STEM) careers: STEM careers encompass a wide range of fields, including computer science, engineering, mathematics, and the natural sciences. These careers are in high demand and can be taught through science and math classes, as well as through STEM-related extracurricular activities. STEM fields are known for their high earning potential, strong job growth, and positive impact on society.

Box 4.3. STEM careers and roles

Science: Careers in science include roles such as research scientists, medical scientists, environmental scientists, and forensic scientists. These professionals use scientific methods to study natural phenomena, conduct experiments, and gather data to solve problems and make new discoveries.

Technology: Technology careers encompass a wide range of roles, such as software developers, data scientists, network administrators, and cybersecurity analysts. These professionals use technology to create, maintain, and protect computer systems and networks.

Engineering: Engineers use science and mathematics to design, develop, and test new products and systems. Some of the most in-demand engineering fields include mechanical engineering, electrical engineering, and civil engineering.

Mathematics: Mathematics careers include roles such as statisticians, mathematicians, and data analysts. These professionals use mathematical techniques to analyse data, make predictions, and solve problems in a variety of fields, including finance, healthcare, and technology.

Note that STEM careers also offer diverse opportunities across various industries, including healthcare, finance, transportation, and environmental protection. Many STEM professionals work in research and development, contributing to creating new products, technologies, and innovations. STEM professionals are in high demand, and the demand for these fields is projected to continue to grow in the future.

Box 4.4. How STEM career workers draw on 21st century skills in their day-to-day work

Technical expertise: STEM career workers need to have a deep understanding of the specific field they work in, such as physics, biology, computer science, or engineering. They use this expertise to conduct research, design and develop products and solutions, and analyse data.

Critical thinking and problem-solving: STEM career workers are often required to troubleshoot and solve complex problems. They use critical thinking and problem-solving skills to analyse data, identify issues, and develop solutions.

Collaboration: STEM career workers often work in teams, and they need to be able to effectively communicate and collaborate with other team members, as well as with clients and stakeholders.

Adaptability: STEM fields are constantly evolving, and STEM career workers need to be able to adapt to changes in their field and continue to learn throughout their careers.

Creativity: STEM career workers need to be able to think creatively and come up with innovative solutions to problems, to improve the technology systems.

Digital literacy: STEM career workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other team members and communicate with clients remotely or online.

Project management: STEM career workers often lead teams and projects, and they need to be able to manage timelines, budgets, and resources effectively.

Leadership: STEM career workers, particularly those in management or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: STEM career workers need to be able to communicate effectively with clients, stakeholders and other team members, as well as to establish trust and rapport.

Entrepreneurship: STEM career workers need to be able to identify and create new business opportunities, and to develop and implement strategies to turn those opportunities into successful projects and ventures.

Emotional intelligence: STEM career workers need to be able to understand and manage their own emotions, as well as those of others, to be effective communicator and team members.

Cultural competence: STEM career workers need to be able to understand and respect cultural differences, to work effectively with diverse colleagues, clients, and stakeholders.

Global perspective: STEM career workers need to be aware of and understand the global context in which they are working, and to be able to incorporate this understanding into their work.

Sustainability: STEM career workers need to be able to understand and appreciate the environmental and social impacts of their work, and to integrate sustainable practices into their work.

Ethics: STEM career workers need to be able to understand and apply ethical principles to their work, to ensure that it is conducted in an ethical and responsible manner.

Overall, STEM career workers use a wide range of 21st century skills in their day-to-day work, and these skills are essential for creating and maintaining effective technology systems that meet the needs of diverse stakeholders and contribute to sustainable development.

Technology careers: Technology careers are a rapidly growing field that offers many job opportunities. Technology careers, such as computer programming and web development, are becoming increasingly popular among middle school students and can be taught through computer science and coding classes.

Box 4.5. Technology career and roles

Software Developer: These professionals design, develop, and maintain software programs. They work with a variety of programming languages and tools to create software for businesses, organisations, and individuals.

Data Scientist: Data scientists analyse and interpret complex data using statistical techniques, machine learning, and other methods. They use this data to make informed decisions and improve business operations.

Network Administrator: Network administrators are responsible for maintaining and troubleshooting computer networks. They ensure that networks are secure, reliable, and running efficiently.

Cybersecurity Analyst: Cybersecurity analysts protect organisations from cyber threats by identifying vulnerabilities, implementing security measures, and monitoring networks for suspicious activity.

Project Manager: Project managers oversee the planning, execution, and closing of technology projects. They are responsible for managing resources, budgets, and timelines to ensure that projects are completed on time and within budget.

Cloud Engineer: Cloud engineers design, implement, and manage cloud infrastructure and services. They work with a variety of cloud platforms, including Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP), to help organisations move their operations to the cloud.

Artificial Intelligence Engineer: Artificial Intelligence (AI) engineers develop and implement AI systems and technologies. They use machine learning, natural language processing, and other AI techniques to create intelligent systems that can analyse and interpret data, make decisions, and automate processes.

UX/UI Designer: UX/UI designers are responsible for creating user-friendly and visually appealing interfaces for digital products, such as websites and mobile apps. They use a combination of design skills and user research to create interfaces that are easy to navigate and meet the needs of users.

These are just a few examples of the many technology careers available. As technology continues to advance, new opportunities are constantly emerging in this field.

Box 4.6. How technology career workers draw on 21st century skills in their day-to-day work

Technical expertise: Technology career workers need to have a deep understanding of the technologies they work with, including programming languages, software, and hardware. They use this expertise to design, develop, and maintain technology systems.

Critical thinking and problem-solving: Technology career workers are often required to troubleshoot and solve complex problems. They use critical thinking and problem-solving skills to analyse data, identify issues, and develop solutions.

Collaboration: Technology career workers often work in teams, and they need to be able to effectively communicate and collaborate with other team members, as well as with clients and stakeholders.

Adaptability: Technology is constantly evolving, and technology career workers need to be able to adapt to changes in their field and continue to learn throughout their careers.

Creativity: Technology career workers need to be able to think creatively and come up with innovative solutions to problems, to improve the technology systems.

Digital literacy: Technology career workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other team members, and communicate with clients remotely or online.

Project management: Technology career workers often lead teams and projects, and they need to be able to manage timelines, budgets, and resources effectively.

Leadership: Technology career workers, particularly those in management or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: Technology career workers need to be able to communicate effectively with clients, stakeholders and other team members, as well as to establish trust and rapport.

Entrepreneurship: Technology career workers need to be able to identify and create new business opportunities, and to develop and implement strategies to turn those opportunities into successful projects and ventures.

Overall, technology career workers use a wide range of 21st century skills in their day-to-day work, and these skills are essential for creating and maintaining effective technology systems that meet the needs of

Artistic careers: Artistic careers encompass a wide range of fields, including visual arts, performing arts, and design. Artistic careers, such as graphic designer, illustrator, and musician, can be taught through art and music classes and can be a good fit for students with creative talents.

Box 4.7. Artistic careers and roles

Visual Artists: Visual artists create art in a variety of mediums, such as painting, sculpture, and photography. They may work as freelance artists or be employed by museums, galleries, or other organisations.

Musicians and Singers: Musicians and singers perform live or record music for audiences. They may work as solo artists or as part of a band or orchestra.

Actors: Actors perform in theatre, film, television, and other productions. They may also work as voice-over artists or on-stage productions.

Dance Performers: Dance performers entertain audiences by performing choreographed routines. They may work in ballet companies, modern dance companies, or other types of dance troupes.

Writers and Authors: Writers and authors create written works, such as novels, poems, plays, and nonfiction books. They may work as freelance writers or be employed by publishing companies or other organisations.

Graphic Designers: Graphic designers create visual concepts, using computer software or by hand, to communicate ideas that inspire, inform, or captivate consumers. They develop the overall layout and production design for various applications such as advertisements, brochures, magazines, and corporate reports.

Photographers: Photographers use cameras to produce images that tell a story or record an event. They work in a variety of settings, including studios, businesses, and on location.

These are just a few examples of the many artistic careers available. Many artistic careers require a significant amount of training and practice but can also be rewarding and fulfilling.

Box 4.8. How artistic career workers draw on 21st century skills in their day-to-day work

Creativity: Artistic career workers need to be able to think creatively and develop original ideas for their work.

Technical expertise: Artistic career workers need to have a deep understanding of the specific techniques and technologies used in their field, such as painting, sculpture, or digital media.

Critical thinking and problem-solving: Artistic career workers need to be able to analyse and interpret their own work and the work of others, and to use critical thinking and problem-solving skills to develop new ideas and solutions.

Collaboration: Artistic career workers often work in teams, and they need to be able to effectively communicate and collaborate with other team members, as well as with clients and stakeholders.

Adaptability: Artistic career workers need to be able to adapt to changes in their field and continue to learn throughout their careers.

Digital literacy: Artistic career workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other team members, and communicate with clients remotely or online.

Project management: Artistic career workers often lead teams and projects, and they need to be able to manage timelines, budgets, and resources effectively.

Leadership: Artistic career workers, particularly those in management or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: Artistic career workers need to be able to communicate effectively with clients, stakeholders, and other team members, as well as to establish trust and rapport.

Entrepreneurship: Artistic career workers need to be able to identify and create new business opportunities, and to develop and implement strategies to turn those opportunities into successful projects and ventures.

Emotional intelligence: Artistic career workers need to be able to understand and manage their own emotions, as well as those of others, to be effective communicator and team members.

Cultural competence: Artistic career workers need to be able to understand and respect cultural differences, to work effectively with diverse colleagues, clients, and stakeholders.

Global perspective: Artistic career workers need to be aware of and understand the global context in which they are working, and to be able to incorporate this understanding into their work.

Sustainability: Artistic career workers need to be able to understand and appreciate the environmental and social impacts of their work, and to integrate sustainable practices into their work.

Ethics: Artistic career workers need to be able to understand and apply ethical principles to their work, to ensure that it is conducted in an ethical and responsible manner.

Overall, artistic career workers use a wide range of 21st century skills in their day-to-day work, and these skills are essential for creating and maintaining effective artwork and creative projects that meet the needs of diverse audiences and contribute to sustainable development.

Business and finance careers: Business and finance careers encompass a wide range of fields, including accounting, business management, and financial analysis. These careers can be taught through business and finance classes and can be a good fit for students with interest in business and economics.

Box 4.9. Business and finance careers and roles

Accountants and Auditors: Accountants and auditors prepare and examine financial records. They ensure that financial records are accurate and comply with laws and regulations.

Financial Analysts: Financial analysts provide guidance to businesses and individuals making investment decisions. They evaluate economic and business trends, as well as the financial and operational performance of companies.

Marketing Managers: Marketing managers plan and direct the promotion of products or services. They develop marketing strategies, analyse data, and oversee advertising campaigns.

Human Resources Managers: Human resources managers plan, direct, and coordinate the administrative functions of an organisation. They are responsible for overseeing the recruitment, interviewing, and hiring of new staff; consult with top executives on strategic planning; and serve as a link between an organisation's management and its employees.

Management Analysts: Management analysts, also known as management consultants, advise organisations on how to improve their efficiency and profitability. They help companies to streamline their operations, increase revenue, and improve customer service.

Investment Bankers: Investment bankers assist companies and governments in raising money by issuing and selling securities. They provide financial advice to clients, evaluate potential investments, and help to structure and underwrite securities offerings.

Real Estate Brokers and Sales Agents: Real estate brokers and sales agents help clients buy, sell, and rent properties. They work with property owners and buyers to negotiate deals and help clients to understand the legal and financial aspects of the transaction.

These are just a few examples of the many business and finance careers available. Business and finance careers can be lucrative and offer a lot of growth opportunities.

Box 4.10. How business and finance career workers draw on 21st century skills in their day-to-day work

Analytical skills: Business and finance career workers need to be able to analyse and interpret financial data, and to use this data to make informed decisions.

Technical expertise: Business and finance career workers need to have a deep understanding of the specific techniques and technologies used in their field, such as financial modelling, data analysis, and accounting.

Critical thinking and problem-solving: Business and finance career workers need to be able to analyse and interpret complex information, and to use critical thinking and problem-solving skills to develop new ideas and solutions.

Collaboration: Business and finance career workers often work in teams, and they need to be able to effectively communicate and collaborate with other team members, as well as with clients and stakeholders.

Adaptability: Business and finance career workers need to be able to adapt to changes in their field and continue to learn throughout their careers.

Digital literacy: Business and finance career workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other team members, and communicate with clients remotely or online.

Project management: Business and finance career workers often lead teams and projects, and they need to be able to manage timelines, budgets, and resources effectively.

Leadership: Business and finance career workers, particularly those in management or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: Business and finance career workers need to be able to communicate effectively with clients, stakeholders, and other team members, as well as to establish trust and rapport.

Entrepreneurship: Business and finance career workers need to be able to identify and create new business opportunities, and to develop and implement strategies to turn those opportunities into successful projects and ventures.

Emotional intelligence: Business and finance career workers need to be able to understand and manage their own emotions, as well as those of others, to be effective communicator and team members.

Cultural competence: Business and finance career workers need to be able to understand and respect cultural differences, to work effectively with diverse colleagues, clients, and stakeholders.

Global perspective: Business and finance career workers need to be aware of and understand the global context in which they are working, and to be able to incorporate this understanding into their work.

Sustainability: Business and finance career workers need to be able to understand and appreciate the environmental and social impacts of their work, and to integrate sustainable practices into their work.

Ethics: Business and finance career workers need to be able to understand and apply ethical principles to their work, to ensure that it is conducted in an ethical and responsible manner.

Overall, business and finance career workers use a wide range of 21st century skills in their day-to-day work, and these skills are essential for creating and maintaining effective financial strategies and managing resources that meet the needs of diverse audiences and contribute to sustainable development.

Education and teaching careers: Education and teaching careers encompass a wide range of fields, including early childhood education, special education, and higher education. These careers can be taught through classes such as education or teaching for future teachers and can be a good fit for students with interest in teaching and mentoring.

Box 4.11. Education and teaching careers and roles

K-12 Teachers: These professionals are responsible for providing instruction to students in kindergarten through 12th grade. They may specialise in a particular subject area, such as math, science, or English.

Higher Education Teachers: These educators teach at colleges and universities, typically at the undergraduate and graduate levels. They may specialise in a particular subject area or field of study.

Special Education Teachers: These teachers work with students who have special needs, such as physical or cognitive disabilities, and may provide support and accommodations to help these students succeed in the classroom.

Curriculum Developers: These professionals are responsible for designing and creating educational materials and curriculum. They may work for schools, districts, or educational publishers.

Administrators and School Leaders: These professionals are responsible for managing and leading schools, departments, or educational programs. They may be principals, superintendents, or other school leaders.

Adult Education Teachers: These educators teach adults in various settings, such as community colleges, vocational schools, or adult education centres. They may teach literacy, job skills, or other adult education programs.

Each of these education and teaching careers requires different levels of education and training and has different responsibilities and job outlooks. Some factors driving the growth in education and teaching jobs include increasing enrolment in schools and the need for teachers to replace those who retire or leave the workforce.

In conclusion, education and teaching offer a wide range of career options with different levels of education, responsibilities, and job outlooks. With the increasing number of students in schools, the field of education is expected to grow, providing many opportunities for those interested in a career in education and teaching.

Box 4.12. How education and teaching career workers draw on 21st century skills in their day-to-day work

Curriculum design: Education and teaching career workers need to be able to design and develop curriculum that is relevant, engaging, and aligned with 21st century skills and standards.

Technology integration: Education and teaching career workers need to be able to effectively integrate technology into their teaching practice, to enhance student learning and engagement.

Critical thinking and problem-solving: Education and teaching career workers need to be able to help students develop critical thinking and problem-solving skills, which are essential for success in the 21st century.

Collaboration: Education and teaching career workers need to be able to create opportunities for students to collaborate and work together on projects and activities, as well as to work effectively with other teachers and school staff.

Adaptability: Education and teaching career workers need to be able to adapt their teaching methods and strategies to meet the diverse needs of their students and to respond to changes in the field of education.

Digital literacy: Education and teaching career workers are required to be able to navigate and use digital tools and platforms to access and share information, collaborate with other teachers, and communicate with students and parents remotely or online.

Project-based learning: Education and teaching career workers need to be able to design and implement project-based learning activities that allow students to apply their learning to real-world problems and situations.

Leadership: Education and teaching career workers, particularly those in leadership or supervisory roles, need to be able to lead and manage teams effectively.

Interpersonal skills: Education and teaching career workers need to be able to communicate effectively with students, parents, and other school staff, as well as to establish trust and rapport.

Entrepreneurship: Education and teaching career workers need to be able to identify and create new opportunities for student learning and engagement, and to develop and implement strategies to turn those opportunities into successful projects and ventures.

Emotional intelligence: Education and teaching career workers need to be able to understand and manage their own emotions, as well as the emotions of their students. This includes the ability to identify and respond to the emotional needs of students and to create a safe and supportive learning environment.

Cultural competence: Education and teaching career workers need to be able to understand and respect the cultural backgrounds of their students and to create inclusive and equitable learning environments.

Data analysis: Education and teaching career workers need to be able to analyse and interpret student data to inform their instruction and to measure student progress.

Reflective practice: Education and teaching career workers need to be able to reflect on their own teaching practice and to make improvements based on that reflection.

Global citizenship: Education and teaching career workers need to be able to help students develop an understanding of and appreciation for different cultures and perspectives, and to prepare students to be responsible global citizens.

Careers that are appropriate for sustainable development in the region

An important factor to consider when thinking about careers is how sustainable particular roles are in the area in which you live. These sorts of employment options are likely to be in the following fields and aligned with the United Nations Sustainable Development Goals illustrated in Figure 4.2.



Figure 4.2. Sustainable development goals

Careers and professional work that contributes to your local and broader community likely concerns poverty alleviation in your area, reducing food and water shortages, good health and wellbeing of the region, access to quality education, access to clean water and sanitation, access to clean and affordable energy, reducing inequalities, sustainable urban and local communities, employment and economic development, climate change mitigating, and promote a livelihood that supports peace and rules and regulations.

Good health is essential for sustainable development. Careers that address health challenges are likely to be in fields addressing widening economic and social inequalities; rapid urbanization; threats to climate and the environment and addressing the spread of infectious diseases and non-communicable diseases. Improving access to water and sustainable access to water resources; protecting and restoring ecosystems are also essential are also related to this goal.

Careers focused on sustaining cities and villages would create livelihoods and business opportunities, safe and affordable housing and build resilient communities and businesses. The would be in areas that would support food security through agricultural transformation; promoting biodiversity and forests conservation and sustainable use, including investment in public transport; and green spaces for the public including creating parks and urban planning and management.

Box 4.13. Career opportunities that can contribute to achieving the Sustainable Development Goals (SDGs)

Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015 to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. There are many career opportunities that can contribute to achieving these goals, some of which include:

Climate Adaptation and Resilience Specialist: These professionals work to help communities and businesses prepare for and adapt to the impacts of climate change, such as sea level rise and extreme weather events.

Sustainable Finance Professional: These professionals work in the financial sector to promote sustainable investing, green bonds and other financial products that support sustainable development.

Sustainable Procurement Specialist: These professionals work to ensure that the products and services that organisations purchase are sourced from sustainable and responsible suppliers.

Sustainable Tourism Manager: These professionals work to promote sustainable tourism practices, such as reducing the environmental impact of tourism and promoting economic benefits for local communities.

Sustainable Fashion Designer: These professionals work to design and produce clothing and accessories that are produced sustainably, using environmentally friendly materials and manufacturing processes.

Renewable Energy Engineer: These professionals design, develop and implement renewable energy systems such as solar, wind, and hydroelectric power. They work to reduce greenhouse gas emissions and promote the use of sustainable energy sources.

Environmental Engineer: These professionals work to protect the environment by designing systems and processes to reduce pollution and waste. They may also work on restoring contaminated sites and developing sustainable technologies.

Climate Change Analyst: These professionals assess the impacts of climate change and provide recommendations for mitigating and adapting to its effects. They may work in government, non-profit organisations or private sectors.

Sustainable Agriculture and Food Systems Specialist: These professionals work to improve the sustainability of food systems by promoting sustainable agricultural practices, reducing food waste, and increasing access to healthy food.

Sustainable Transportation Planner: These professionals work to create sustainable transportation systems by developing plans and policies that promote the use of public transportation, walking, and biking, and reduce dependence on fossil fuels.

Sustainable Building and Urban Planner: These professionals work to design and plan sustainable buildings, communities and cities. They work to reduce the environmental impacts of buildings, promote energy efficiency, and create liveable and walkable communities.

Water Resource Manager: These professionals work to protect and manage water resources, such as rivers, lakes, and groundwater. They may work to prevent water pollution and ensure access to clean water for all.

Biodiversity and Conservation Biologist: These professionals work to protect and conserve plant and animal species and their habitats. They may work on research, monitoring, and management of protected areas, and may also work on developing policies and strategies to protect biodiversity.

Social and Economic Development Professional: These professionals work to improve the economic and social wellbeing of communities and countries. They may work on projects related to poverty reduction, education, and health and work on the implementation of policies that promote inclusive and sustainable development.

Sustainable Supply Chain and Logistics Manager: These professionals work to ensure that the products and materials used in a business are sourced and transported in a sustainable way. They may work to reduce the environmental impact of transportation, promote the use of renewable energy, and ensure that products are produced in an ethical and sustainable way.

Sustainable Energy Efficiency Engineer: These professionals work to improve the energy efficiency of buildings and industrial processes, reducing energy consumption and greenhouse gas emissions.

Sustainable Packaging Engineer: These professionals work to design and develop packaging that is sustainable, using materials that are recyclable and biodegradable, and minimising packaging waste.

Sustainable Transportation Engineer: These professionals work to design and develop transportation systems and infrastructure that are sustainable, such as electric vehicles, bike-sharing systems and public transportation.

Sustainable Land Use Planner: These professionals work to plan and develop sustainable land use, such as protecting natural habitats and preserving farmland for future generations.

Sustainable Materials Scientist: These professionals work to research and develop new sustainable materials, such as bioplastics and sustainable alternatives to traditional materials like concrete and steel.

Sustainable Infrastructure Engineer: These professionals work to design and develop sustainable infrastructure, such as green roofs, rainwater harvesting systems, and sustainable transportation systems.

Sustainable Energy Policy Analyst: These professionals work to develop and analyse policies related to sustainable energy, such as renewable energy standards, energy efficiency programs and carbon pricing schemes.

Sustainable Forest Manager: These professionals work to plan and manage sustainable forests, such as implementing sustainable logging practices, protecting biodiversity, and promoting reforestation.

Sustainable Agriculture and Livestock Manager: These professionals work to promote sustainable agricultural practices, such as organic farming, agroforestry, and sustainable livestock management.

Sustainable Chemical Engineer: These professionals work to design and develop sustainable chemical processes, such as using renewable raw materials, minimising waste, and reducing greenhouse gas emissions.

Sustainable Urban Designer: These professionals work to design sustainable urban areas, such as promoting walkability, green spaces and sustainable transportation systems.

Sustainable Building Systems Engineer: These professionals work to design and implement sustainable building systems, such as energy-efficient heating, ventilation, and air conditioning (HVAC) systems.

Sustainable Business Consultant: These professionals work to help companies and organisations become more sustainable by identifying opportunities for energy and resource efficiency, reducing waste, and promoting sustainable products and services.

Sustainable Community Development Professional: These professionals work to promote sustainable community development by working with local residents and organisations to address issues such as poverty, unemployment, and environmental degradation.

All these careers can contribute to achieving the sustainable development goals in different ways, from designing and developing sustainable infrastructure and systems, to analysing and promoting sustainable policies and practices, and educating and engaging communities in sustainable development.

Information on developing teaching resources to teach 21st century skills

Teaching resources are materials or tools used to support instruction and facilitate learning. They can include items such as textbooks, lesson plans, worksheets, videos, games, and manipulatives. These resources can be used to supplement instruction and provide students with a variety of ways to engage with content and practice new skills. Some common examples of teaching resources are flashcards, worksheets, real-life examples, interactive activities, and online resources.

There are several teaching resources that can be crafted to teach 21st century skills for primary school students that are appropriate for sustainable development. Some examples are presented in Box 4.14:

Box 4.14. Teaching resources that can be crafted to teach 21st century skills for primary and middle school students

1. Interactive lessons or activities that focus on problem-solving, critical thinking, and creativity. For example, students could work in small groups to design a sustainable solution to a local environmental problem, such as reducing plastic waste or conserving energy.
2. Hands-on projects that allow students to explore and apply concepts related to sustainable development, such as renewable energy, recycling, and conservation. For example, students could design and build a solar-powered water heater or create a rainwater harvesting system for their school.
3. Curriculum-aligned lesson plans that incorporate 21st century skills and sustainable development goals. These could include activities that focus on digital literacy, data analysis, and communication skills, such as creating a podcast or video about a sustainable development topic.
4. Online resources, such as educational games or simulations, that help students learn about sustainable development concepts and skills in a fun and interactive way.
5. Professional development opportunities for teachers to learn how to effectively integrate 21st century skills and sustainable development into their curriculum.
6. Collaborative learning opportunities, such as online discussions or project-based learning that allow students to work together to find sustainable solutions to real-world problems.

7. Role-playing activities that allow students to act out different scenarios related to sustainable development, such as a debate on the use of renewable energy sources.
8. Student-led research projects that allow students to explore specific sustainable development topics of their choice.
9. Community service projects that allow students to apply their learning to real-world situations and make a positive impact on their community.
10. Use of technology, such as virtual reality or augmented reality, to enhance students' understanding of sustainable development concepts.
11. Interactive games and activities that teach problem-solving and critical thinking skills, such as design challenges or coding exercises.
12. Lesson plans and activities that incorporate real-world issues and problems related to sustainable development, such as climate change or sustainable energy.
13. Collaborative learning and project-based activities that encourage teamwork and communication skills, such as group research projects or service-learning projects.
14. Digital tools and resources, such as online simulations or virtual field trips that allow students to explore and learn about sustainable development topics in a fun and engaging way.
15. Curriculum-aligned resources and activities that integrate sustainable development goals and 21st century skills across multiple subject areas, such as science, math, social studies, and language arts.
16. Use of storytelling, role-playing, and other forms of experiential learning to help students understand and connect with sustainable development concepts and issues.
17. Incorporating field trips to local organisations and businesses that are implementing sustainable practices.
18. Using authentic assessment techniques such as portfolios, performance tasks, and self-reflection to evaluate student learning and understanding.
19. Encourage student-led research and investigation of sustainable development issues and opportunities.
20. Use of technology such as virtual and augmented reality to explore sustainable development in an interactive way.

Ideas for sustainable development goal flashcards

The goal is to make the flashcards easy to understand, visually appealing and convey the information about the sustainable development goal effectively. Here are a few ideas for your sustainable goal flashcards:

SDG targets and indicators - Create flashcards with each of the 17 SDGs and their specific targets and indicators. This will help you understand the specific goals and how they are measured.

SDG actions - Create flashcards with actions that individuals, communities, and governments can take to achieve the SDGs. These can include things like reducing carbon emissions, increasing access to clean water, or promoting gender equality.

SDG case studies - Use flashcards to study real-world examples of how the SDGs are being implemented and achieved in different communities and countries around the world.

SDG statistics - Create flashcards with statistics and data related to the SDGs, such as the number of people living in poverty, or the percentage of renewable energy used in a particular country.

SDG connections - Make flashcards that show the connections between the different SDGs and how addressing one goal can also contribute to achieving others.

SDG challenges - Create flashcards with the main challenges and obstacles that the world faces in achieving the SDGs, such as lack of funding, lack of political will or lack of awareness.

SDG heroes - Create flashcards with people who have made significant contributions to the achievement of the SDGs, such as scientists, activists, policymakers, and community leaders.

SDG-related quotes - Make flashcards with quotes from leaders and experts in the field of sustainable development, along with a brief explanation of their relevance to the SDGs.

SDG-related news - Use flashcards to keep track of recent news and developments related to the SDGs, such as new research or policy changes.

SDG-related organisations - Create flashcards with information about organisations that are working towards the SDGs, such as UN agencies, NGOs, and local groups.

SDG-related legislation - Create flashcards with information about laws and regulations related to the SDGs, such as climate change or poverty reduction laws.

SDG-related resources - Create flashcards with information about resources that can be used to learn more about the SDGs such as books, podcasts, websites, and videos.



Learning activity 1. Creating flashcards: Teaching 21st century skills to primary and middle school students

The purpose of this learning activity is for you to create flashcards that teach 21st century skill related to sustainable development. You will be able to explain how your flashcard connects to sustainable development.

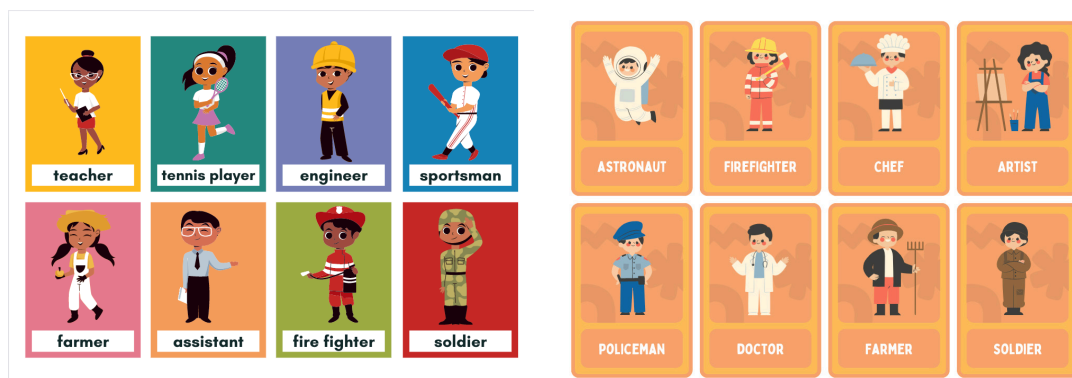


Figure 4.3. Sample template of flashcards from Canva

Work in pairs or small groups to create your own flashcards. Think about how your flashcard connects to sustainable development. Then, share the flashcards with the class. Ask questions and provide feedback to one another.

Here is a rubric with success criteria to guide you through the assessment:

Table 4.5. Rubric for the lesson: Creating flashcards – Teaching 21st century skills to primary school students

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Unsatisfactory (1)
Relevance to 21 st century skills and sustainable development	The flashcards clearly and accurately demonstrate how they teach 21 st century skills and align with sustainable development goals.	The flashcards demonstrate an attempt to teach 21 st century skills and align with sustainable development goals, but there may be areas of improvement.	The flashcards include some elements of 21 st century skills and sustainable development, but they are not well-integrated.	The flashcards do not demonstrate any connection to 21 st century skills or sustainable development.
Creativity and originality	The flashcards show a high level of creativity and originality in their design and content.	The flashcards show some creativity and originality in their design and content.	The flashcards are basic and lack originality.	The flashcards are unoriginal and lack creativity.
Quality of visuals and design	The flashcards feature high-quality visuals and a well-designed layout that is easy to read and understand.	The flashcards feature good-quality visuals and a decent layout that is easy to read and understand.	The flashcards feature mediocre-quality visuals and a layout that is not well-designed and may be difficult to read and understand.	The flashcards feature poor-quality visuals and a layout that is not well-designed and difficult to read and understand.
Clarity and conciseness	The flashcards clearly and concisely convey their intended message.	The flashcards convey their intended message, but there may be areas of improvement in terms of clarity and conciseness.	The flashcards convey their intended message, but it is not clear and concise.	The flashcards do not convey their intended message clearly or concisely.

Table 4.6. Rubric context verification

<p>Review the rubric and confirm to the teacher educator whether it is suitable to your context and level. The rubric is a sample and may need to be adjusted to fit your specific needs. Adjustment of the rubric requires verification and collaboration with the teacher educator.</p>
<p>Does the rubric suit your context?</p> <p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p> <p>Does the rubric suit your level?</p> <p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p>

Suggestions for improvement (make sure to show this to your teacher educator):



Learning activity 2. Role play: Dress up according to a chosen career

The purpose of this learning activity is for you to be able to research, present a career of your choice and dress up in attire that represents your chosen career, play-acting that you are either a primary or middle school student. Your goal is to present how they draw on 21st century skills in their day-to-day work.

1. You will be grouped according to the theme you represent. For example, the healthcare-costumed student teachers can form a single group.
2. You will be allowed enough time to dress up in attire that represents your chosen career. Be creative and use props or accessories if it is possible.
3. A career fair may be set up or an EDC campus parade where you can exhibit your chosen careers, interact with their peers, and share your experiences with other constituents of the EDC. Walk around and ask each other questions about your chosen careers.

Here is a rubric with success criteria to guide you through the assessment:

Table 4.7. Modifiable rubric sample for the lesson: Role play – Dress up according to a chosen career

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs improvement (1)
Creativity and originality	The attire and accessories are unique and original, clearly showcasing their chosen career.	The attire and accessories are reasonably creative, showcasing their chosen career.	The attire and accessories are somewhat creative but lack originality.	The attire and accessories are not creative or original and do not clearly showcase their chosen career.
Attention to detail	The attire and accessories are well-coordinated and appropriate for their chosen career, with attention to detail evident.	The attire and accessories are appropriate for their chosen career but lack attention to detail.	The attire and accessories are somewhat appropriate for their chosen career but lack attention to detail.	The attire and accessories are not appropriate for their chosen career and lack attention to detail.

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs improvement (1)
Knowledge of the career	The student teacher demonstrates a thorough understanding of their chosen career and it is evident in their attire and accessories.	The student teacher demonstrates a good understanding of their chosen career, and it is evident in their attire and accessories.	The student teacher demonstrates a basic understanding of their chosen career, but it is not evident in their attire and accessories.	The student teacher demonstrates a poor understanding of their chosen career, and it is not evident in their attire and accessories.
Presentation skills	The student teacher presents themselves confidently and professionally, with appropriate posture and attitude for their chosen career.	The student teacher presents themselves reasonably confidently and professionally but could improve their posture and attitude.	The student teacher presents themselves somewhat confidently and professionally but lacks appropriate posture and attitude.	The student teacher presents themselves poorly, with a lack of confidence and professionalism, and inappropriate posture and attitude.
Alignment with the activity	The attire and accessories align well with the purpose of the activity and showcase their chosen career.	The attire and accessories align with the purpose of the activity but could be improved to showcase their chosen career more clearly.	The attire and accessories somewhat align with the purpose of the activity, but do not clearly showcase their chosen career.	The attire and accessories do not align with the purpose of the activity, but do not clearly showcase their chosen career.

Table 4.8. Rubric context verification

<p>Review the rubric and confirm to the teacher educator whether it is suitable to your context and level. The rubric is a sample and may need to be adjusted to fit your specific needs. Adjustment of the rubric requires verification and collaboration with the teacher educator.</p>
<p>Does the rubric suit your context?</p> <p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p> <p>Does the rubric suit your level?</p> <p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p>
<p>Suggestions for improvement (make sure to show this to your teacher educator):</p>

Homework activity

The whole class will be assigned to form groups based on proximity as to where you live. You must choose a traditional Myanmar meal that will have a minimal waste impact on the environment. In addition, this meal should incorporate the concept of traditional food medicines and practices. At home, your group will prepare the ingredients, cooking pots, and other necessary cooking utensils for the preparation of the meal, including how you can serve the meal to potential customers in the EDC.

In the following session, your group will prepare your chosen healthy traditional Myanmar food and promote their medicinal value in the Myanmar tea shop that the teacher educator setup. The GRASPS for this learning activity is as follows:

- | | | |
|---|-----------|---|
| G | Goal | The goal corresponds to the learning outcomes of the next lesson: <ul style="list-style-type: none"> • Prepare a traditional Myanmar meal that will have a minimal impact on the environment; and • Promote the incorporation and protection of traditional food medicines and practices. |
| R | Role | The teacher educator is the Tea Shop owner.
You are the service crew members. You can assume several roles: <ul style="list-style-type: none"> • Cooks and chefs • Food servers. |
| A | Audience | Constituents of the EDC (student teachers, teacher educators, visitors, and the community) are customers. |
| S | Situation | An outdoor Myanmar Tea Shop in the EDC serves as a laboratory for a lesson in Local Curriculum class. This Myanmar tea shop serves healthy foods and traditional food that promotes medicinal properties of the ingredients as part of Myanmar traditional practices. |
| P | Products | Food, drinks, and promotional materials |
| S | Standard | The success criteria include: <ul style="list-style-type: none"> • Hygienic preparation of a traditional Myanmar meal; • Quality of food and beverage handling; • Impact on the environment; and • Promotion of the incorporation and protection of traditional food medicines and practices. |



Review questions

1. Why is the development of 21st century skills important for career education and planning?
2. What are the challenges in finding careers that align with the Sustainable Development Goals?
3. How might you develop career aspirations in your students?

Unit Summary



Key messages

- It is important to know exactly how 21st century skills in education and employment relate to work.
- With the advent of technology, traditional jobs are requiring new knowledge, skills, and qualifications.
- By developing students' 21st century, they will be well prepared for future employment.
- Career guidance provides the knowledge, information, skills and experience needed to identify career choices.
- There are online systems Myanmar that provide in easy access to jobs and recruitment.
- When considering different career options, sustainable job opportunities may be more long-term and contribute more to your community.



Unit reflection

Reflect on your own learning: Reflect on what you have learnt from this unit and how you can use that knowledge to improve your teaching practice.



Further reading

4.1.

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Unit 5

Home Management Skills

Home management skills are essential to maintain a family and handle everyday chores. Budgeting, food planning, cleaning, laundry, and organising are examples. These abilities can help people save money, stay organised, and minimise stress. Home management skills teach young learners' responsibility and self-sufficiency. Strong home management skills are vital for students, working professionals, and retirees for a comfortable and organised existence.

This unit gives a brief introduction to the many subjects that are collectively taught under the title "Home Management Skills". These include health and food, financial literacy, and sustainable living.

Expected learning outcomes

By the end of this unit, you will be able to:

- Describe a healthy lifestyle;
- Outline key objectives and strategies for the promotion, incorporation and protection of traditional food medicines and practices;
- Prepare a traditional Myanmar meal that will have minimal impact on the environment, including its waste;
- Promote the incorporation and protection of traditional food medicines and practices;
- Explain the importance of budgeting, investment and financial management skills;
- Demonstrate a range of financial management strategies;
- Demonstrate home management and home economics skills; and
- Promote sustainable practices in line with sustainable living.





Competencies gained

A2.1 Demonstrate understanding of appropriate use of a variety of teaching and learning strategies and resources

A5.1 Demonstrate understanding of the subject matter to teach the assigned subject/s for the specified grade level/s

B1.2 Demonstrate capacity to apply educational technologies and different strategies for teaching and learning.

B3.1 Demonstrate capacity to create a safe and effective learning environment for all students

C1.3 Demonstrate understanding of the possible effect of local culture and context on student participation in school

C1.4 Demonstrate responsibility and accountability for the use of education resources

C3.3 Demonstrate capacity to build students' understanding of different cultures and global citizenship



Key terms

Healthy lifestyle, lifestyle, food wastage, loss of food, waste of food, Home Economics Science

5.1. Wellness and Food

In this sub-unit, you are introduced to study and presentation of a healthy lifestyle in relation to traditional foods. It also covers key objectives and strategies for the promotion, incorporation and protection of traditional medicinal food and practices, food design plans that minimise the impact on the environment, including waste.

5.1.1. Traditional food practices for wellness

Expected learning outcomes

By the end of this lesson, you will be able to:

- Describe a healthy lifestyle perspective;
- Outline key objectives and strategies for the promotion, incorporation and protection of traditional food medicines and practices;
- Prepare a traditional Myanmar meal that will have minimal impact on the environment, including its waste; and
- Promote the incorporation and protection of traditional food medicines and practices.



Traditional food

Local food has a long history of being nutritious and promoting good health and wellbeing. Indeed, these foods have been consumed for thousands of years. Traditional foods are usually able to be simply prepared and include vegetables and fruits, meat, chicken, fish, dairy products, eggs, legumes, nuts and seeds.

Benefits of local traditional food

The land and seafood once provided everything for humans in their particular location. Today, although most people eat a mixture of market-based or processed foods and traditional foods, local traditional foods are still an important source of nutrients.

Typically, local traditional foods:

- Are low in calories so help maintain a healthy weight.
- Are low in saturated fat so are good for the heart.
- Contain more iron than processed food, which is good for muscles and blood.
- Contain more zinc than processed food, which helps to heal wounds and prevent infections.
- Contain more Vitamin A, than processed food which is better for vision and preventing diseases.
- Contain calcium which is good for bones and teeth.

A healthy lifestyle

A healthy lifestyle is one of the keys to maintaining a healthy and happy life and coping with stress. Healthy living has a lifelong effect. It includes eating a healthy diet, physical activity, weight management and stress management.

A healthy lifestyle includes a balanced diet. A well-balanced diet is one in which every meal is eaten a variety of foods in the right proportions and consuming the right amount of food. Meat, dairy products, fruits, and vegetables are an important part of keeping your body healthy.

Natural medicinal foods that support health. Visit the link below.

<https://myfoodmyanmar.com/5-spices-and-herbs-thatll-take-delicate-care-of-your-body-from-head-to-toe/>

Characteristics of a healthy diet

The food we eat every day should have the following characteristics to be healthy.

- **Balance**
When preparing food for healthy growth and development, the right amount and proportion of nutrients are required.
- **Include fruits and vegetables**
Fruits and vegetables are rich in vitamins and antioxidants as well as fibre and minerals. Eating fruits and vegetables regularly can help keep your digestive system healthy and free of constipation, as well as prevent chronic diseases as you grow older. Therefore, you should make it a habit to eat fruits and vegetables.
- **Fresh and clean**
The fresher the food, the higher the nutritional value. Therefore, it is important to carefully choose fresh and cooked foods to get proper nutrition. This not only provides nutrition but also protects against unwanted diseases.
- **Limit unhealthy fats**
Since saturated fats and modified fats are unhealthy, care must be taken not to include them in the diet. This will help prevent high cholesterol in the blood and prevent Type 2 diabetes and cardiovascular disease. Some fats are good for the body, so you can eat foods like nuts and seeds, fish, olive oil and avocado.
- **Eat whole grains**
You need to eat foods made from grains such as wheat, oats, brown rice, and whole wheat. Eating this way not only can prevent cardiovascular disease but also is the most effective way to prevent stroke and sudden cardiac arrest. In addition, it is also the most effective way to prevent asthma, gum disease, tooth decay, high blood pressure, inflammation and colon cancer.
- **Eat less processed foods**
Processed foods are high in sodium, which can lead to high blood pressure. These foods are too salty and contain preservatives that can be harmful to your health. You need to cut down on processed foods to prevent diseases such as stroke with high blood pressure, cardiovascular disease, heart disease, diabetes, and obesity.

Food safety and security

Food safety is related to how food is grown, delivered, stored, processed, displayed, packaged, transported, disposed and composted. In home based or mass-produced food industries, food handlers and supervisors need to have appropriate expertise and knowledge in food safety and food hygiene. Food handlers need to be hygienic and clean of infectious diseases. Food storage, production and packaging areas are needed to be kept clean and the proper temperature maintained.

Safe food is free of fertiliser, chemicals such as pesticides, pigments, odours, dust, stone, sand, other unwanted substances, and no germs. It needs to be cleaned throughout the process such as step-by-step food preparation, packaging, and transportation.

Careful cooking or processing must be done at all stages of food production prevent the growth of the bacteria that cause food poisoning. Food contact surfaces and equipment must be regularly cleaned to remove micro-organisms. Care must also be taken to keep animals and insects away from food production areas. Pre-packaged food products should contain a list of ingredients and expiry dates and be stored at an appropriate temperature.

Food wastage

According to the United Nations, food that is lost or wasted account for 38% of total energy usage in the global system. Around 14 % of food produced is lost between harvest and retail. Significant quantities of food are also wasted in retail and at the consumption level.

Effects of food wastage

Food loss and waste **undermine the sustainability of food systems**. When food is lost or wasted, all the resources that were used to produce this food also go to waste. In addition, the disposal of food waste in landfills, leads to greenhouse gas emissions, contributing to climate change. Food loss and waste affect food security and food availability and contribute to increasing the cost of food.

Global and national food systems **cannot be resilient if they are not sustainable**. Integrated approaches designed to reduce food loss and waste. Actions are required globally and locally to maximise the use of the food we produce and minimise waste.

Food waste is an environmental problem.

Methane is released when food is dumped in landfills. It heats the air 25 times more than carbon dioxide (CO₂). According to estimates, 14% of global CO₂ emissions are caused by food. According to the Food and Agriculture Organization of the United Nations, 30 percent of food waste is contributing 8 percent of global greenhouse gas emissions. Methane and carbon dioxide emissions are causing greenhouse gas emissions, global warming, and climate change. Its impact on the environment is enormous.

Food waste is an economic and social problem.

Research estimates that there are about 1.3 billion tons of food waste in the world each year, with an estimated economic cost of around \$ 2.6 trillion (FAO). A major UN problem is more than 815 million people are facing food insecurity.

Benefits of reducing food wastage

Reducing food wastage provides social, environmental, and economic benefits.

- Planning meals reduces food waste and saves money.
- It can reduce methane emissions from landfills and greenhouse gas emissions.
- Increases productivity and economic growth.

Ways to reduce food waste at home

Below are some suggestions to help you reduce food waste in your home.

1. Plan meals

You can save money and time by planning your meals. If you mostly buy your food from shops, make a weekly food list. If you do not buy more than you can eat, keep those foods fresh and use them all without wastage.

2. Eat seasonally

When seasonal crops are plentiful, preserve excess fruits and vegetables. Investigate traditional ways of preserving food such as fermenting, as these are not reliant on processes such as refrigeration.

3. Store food well

Wash fruits thoroughly until they are ready to eat to prevent mould. Make sure food is kept away from rodents and other pests.

4. Make compost or natural fertilisers

Feeding natural fertilisers, made with the food residues, give plants the energy they need. Fertiliser can be made at home with discoloured vegetables, coffee grounds and eggshells, etc. Food waste can be converted into fertile fertiliser that will make your garden more productive. Even for those with limited space, there are easy ways to make natural fertiliser. Natural fertilisers are ideal for houseplants or small nurseries.

5. Educate to reduce food waste

Public awareness and food waste education campaigns are important to change the attitudes and behaviours of consumers. This knowledge will help you understand how much food is being lost in your home and how to reduce it. By making small changes to your shopping, preparation, and storage, you can save time and money and save valuable resources for wasting and distributing food. Teachers, such as yourselves have an important role to play in educating young people about preventing food waste.



Learning activity. Simulation performance task: The healthy Myanmar tea shop project

The purpose of this learning activity is for you to prepare a traditional Myanmar meal that will have minimal impact on the environment and promote the incorporation and protection of traditional food medicines and practices.

Your teacher educator will divide you into groups.

1. Groups must have their chefs, cooks, and food servers ready with their cooking pots, utensils, and cleaning materials.
2. The chefs and cooks will prepare their sample dish for the teacher educator while the food servers promote the dish, considering the ingredients' health and medicinal properties.

3. The group will oversee the implementation, hygienic practices, controlling fly infestations, and other important health and wellness concerns regarding food handling.
4. The success criteria from the GRASPS will be used to evaluate and give you feedback on the performance of your groups. The GRASPS for this learning activity is as follows:

G	Goal	The goal corresponds to the learning outcomes of this lesson: <ul style="list-style-type: none">• Prepare a traditional Myanmar meal that will have a minimal waste on the environment; and• Promote the incorporation and protection of traditional food medicines and practices.
R	Role	The teacher educator is the Tea Shop owner. The student teachers are the service crew members. They can assume several roles: <ul style="list-style-type: none">• Cooks and chefs• Food servers.
A	Audience	Constituents of the EDC (student teachers, teacher educators, visitors, and the community) are customers.
S	Situation	An outdoor Myanmar Tea Shop in the EDC serves as a laboratory for a lesson in Local Curriculum class. This Myanmar Tea Shop serves healthy foods and traditional food that promotes medicinal properties of the ingredients as part of Myanmar traditional practices.
P	Products	Food, drinks, and promotional materials
S	Standard	The success criteria include: <ul style="list-style-type: none">• Hygienic preparation of a traditional Myanmar meal;• Quality of food and beverage handling;• Impact on the environment; and• Promotion of the incorporation and protection of traditional food medicines and practices.



Review questions

1. Should your diet be based on local traditional foods? Why?
2. How can you encourage people in your community to get into the habit of eating traditional medicinal foods? Why?
3. What needs to be done to make local food safe to eat? Who will you work with? How can you get them involved?

5.2. Financial Literacy

Having a firm grasp of personal money is a must in today's competitive environment, and this is where financial literacy comes in. Financial literacy is the familiarity with and proficiency in a range of money-related tasks, including budgeting, saving, investing, and debt management. The ability to manage one's finances in a way that serves one's long-term goals requires a comprehension of fundamental financial principles, knowledge of available financial goods and services, and prudent decision-making. It is an essential talent that may have a major influence on one's financial security and future success. Individuals may attain financial stability and plan for a secure future if they have the necessary information and abilities. A person's chances of having a thriving financial future improve if financial literacy is viewed as a priority and taught to them during their formative years.

In this sub-unit, lessons will focus on teaching strategies for managing one's finances. The activities will help you understand the importance of teaching good financial management practices to equip your learners with the knowledge and skills to make informed decisions about their finances. The goal is to provide student teachers with a solid foundation to be able to teach financial management to learners as they grow into adulthood and become more responsible for their own financial wellbeing.

5.2.1. Strategies of financial management

Expected learning outcomes

By the end of this lesson, you will be able to:

- Explain the importance of budgeting, investment, and financial management skills; and
- Demonstrate a range of financial management strategies.



This lesson introduces how to teach basic financial literacy and the importance of budgeting, investing and the financial management skills for students in Myanmar. This lesson includes not only about the knowledge of financial literacy but also explains financial management techniques.

How do we get started in managing our money?

Before you read the rest of this lesson, think about how you would get started with a plan to manage your money.

You might start by identifying what your financial resources are and how secure and regular they are. For example, you may have some money saved but no job currently. How you manage your money will depend on whether you have a regular **income** or need to manage savings or allowances you have. Table 5.1 sets out how to calculate your income.

Table 5.1. How to calculate income

How to calculate income	
Income from work / salary	
Extra income	
Other income:	

Total income	

Next you will need to **identify what your necessary expenses are**. Many financial experts suggest listing these to develop a personal budget. These necessary expenses are the priority expenditure from your income. Be aware that some necessary expenses may vary from month to month for example, your electricity bill. These are called **variable expenses**. This variation needs to be incorporated into your calculation. Other expenses may be **fixed expenses**, for example, rent for your home where you pay the same amount each week or month. You will also need to set aside some of your income for emergency expenses, for example, health, maintenance or other unforeseen costs.

Occasional costs are expenses collected quarterly, seasonally, or annually. These expenses may include things like taxes and insurance. They are necessary expenses, but they are not regular. These expenses should be identified and divided by 12 to reach an average monthly amount. This amount needs to be set aside on a monthly basis and forms part of your necessary expenses. Tables 5.2 and 5.3 are examples of how you would calculate your necessary expenses.

Table 5.2. How to calculate expenses

How to calculate expenses	
Necessary expenses	
House rent	
Food (estimated cost)	
Electricity	
Phone top up card	
Transport to work	
Emergency expenses (amount you will put aside for emergencies only)	
Occasional expenses (Divide the annual cost by 12 to find the average monthly cost)	
Travel expenses	
Taxes	
Insurance	

Total expenses	

Compare your income and expenses.

Subtract the total expenses from your total income.

Table 5.3. How to calculate the total balance

Total balance	
Total income	
Total expenses	
Balance (+ / -)	

If you end up with a negative balance your expenses are in excess of your income and this is a situation of financial stress and vulnerability. Your **balance** is your **disposable income** that is income that you can choose to save or spend.

You may choose to spend your disposable income on **general expenses**. These are flexible expenses and may vary from month to month. They include things like clothing and entertainment. They are not necessary expenses.

The next step is to **identify your financial goals**, for example, you would like to buy a motorcycle because it will make it easier and quicker to travel around. If you do not currently have sufficient savings to purchase a motorcycle, you will need to implement a savings plan. Considering your disposable income, you can decide to regularly set aside a certain amount of your income as savings to meet your goals of buying a motorcycle. It is helpful to work out how long it will take you to purchase a motorcycle in your savings plan.

Distinguish between needs and desires. Are there any expenses that surprise you? Are you spending more than you want to? Will spending this money bring me closer or farther away from my goals?" It will be easier for you to set clear priorities for yourself and make decisions.

If you are spending more than you earn – you will need to borrow money from others. Borrowing money can be easy, but it can be difficult to repay and can lead to “debt”.

If all income is used continuously – you are likely in financial stress. You should a) reduce your spending if you can or b) increase your income if you can.

When you spend less than you earn – it gives you more security. You can save for your goals, and you do not need to borrow from others in case of an emergency.

Make a budget

You need to plan to manage your money. You need to set goals that you can achieve.

Then you must make monthly budget to save money. That means spending less than you earn.

Is your budget realistic?

Compare your spending habits from Step 3 with your current budget. Knowing these differences will help you to manage your expenses and determine which expenses should be reduced or what to spend more on compared to previous ones.

Follow your plan

Once you have a budget, keep in mind your expenses. Diligence and discipline must be followed in accordance with your plans. Find and create a system that suits you. These are strategies that have been identified as useful:

“**Envelope**” – For example, organise your weekly expenses for each Sunday and put it in an envelope. In other words, make different envelopes at the beginning of each week such as “Savings”, “Car fee”, “Food”, “Wanted”. Never touch a savings envelope except in an emergency.

“**ATM**” – If you have a bank account and have money deposited in it, you must set a discipline and time limit on how much money you can withdraw from the ATM to keep track of your cash flow. For example, you only must go to the ATM on Sunday and withdraw the expenses for one week. Be careful not to repeat it until the next Sunday (except for emergencies). This way you know immediately if you use more than you plan.

“**Mobile applications**” – Alternatively, users of mobile applications can check their expenses in detail and track their expenses.

Extra savings –You can also create fun ways that will be supported to save a little extra on a monthly basis to increase your savings. It can increase your savings as it comes out of spending on your desires or wants.

“**Special banknote**” – Any banknote is designated as a special banknote (e.g., 200 kyats) and is kept unused whenever it is received.

“**New banknote**” – Keeping new banknotes unused when new ones are received.

“**Small change**” – Savings unused when you receive less than 500 Kyats.

Adjust the plan

Sometimes, we deviate from our plan because it is not always as we want in the real life. No need to worry if your budget is not perfect the first time you try. The most important thing is that you have a budget.

Review your budget monthly. Using this information, you can make new budget plans by making adjustments and changes for the coming months.

Some things may need to be reduced to save for more important expenses and to achieve your financial goals.

If your salary increases, add it to your income. If you experience an unexpected drop in income or a new regular expense, include it in your budget and make the necessary adjustments.

Financial management tools

Management of finances is crucial in both private and commercial settings. The availability of several financial management tools and mobile applications has greatly simplified the process of keeping track of money in the modern day. To add to their usefulness in monitoring financial standing, these resources also shed light on spending habits and facilitate calculated financial choices.

The convenience of these resources for managing money is a major plus. They may be accessible at any time, from any place, and on any smartphone. Download them from the App Store or Google Play depending on your device. In addition, many of these resources are available at no cost, providing another choice for people seeking to increase their financial literacy and take better control of their own money. If you want to learn more about money and how to handle it better, these applications and online resources are invaluable.

Moreover, Google Sheets and Microsoft Excel are both popular spreadsheet programs that can be used as financial management tools. They provide templates that can be customized to track income, expenses, and budgeting. With these programs, users can easily create and manage financial statements, such as balance sheets, income statements, and cash flow statements. Additionally, users can perform complex calculations, including what-if analysis and financial modeling, to help make informed financial decisions. Both Google Sheets and Microsoft Excel are user-friendly, accessible, and free to access for individuals with a Google or Microsoft account. Furthermore, both programs offer a range of tools for collaboration, enabling users to share and edit documents with others in real-time. For those who want to track their finances, these programs can provide a simple, efficient, and effective solution.

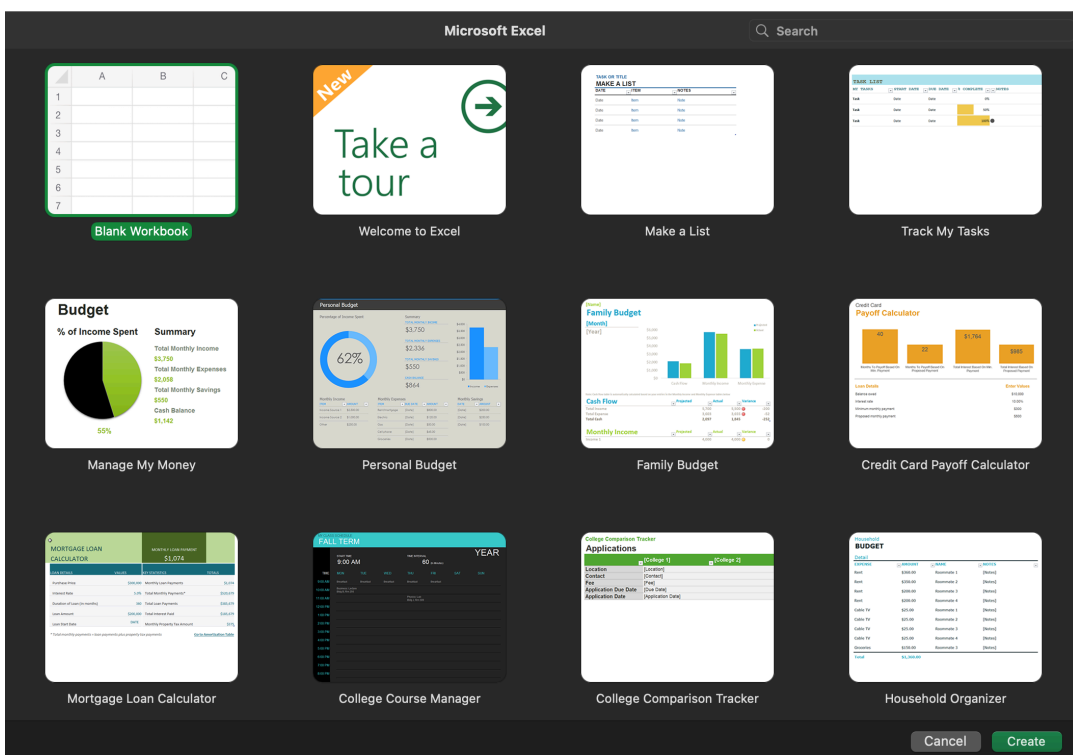


Figure 5.1. Financial management templates are common in Microsoft Excel

In conclusion, the availability and convenience of financial management tools and mobile applications have expanded financial management’s reach and impact. By providing a variety of features and straightforward interfaces, these programs educate users and equip them with the skills they need to make sound financial decisions and reach their objectives.



Learning activity 1. Group discussion: Importance of budgeting, investment, and financial management skill

The purpose of this learning activity is for you to discuss and explain the importance of budgeting, investment, and financial management skills.

1. Refer to this textbook, which contains information on budgeting, investment, and financial management skills for the group discussion.
2. Group Discussion: Class are divided into groups of 3-5 students. Each group should have a designated leader and a recorder. Groups have group discussion paper where they can freely record their discussion points. The groups should discuss the following questions:
 - What are budgeting, investment, and financial management skills?
 - How can these skills help individuals in their everyday lives?
 - What are some examples of budgeting, investment, and financial management skills?
 - How can these skills help individuals achieve their financial goals?
 - How can these skills help individuals contribute to sustainable development?
3. Group Presentation: After the group discussion, briefly present your answers to the class. Ask follow-up questions to the groups.
4. The assessment will focus on the following:
 - Observation of participation in the group discussion;
 - Completion of the group discussion paper where your group freely record your discussion points;
 - Quality of the group presentation; and
 - Quality of the follow-up questions asked by the class.



Learning activity 2. Developing teaching resources: Financial management strategies for primary and middle school students

The purpose of this learning activity is for you to demonstrate a range of financial management strategies that can be implemented in school.

Recap that in Lesson 4.1.2, the learning activity featured was *Learning activity 1. Creating flashcards: Teaching 21st century skills to primary and middle school students*. Use this lesson as a reference for a list of teaching resources you can create. You must select which teaching resource you want to develop. But this time, you will create teaching resource for financial management strategies that suit the context of primary and middle school levels.

1. Class will be divided into small groups of 3-4 students considering inclusive principles, ensuring that all genders are represented, and the groups do not discriminate abilities.
2. Each group has chart paper, markers, blank flashcards, and index cards.
3. Here is a list of financial management strategies that may be appropriate for students are suggested:
 - Creating a budget for a pretend allowance
 - Saving for a specific goal, such as a toy or trip
 - Learning about different types of bank accounts and their uses
 - Creating a savings plan for a long-term goal
 - Tracking expenses in a journal or spreadsheet
 - Comparing prices and making informed purchasing decisions
 - Understanding the concept of credit and credit scores
 - Learning about investment options and the stock market
 - Creating a plan for paying off debt
 - Understanding the concept of compound interest
 - Learning about the different forms of currency and exchange rates
 - Understanding the difference between needs and wants
 - Creating a financial plan for a hypothetical business
 - Learning about different types of insurance
 - Understanding the concept of inflation and its impact on purchasing power
 - Creating a retirement plan
 - Understanding the difference between assets and liabilities
 - Learning about different types of loans and how they work

- Creating a plan for emergency savings
 - Understanding the concept of taxes and how they are used to fund government services.
4. Each group choose one strategy and create a teaching resource (refer student teachers to Lesson 4.1.2) that will help primary and middleschool students understand and apply the strategy.
 5. You will be allowed enough time to work on your teaching resources.
 6. Each group present their resources to the class and have a class discussion on the effectiveness and appropriateness of the resources.

Here is a rubric with success criteria to guide you through the assessment:

Table 5.4. Rubric for the lesson: Developing teaching resources – Financial management strategies for students

Success criteria	Excellent	Good	Fair	Poor
Appropriateness of resource for students	The resource is highly appropriate and tailored to the specific needs and developmental level of students.	The resource is appropriate for students, but could be improved to better suit their needs.	The resource is somewhat appropriate for students, but could benefit from more tailoring.	The resource is not appropriate for students.
Effectiveness of resource in teaching financial management strategies	The resource is highly effective in teaching the chosen strategy and is engaging for students.	The resource is effective in teaching the chosen strategy, but could be improved to better engage students.	The resource is somewhat effective in teaching the chosen strategy, but needs improvement to be more effective.	The resource is not effective in teaching the chosen strategy.
Creativity of resource	The resource is highly creative and original.	The resource is creative, but could be more original.	The resource is somewhat creative, but lacks originality.	The resource is not creative.

Table 5.5. Rubric context verification

Review the rubric and confirm to the teacher educator whether it is suitable to your context and level. The rubric is a sample and may need to be adjusted to fit your specific needs. Adjustment of the rubric requires verification and collaboration with the teacher educator.
Does the rubric suit your context? <input type="checkbox"/> YES <input type="checkbox"/> NO
Does the rubric suit your level? <input type="checkbox"/> YES <input type="checkbox"/> NO

Suggestions for improvement (make sure to show this to your teacher educator):

Homework activity

Lesson 5.3.1 is about **Home Economics skills and sustainable development**. You need to read and understand the lesson. Feature one home economics skill and sustainability practice featured in this textbook to help make the world a better place. Be creative in demonstrating your home economics skills and sustainability practice by:

- a) *Designing a household chore contest.* Create a simple and easy home economics skill contest. For example, a contest about hand-washing dirty white clothes can be designed to demonstrate skill in washing laundry. Participants will come from the groups, preferably males. The group with the cleanest and whitest laundry wins the contest. The groups can create a contest from (1) food choice, (2) basic cooking, (3) sewing, (4) washing, (5) ironing, (6) basic house cleaning (7) basic house maintenance.
- b) Participate in the sustainability festival – a celebration of sustainable practices. Each group selects at least one sustainability practice from the textbook and should not duplicate with another group. Options which your group can do in the sustainability festival:
 - Introduce how to do paper recycling;
 - Introduce how to use sustainable products;
 - Demonstration of a conservation practice such as walking rather than riding motorbikes or cars;
 - Choosing local foods;
 - Growing your own fruit trees (i.e., fruit tree planting);
 - Water conservation strategies;
 - How to reuse some products;
 - Donating unused items;
 - Zero plastic policy; and
 - Recycling and using recycled products.



Review questions

1. Is financially literate a requirement for everyone? Why is it needed?
2. What are some things to keep in mind when planning your own budget?
3. What is the first thing you need to do when managing money? Why do you need to do this?

5.3. Sustainable Living

‘Sustainable living’ is a way of life that seeks to reduce the use of the earth’s natural resources by individuals or communities.

In this sub-unit, teaching students about ‘sustainable living’ also includes understanding why home economics skills and sustainable development benefit everyone in every region.

5.3.1. Home economics skills and sustainable development

Expected learning outcomes

By the end of this lesson, you will be able to:

- Demonstrate home management and home economics skills; and
- Promote sustainable practices in line with sustainable living.



Education for sustainable development

The task of sustainable education development is not only to raise awareness about sustainable development, but also to develop skills, to promote motivation for active participation in shaping values and promoting sustainable development. Home economics is a school subject that covers a wide range of topics related to sustainable development.

Sustainability

Sustainability is a concept related to the development of our products and services that meet our current needs but does not disturb our ability to meet the needs of

future generations. The environment is an exhaustible resource. Therefore, it is important to use the environment and its resources wisely and to protect the earth and our environment for the benefit of humans and all living things. Sustainability also includes reducing the use of the earth's resources. There are many things you can do including limiting the amount of energy used, using eco-friendly products and changing your diet. Human beings need to live in harmony with the environment in a sustainable society and conserve natural resources for their future generations.

Home economics skills that everyone needs.

The art of housekeeping is called home economics science. This subject covers topics such as cooking, sewing work, cleaning and decorating your home to make it more liveable, financial management and health education.

Due to constantly changing living conditions, household tasks are becoming more and more complicated. In the past, it was housewives who used to keep the house in accordance with the methods taught by call older housewives, such as their mother and aunts. Today, these roles are becoming less gendered as more women participate in the workforce and have careers of their own. Skills that everyone needs in today's society:

1. Food choices and basic cooking

Buying and storing food and making a nutritious and economical daily family meal is a necessary skill.

If you know about the nutritional value of different foods, you plan your daily diet to include essential nutrients. When Safety and care are also needed in food handling and storage to prevent food from being wasted or spoiled.

It is also important to know how to cook to prevent nutrient damage, to prepare appetising meals. in these dishes. You also need to be able to prepare cooked food to make it appetising.

2. Sewing

Although not everyone makes a living as a seamstress, basic sewing skills are useful for everyone. Skills such as mending when clothes are torn are useful and contribute to living sustainably as the life of clothes can be extended.

3. Washing and ironing

Advances in technology have made it easier to wash laundry in more recent year. Nevertheless, knowing how to wash different fabrics and use different washing machine programs is an essential modern-day skill. Use washing

machines and dryers over the years. Therefore, it is necessary to know how to use the washing machine. In ironing, using the right temperature for heating is important to maintain your clothes and smart appearance.

4. **Basic house cleaning**

Housekeeping is a “life skill” that both men and women need to learn.

From an early age, it is important to know housekeeping and cleaning, sweeping, vacuuming, dusting, washing dishes and how to clean the kitchen, bathroom, and toilet. It is also necessary to understand differences between items that are easy to clean and things that need to be carefully cleaned and what materials can be used for cleaning tasks. Understanding these basic cleaning skills will make the cleaning process more efficient and faster. All areas such as kitchen, bathrooms and toilets need to be thoroughly cleaned. As the house needs to be kept clean and tidy, and it is also required ornamental plants and trees should be planted to keep the home environment green.

5. **Basic house maintenance**

A basic knowledge of house maintenance is required for both safety and aesthetic reasons. Basic knowledge of electricity, how to close off water mains, checking electrical circuit breakers and installation of light bulbs and how to conduct base repairs are all important.

6. **Money management**

You need to be able to use the money you earn wisely and not waste it. To do this, you need to have a lot of knowledge to adapt to a changing environment.

Payment of rent and bills: Know how to pay bills and the best way to do this is critical so you do not pay penalties for late payment.

Managing a bank account: This is a good thing to start when it comes to managing your finances. When deciding which bank to join, it is important to consider factors such as free withdrawals from ATMs or unlimited monthly transfers. You can put some of your savings into your account monthly.

Loans and debts: As a borrower, you need to know how to manage debt and adjust spending. Credit cards are ideal for short-term expenses that can be paid within a month but charge heavy interest rates. Personal loans are ideal for long-term expenses but selecting the best loan and interest rates requires good research skills.

7. **Family relationship skills**

Communication skills, teamwork skills and such as patience and compromise or conflict resolution, all contribute to harmonious family relationships. Basic social skills are also essential in our society and workplace.

8. Health care

Careful care of sick family members in accordance with doctor's instructions is an important skill. This includes cleaning, preparing nutritious foods, and understanding of home remedies for common ailments, as well as keeping medicines at home.

9. Social ethics

In social relation, living by the rules of follow or avoid getting good benefits is living in a civilised manner according to social ethic. Being polite is a simple performance that shows how you live and act. Becoming a civilised person is to be possible more friendly to both your personal and professional life.

Why is home economics important?

By teaching about nutrition cooking, family finances, safety, and other occupational skills for teenagers in home economics, the following life skills can be improved:

- Individuals can apply practical skills learnt in the classroom, such as choices of food and nutrition, cooking skills, choices of health and lifestyle. It provides the opportunity to apply risk management skills and techniques to manage their personal safety at home.
- It enables individuals to make healthy choices, have self-awareness and take responsibility for their own health and wellbeing. It also improves self-confidence.
- Food, nutrition, and health care can be provided and being able to manage resources such as time, money and energy also increases the responsibility for family and long-term sustainability.
- Improves critical thinking and problem-solving skills to make good decisions.
- Home economics helps to develop the knowledge and skills needed to help each person make the right decisions and to prioritise the balance between his or her career and personal needs.

Why is sustainability important?

Sustainability improves the quality of our lives, protects our ecosystem, and preserves natural resources for future generations. Environmental green and sustainability not only benefit the society but also have long-term benefits on conserving the environment.

The main benefits of sustainability are:

- a. It provides a secure future:** Everyone has a moral responsibility to make the sustainable world.
Our current choices and actions could have long-term impacts on future generations. If we use more of our earth's resources now than we need to, run out of natural resources for future generations. For example, excessive overfishing of the oceans not only diminishes the supply of fish but also the loss of all available resources in the food chain related to that fish.
Therefore, we can make a secure future for everyone by making ethical choices and practicing them for long-term sustainability.
- b. It reduces energy consumption:** Sustainable economic practices lead to a significant reduction in long-term energy costs. Some features, such as the rapid replacement of energy-efficient appliances in the production process, can reduce long-term electricity costs. Combined with solar and wind energy equipment, it saves on monthly expenses. Reducing energy consumption also helps businesses become more efficient.
- c. Achievement of a healthier life:** Sustainable activities reduce carbon emissions and pollution, making a positive change in society. By doing so, in the long run, our society will benefit from improved water and air quality and it also can be felt the benefits of reducing landfills and increasing renewable energy resources. As we focus on sustainability, the whole world will enjoy the benefits of a cleaner, healthier life.
- d. It has an impact on the community:** Employers can not only improve their business standards and brand by promoting the conservation of natural resources, but also deepen their knowledge and practice to employees and their families. Telling emphasise the importance of long-term sustainability in their work is building a very important dialogue that can have a wider impact on society.

How to be sustainable

Here is the list of easy changes to live sustainably every day. You can help make your world a better place by making some small changes to your lifestyle.

1. Choose sustainable ways to conduct your day-to-day living

Every person and business in the world has bills that need to be paid. Try your best to avoid paper bills. Encourage others not to use paper.

Regular billing statement(e-billing) can be sent to your email, which makes them easier to organise and more secure. This is a simple way to reduce the use of paper and improve the environment and make it more sustainable

It is very easy to choose products that are sustainable or durable. Many companies are focusing on sustainability. There are many sustainable options in clothing to beauty brands and food and energy providers. Choose brands that use recycled plastic or materials instead of packaging for waste products.

2. Save energy savings through transportation adjustments

Try to minimise the use of motor vehicles and try to walk the closest distance as much as possible. It can conserve the environment by reducing carbon emissions. If you live in a city that is within walking distance, you can use a bicycle or walk. This is a good way to exercise and reduce fuel consumption in transportation.

If you cannot walk, take public transport as much as possible. If you cannot travel this way, you can choose a carpool that friends who are same way can ride together. These behaviours, though small, can lead to real improvement in the long run if done consistently.

3. Choose local foods

When it comes to buying groceries, choose sustainable food manufacturers. You can buy at the markets to get delicious farm-fresh produce from local farmers in your community. Shopping from local farmers can reduce carbon emissions by eliminating the need for transportation. You can also choose brands that guarantee long-term practice.

4. Grow your own food

Grow your own fruits and vegetables and use natural fertilisers made from kitchen waste. In this way, you will not need to use fuel to travel to shops and this will reduce the amount of fuel energy used to transport goods.

5. Save water

You can save water in and around your home by making many small changes. Use drinking water only as much as you need to avoid wastage. You can save water by collecting rainwater for washing fish, meat and vegetables and then watering your plants.

6. Choose reusable products

A few small changes in your habits can have a sustainable effect. Choose reusable bottles, dishes and shopping bags instead of paper towels and paper or plastic bags. Also, use reusable food storage containers to reduce waste and to securely pack and transport your food safely.

If you are a business owner, you can help reduce the waste by carefully planning your activities. Instead of disposable plastic sticks in restaurants, use reusable wooden sticks. Businesses can make more sustainable practices, such as replacing light bulbs with LED bulbs.

7. Donate unused items

To reduce litter, donate items you no longer use or wear to contributions and pass them on to potential users.

8. Make and use recyclable products

Recycling is something that everyone should do at this time. It is very easy to reuse. Keep a separate trash bin in your home and business, where you can organise recycling or recyclable products. In cities and towns, recyclable materials are now being purchased and recycled.



Learning activity 1. Housework contest: Demonstrating home economics skill

The purpose of this learning activity is for you to demonstrate home economics skills through contests.

1. Groups will be asked to prepare one household chore contest as a homework activity.
2. You can create a simple and easy home economics skill contest. For example, to demonstrate skill in washing laundry, a contest about hand-washing dirty white clothes can be designed. Participants will come from the groups, preferably males. The group with the cleanest and whitest laundry wins the contest.
3. With this, your groups can create a contest from:
 - Food choice
 - Basic cooking
 - Sewing
 - Washing
 - Ironing
 - Basic house cleaning
 - Basic house maintenance.
4. In creating the contest, be mindful about inclusion and challenging gender stereotypes.
5. Note that this learning activity is simultaneous with the healthy Myanmar tea shop simulation to establish the local community atmosphere.



Learning activity 2. Sustainability festival: Promoting sustainable practices

The purpose of this learning activity is for you to promote sustainable practices in line with sustainable living.

1. Groups will prepare for the sustainability festival – a celebration of sustainable practices as a homework activity.
2. Each group selects at least one sustainability practice from the student teacher textbook and should not duplicate with another group. Groups may:
 - Introduce how to do paper recycling;
 - Introduce how to use sustainable products;
 - Demonstrate a conservation practice such as walking rather than riding motorbikes or cars;
 - Choose local foods;
 - Grow your own fruit trees (i.e., fruit tree planting);
 - Employ water conservation strategies;
 - Show how to reuse some products;
 - Donate unused items;
 - Devise a zero-plastic policy; and
 - Recycle and use recycled products.
3. The festival will be held at the healthy Myanmar tea shop. A moderator is assigned for the festival. Each group will be called to present their sustainability practice.
4. In this festival, you have freedom of expression on how you wish to demonstrate promotion of sustainable practices.
5. Conduct a parade around the EDC to raise awareness and promote the sustainable practices in the campus.



Review questions

1. Does everyone need to be involved in sustainable development? Why?
2. What are some of the home economics skills that most young people need today? How can you practise these skills?
3. How can you contribute to a sustainable world?

Unit Summary



Key messages

- A healthy lifestyle is one of the things that can help people maintain their health and wellbeing and overcome stress. Healthy living has a lifelong effect. It includes eating a healthy diet, physical activity, weight management and stress management.
- A healthy lifestyle includes a balanced diet. A well-balanced diet is one in which every meal is eaten in moderation, that is eating a variety of foods according to age in the right proportions and right amount of food. Meat, dairy products, fruits, and vegetables are an important part of keeping your body healthy.
- “Loss of food” and “Waste of food” cause food wastage. Reducing food wastage is a provides social, environmental, and economic benefits.
- Financial literacy enables people to understand basic financial concepts to make practical financial decisions. With this knowledge, they will be able to manage their money, make strong decisions and have good spending and budgeting practices.
- Home economics provides can help improve life skills for young people by teaching nutrition, cooking, family finances, safety, and other occupational skills.
- Home economics and technology is a school subject and covers a wide range of topics related to sustainable development.
- Sustainability is a concept about the development of our products and services that meet our current needs but does not disturb our ability to meet the needs of future generations.
- Sustainability improves our quality of life. It protects our ecosystem and preserves natural resources for future generations. Environmental wellbeing and sustainability not only benefit of society but also the long-term benefits of focusing on conserving our natural resources.



Unit reflection

After completing this section, students should consider the following questions.

- Do you think it is important to learn about how to promote, protect and integrate traditional medicinal foods and eating habits? Why?
- As you learn about promoting traditional medicinal foods and eating habits, integration, and protection, how can your middle school student interest?
- How can budgeting and financial management skills be used to guide middle school students in managing their finances?
- Take some time to think about how to create a list that contains the information needed to live a more sustainable lifestyle.
- How can we help friends and families or members in your community to become involved in sustainable development?



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Unit 6

Teaching, Learning and Assessment

There are two main components in this unit. The first component is planning and microteaching a local curriculum lesson by using a Year 3 lesson plan template, whereas the second is reflection on that microteaching and assessment. This Year 3, you will have to study with focus on some assessment tools that can foster students' learning and inclusion though they have already covered the assessment methods used in Local Curriculum in Year 2.

Expected learning outcomes



By the end of this unit, you will be able to:

- Collaboratively develop a Local Curriculum lesson plan for a selected grade level, maximising formative assessment opportunities;
- Deliver one stage of the lesson in a group microteaching session setting;
- Reflect on micro-teaching sessions to identify effective and inclusive teaching learning strategies for Local Curriculum lessons; and
- Outline a range of formative and summative assessment tools that can foster students' learning and inclusion in Local Curriculum.



Competencies gained

A1.1 Demonstrate understanding of how students learn relevant to their age and developmental stage

B2.1 Demonstrate capacity to monitor and assess student learning

C3.1 Demonstrate a high regard for each student's right to education and treat all students equitably

C3.2 Demonstrate respect for diversity of students and the belief that all students can learn according to their capacities

D1.1 Regularly reflect on own teaching practice and its impact on student learning

D2.1 Improve own teaching practice through learning from other teachers and professional development opportunities



Key terms

Inclusion, inclusive, assessment

6.1. Teaching, Learning and Assessment for

Local Curriculum

In this sub-unit, you will plan Local Curriculum lessons and micro-teach them in groups. They will also have to reflect on their practice teaching. Thus, you will also be able to basically identify effective and inclusive assessment tools for teaching and learning Local Curriculum lessons by doing such practical activities.

6.1.1. Lesson planning and microteaching

Expected learning outcomes

By the end of this lesson, you will be able to:

- Collaboratively develop a Local Curriculum lesson plan for a selected grade level, maximising formative assessment opportunities; and
- Deliver one stage of the lesson in a group microteaching session setting.



Table 6.1. Lesson plan template for microteaching at primary/middle school level (Local Curriculum)

Group:		Teacher:	
Class:		Date & time	
Lesson:			
Know the students' prior knowledge			
Student profile:			
Lesson objective:			
Learning outcomes:			

<i>By the end of this lesson, students will be able to:</i>				
Criteria for success:				
Formative assessment opportunities:				
Teaching and learning strategies:				
Teaching and learning methods and techniques:				
Teaching aids and resources (visual aids, audio aids, integration of technologies):				
Stage	Timing	Teacher activity	Student activity	Differentiation
Introduction				
The introduction is assigned to (name of a student teacher):				
Body				
The body is assigned to (names of two student teachers):				
Review				
The review is assigned to (name of a student teacher):				

Instruction: This is a cooperative group activity. Plan how your group can deliver the lesson for microteaching within 20 minutes (5 minutes each person).

Source: Year 3 lesson plan template for microteaching

Teaching practice (microteaching) or Taking turns to make presentation.

“Micro-teaching” is a practice where you can develop your teaching skills. In other words, it is a time of experimentation to see if a teaching method or a learning activity or an assessment tool relating to Local Curriculum is practical. Micro-teaching activities are designed to provide equal opportunities to all student teachers in a class. Sample activities are provided in Figure 6.1 and 6.2 to describe how micro-teaching can be conducted to ensure equal teaching and learning experience.

You will prepare a lesson plan in Local Curriculum in a group (for a period of 40 or 50 minutes). The lesson plan will be divided into parts and each student teacher has to teach their part of a lesson in their respective groups for about 5 minutes. As shown in Figure 6.1 and Figure 6.2, peer teaching circles can be divided into primary and middle school levels. In brief:

- 10 peer teaching circles (for a total of 40 students in a class).
- 4 students in a teaching circle (one lesson).
- You will take turns to conduct teaching and learning activities such as microteaching or making presentation for about 5 minutes each.

After the teaching practice, you will complete a self-reflection on your teaching activities as well as receive feedbacks from peers so as to improve teaching and learning.

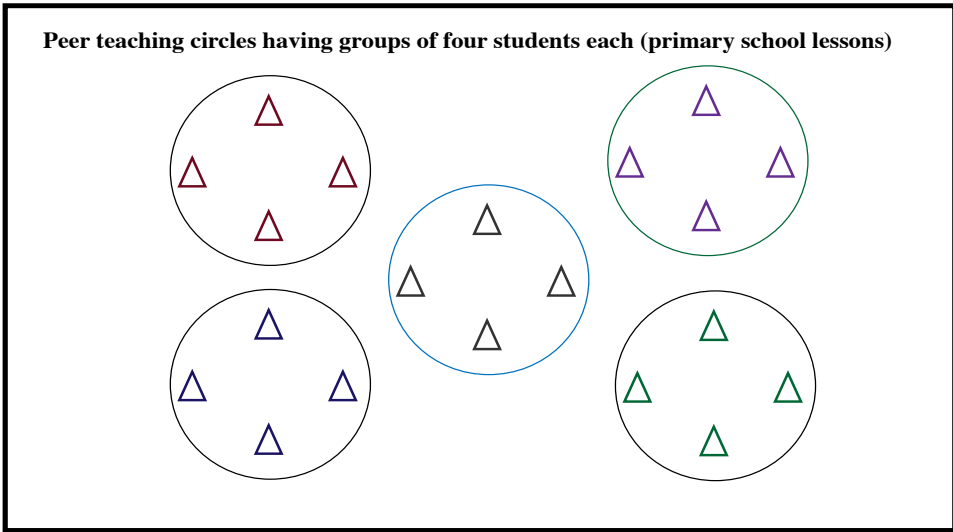


Figure 6.1. Five peer teaching circles for primary school lessons

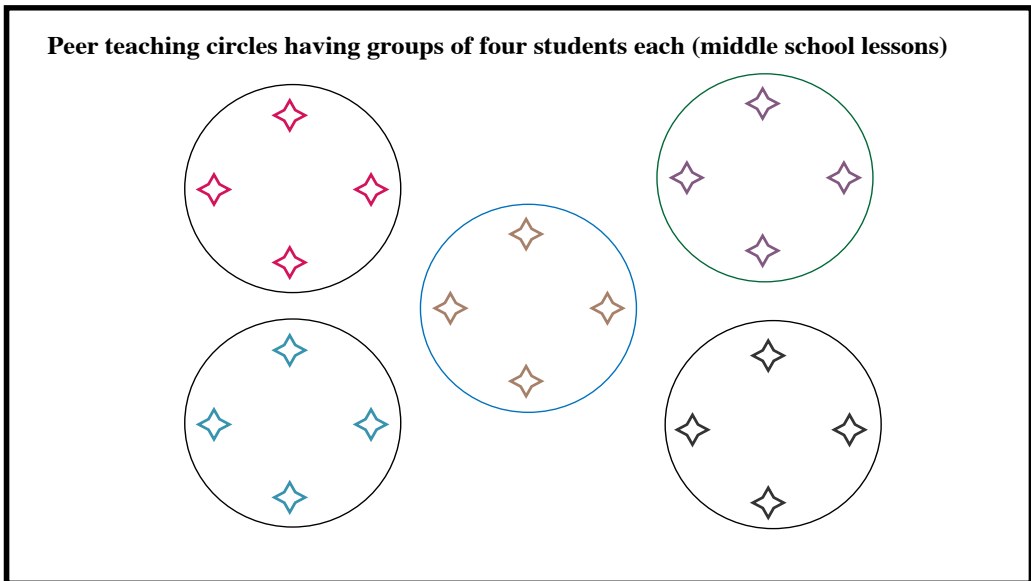


Figure 6.2. Five peer teaching circles for middle school lessons

Period 1



Learning activity 1. Practical: Planning a lesson for microteaching

The purpose of this learning activity is for you to plan a Local Curriculum lesson by utilising the Year 3 lesson plan template. In this activity, you will have to:

- Plan a local curriculum lesson cooperatively in a group of four students.
- Consider and use a variety of formative assessment tools in planning your lesson.

Period 2



Learning activity 2. Microteaching: Microteaching the lessons planned

The purpose of this learning activity is for you to teach the lessons planned in a group of 4 students, by taking turns.

You will have to conduct microteaching in a group of four using the lesson plan developed by yourselves.

You will be assigned to teach one of the following parts of the lesson plan:

- Introduction (1 student);
- Body (2 students); and
- Review (1 student).

To facilitate effective teaching observation, observers will utilise the lesson study observation sheet to assess the performance of student teachers during their microteaching sessions. The lesson study observation sheet is as follows:

Table 6.2. Lesson study observation sheet

Teacher's behaviour		
1. Subject knowledge The teacher is able to teach the appropriate subject content based on a deep understanding and mastery of the subject matter.	The information taught in the lesson is accurate and correct.	
	The information taught in the lesson is focused on the important information needed to achieve the lesson objectives. The lesson does not include distracting or unrelated details.	
2. Lesson design The teacher is able to design a learner-centred lesson that engages students in active learning.	The teacher engages student interest and/or connects to prior learning and knowledge in the introduction to the lesson.	
	The teacher uses a variety of different learning activities to help students achieve the lesson objectives.	
	The teacher wraps up the lesson with a conclusion that highlights main points and/or allows students to ask questions.	
3. Teaching and learning materials The teacher uses low cost and effective teaching and learning materials related to the lesson content.	The teacher uses teaching and learning materials related to the lesson contents to help students learn.	
	The teacher uses the blackboard/whiteboard to write instructions or content that will help students learn.	
4. Learner-centred approach The teacher uses learner-centred and gender-sensitive approaches that engage the students in active learning to teach the lesson.	The teacher uses different types of activities during the lesson (e.g., individual work, pair and group work, discussion, and practical application activities) so that students can achieve the learning objectives.	
	The teacher gives time for students to think and discuss during the lesson.	
	The teacher demonstrates a gender-sensitive approach, including giving equal time and attention to male and female students.	
	The teacher differentiates instruction to address individual students' different learning needs	
	The teacher asks individual students to volunteer answers to questions, rather than only a whole class, choral response.	
5. Use of assessment The teacher uses formative assessment strategies to monitor student learning.	The teacher circulates around the room to observe students working.	
	The teacher uses closed and open-ended questions to check for understanding of the main ideas of the lesson.	
6. Interactions with students The teacher communicates with students in a friendly and warm manner and is able to foster student interest in learning.	The teacher is warm, friendly, and respectful when interacting with all students.	
	If needed, the teacher uses positive discipline techniques to help manage student behaviour.	
	The teacher provides opportunities for a wide variety of students – representing a mix of genders, ability levels, and learning styles – to share their ideas and actively listens to what they have to say.	

Students' behaviour		
1. Active learning Students are engaged and active in the learning activities.	Students actively participate in the learning activities for the lesson (e.g., individual work, pair and group work, discussion, and practical application activities).	
	Students work collaboratively with their peers.	
2. Positive attitude	Students demonstrate an enthusiasm for learning.	
In this space, please include any other comments on your lesson observation. What did you think worked well in the lesson? What could be improved in the lesson?		

6.1.2. Assessment approaches for Local Curriculum

Expected learning outcomes

By the end of this lesson, you will be able to:

- Reflect on micro-teaching sessions to identify effective and inclusive teaching learning strategies for Local Curriculum lessons; and
- Outline a range of formative and summative assessment tools that can foster students' learning and inclusion in Local Curriculum.

Inclusion

“Guidelines for inclusive and equitable classroom practices” are usually described on the front of EDC prescribed books, you will need to read them thoroughly. Inclusion is a belief that all students in the class, with the right support, should be able to learn and engage in learning activities.

Student learners are different from each other in a number of ways such as their needs, prior knowledge and experiences, interests, personality, and characteristics. With this in mind, teachers should incorporate inclusive teaching methods into their lesson plans and also need to assist students in developing their skills. Similarly, teachers need to modify, change, scaffold and adjust the lessons as needed when they deliver them. Teachers themselves can set an example for their students to have inclusive and equitable classroom practices.

Creating an inclusive learning environment

The following factors need to be taken into account in creating an inclusive learning environment for all learners:

- Taking into consideration each and every student and also the obstacles that may be encountered due to gender, disability, religion, ethnic group, language, geographical context, or socio-economic status;
- Adapting flexible learning activities for different students;
- Focusing on using all five senses of learners in learning;
- Avoiding bias carefully;
- Using various tools of formative assessment in checking students' understanding; and
- Providing positive/constructive feedbacks.



Assessment

There are a wide variety of tools for monitoring and assessing students' learning before, during, and after learning a lesson. Providing verbal or/and written feedback on students' learning is an important part of the formative assessment. Providing feedback by teachers facilitates students' learning and improve their future tasks.

Inclusive assessment

“Assessment should be inclusive and equitable as far as possible without compromising academic standards, that is it should ensure that tasks and procedures do not disadvantage any group or individual, including disadvantage due to gender, ethnic group, disability, socio-economic status, or other circumstances.”⁸

Similarly, regarding assessment, one of the objectives for assessment of basic education is: “To improve the inclusiveness and equity of the education system.”⁹

8 Roy, S. S. (2020).

9 Ministry of Education. (2019).

Tools of assessment

As shown in Figure 6.3, there are four categories of assessment tools and their respective activities broadly used in schools:

1. Performance: For example, projects, drawing, demonstrations, using video or audio, speech, experiment, written reports, debate
2. Paper and Pencil Tests: For example, standardised tests, end-of-unit tests, teacher made tests
3. Personal Communication: For example, individual conferences, small group discussion, interviews
4. Observation and Perception: For example, observing students’ classroom interaction, students’ participation, sharing¹⁰

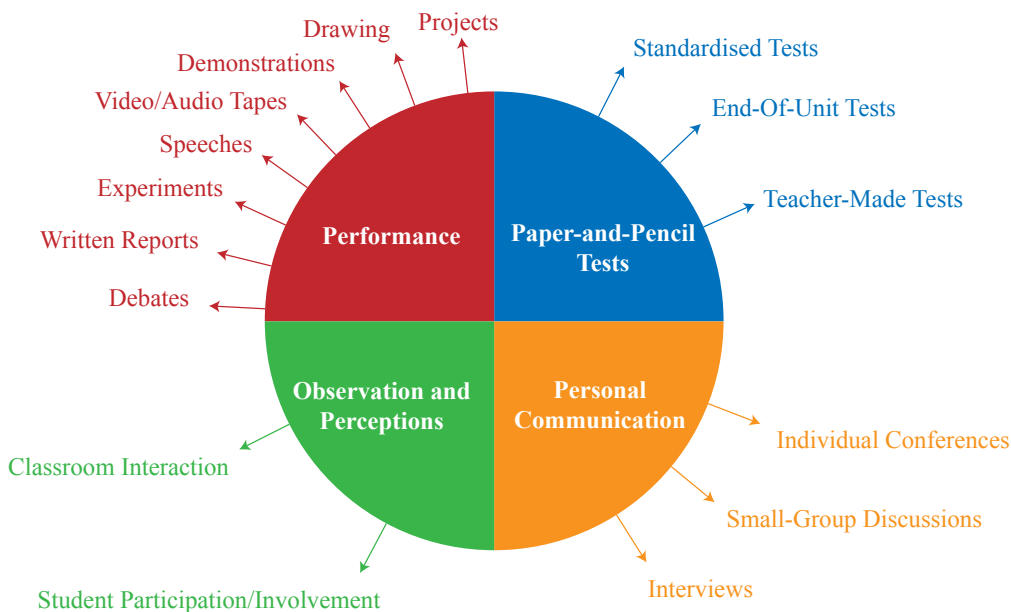


Figure 6.3. Tools of assessment¹¹

¹⁰ Roy, S. S. (2020).

¹¹ Roy, S. S. (2020).



Learning activity 1. Think-pair-share: Reflecting on microteaching session

The purpose of this learning activity is for you to reflect on microteaching so as to identify effective and inclusive teaching learning strategies for Local Curriculum lessons.

In this activity, you will have to reflect on your microteaching so as to identify effective and inclusive teaching learning strategies by considering the three questions below:

1. Is your team's teaching learning effective?
2. Is your team's teaching learning inclusive for all students?
3. Identify three teaching learning strategies which are effective and inclusive.



Learning activity 2. Group work: Brief description of assessment tools that can foster students' learning and inclusion

The purpose of this learning activity is for you to describe assessment tools (formative and summative) in brief that can foster students' learning and inclusion in Local Curriculum.

In this activity, as a groupwork, you will have to identify some assessment tools that can foster students' learning and inclusion in Local Curriculum.



Review questions

1. Why should teachers use effective and inclusive teaching strategies in teaching?
2. How can teachers use inclusive strategies effectively in the classroom?

Unit Summary



Key messages

- Assessment is just as important as teaching and learning for students' learning.
- It is important for all teachers together with responsible education personnel to understand and apply the point mentioned in the National Assessment Policy for basic education: "Assessment should be inclusive and equitable as far as possible without compromising academic standards, that is it should ensure that tasks and procedures do not disadvantage any group or individual, including disadvantage due to gender, ethnic group, disability, socio-economic status, or other circumstances."



Unit reflection

- Why is "Inclusion" increasingly emphasised in the 21st century classroom?
- Review the role of teachers in the classroom to support all students to maximise their learning.



Further reading

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Glossary

Terms	Elaborations
Career counselling	It is a type of business that provides career advice and guides students through their life journey. Assists in managing learning and job transitions.
Food wastage	Although originally intended for human consumption, it is excluded from the human food chain for a variety of reasons, resulting in mass loss of food or declining nutritional value.
Global citizen	The one who notices what is happening in the world, leads for the sustainability of the world, respects the rights of all human beings, respects values and individual differences and works for equality.
Green school environment	Green school environment is landscaping the school compound with trees and ornamental plants.
Healthy lifestyle	It is a lifestyle that includes activities and habits that promote the development of physical and mental fitness that reduce the risk of serious illness. These include healthy activities and habits, regular exercise, nutritious food, adequate sleep and rest, abstinence from smoking, regulating alcohol consumption.
Home Economics science	Skills to maintain a happy marriage within the family.
Inclusion	Inclusion is a belief that all students in the class should be able to learn and engage in learning activities that are accessible to everyone.
Inclusive assessment	Assessment activities/tasks and procedures do not disadvantage any group or individual due to gender, ethnic group, disability, socio-economic status, or other circumstances.
Lifestyle	A lifestyle or way of life that reflects the attitudes and values of a person or group of people.
Loss of food	Usually, foods lost in the early stages such as harvesting, production, storage and transportation.
Sustainable development	Sustaining the capacity of natural systems by providing the natural resources and ecosystem services on which economies and societies depend to meet human development goals.
Waste of food	Foods that are suitable for human consumption but thrown away, often at supermarkets or by consumers.

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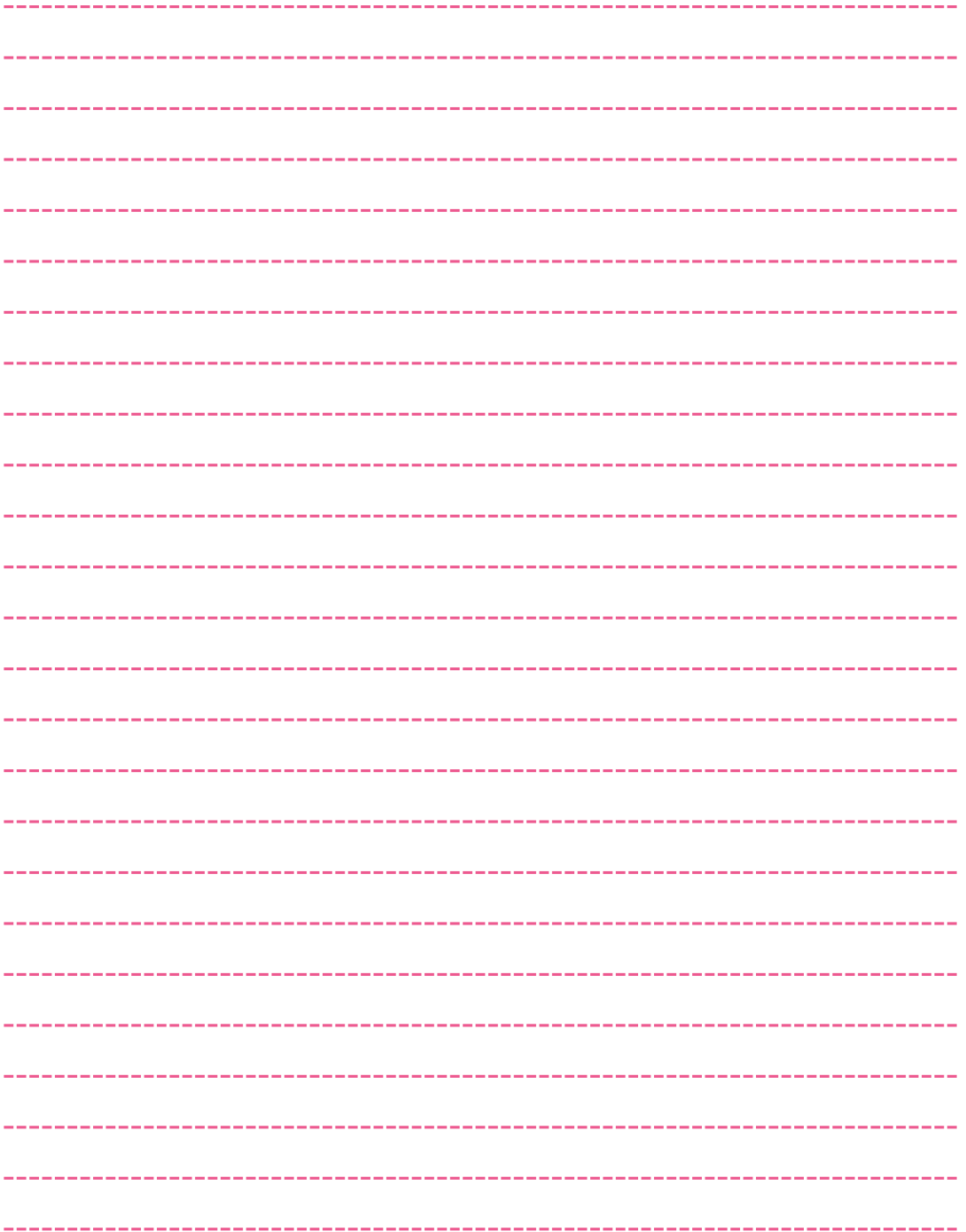
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Notes



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