The Government of the Republic of the Union of Myanmar

Ministry of Education

Year 2 Semester 2

EDU2201

Educational Studies

Student Teacher Textbook

PREFACE

The Myanmar Ministry of Education developed the four-year Education Degree College Curriculum, in line with the pre-service teacher education reform as specified in the National Education Strategic Plan (NESP) 2016-2021.

The Myanmar Education Degree College Curriculum consists of several components: the curriculum framework, syllabi, Student Teacher Textbooks, and Teacher Educator Guides. This curriculum for the four-year Education Degree College 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 Education Degree College 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 Education Degree College 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.

The Myanmar Education Degree College Curriculum was developed by a curriculum core team, which is a Ministry of Education-appointed team of Myanmar Education Degree College teacher educators supported by the Ministry of Education, resource persons from the Universities of Education, University for the Development of National Races of the Union and a team of national and international experts. Overall guidance of the work was provided by the Department of Higher Education, Ministry of Education.

The curriculum development was also supported by the Strengthening Pre-service Teacher Education in Myanmar project, with technical assistance from the United Nations Educational, Scientific and Cultural Organization (UNESCO) and financial contributions from Australia, Finland, and UK Governments.

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HOW TO USE THIS TEXTBOOK

Who will use this Educational Studies Student Teacher Textbook?

This textbook has been designed to guide you, as a student teacher, through Year 2 of the Educational Studies Subject. In this textbook, you will find foundational information about Educational Studies. 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 Educational Studies. Throughout this module, you and your teacher educator will work together, using this textbook as a tool for learning.

When and where does Year 2 Educational Studies take place?

A total of 176 (Semester 1: 96 teaching periods; Semester 2: 80 teaching periods) are allotted for Year 2 of the four-year Education Degree College programme. Classes will be held at your Education Degree College campus.

What is included in the Year 2 Educational Studies textbook?

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

Year 2 Educational Studies contains following topics:

- Educational Studies: Developing Understanding
- Pedagogical Theory and Practice
- Strategies for Effective Learning
- Planning and Preparation

- Educational Psychology
- Myanmar's Education System and Curriculum Agendas
- Educational Philosophy
- Assessment
- Supportive and Safe Learning Environment
- Teacher Professionalism

For each unit, you will be working through learning activities, 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 2 Semester 2, Educational Studies content map

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
6. Myanmar's Education System and Curriculum Agendas	6.1. Overview of Myanmar Education System	6.1.1. Education reform and the middle school	• Outline the changing structure of schooling in Myanmar • Discuss broad expertise of middle school teachers • List key legislative and policy documents related to education in Myanmar	A4.1 C3.1	A4.1.1 C3.1.1	1
	6.2. Education for Sustainable Development (ESD)	6.2.1. ESD definitions, frameworks, issues and resources	• Identify the dimensions of sustainable development • Outline sustainability issues that are relevant to the Myanmar middle school context • Discuss the characteristics and underpinning principles and values of ESD	C3.3	C3.3.1	3

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
		6.2.2. ESD competencies and pedagogies	• List key competencies for ESD • Identify effective teaching and learning strategies and techniques to develop ESD competencies	A2.1 A5.2 C3.3	A2.1.1 A5.2.2 C3.3.1	2
		6.2.3. Whole-school approach to ESD	• Identify elements of a whole-school approach to ESD • Discuss characteristics and initiatives of a sustainable school	C3.3	C3.3.1	1
	6.3. Human Rights Education	6.3.1. Human rights education in the middle school	• Define human rights education and explain its importance in the curriculum • Outline competencies developed through human rights education • Discuss key international human rights standards, including the Universal Declaration of Human Rights and the Convention on the Rights of the Child • Outline teaching and learning strategies and methods and relevant issues for human rights education	A3.2 A4.1 A5.1 C3.3	A3.2.2 A4.1.1 A5.1.1 C3.3.1	5

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
	6.4. Integrated Approaches to Curriculum Design	6.4.1. Teaching and learning strategies in integrated curriculum	• Explain different approaches to integrated curriculum design • Discuss appropriate teaching and learning strategies for an integrated approach to Middle School Curriculum	A5.2	A5.2.3	2
7. Educational Philosophy	7.1. Educational Philosophy and its Implications for Teaching	7.1.1. Importance of Educational Philosophy	• Critically reflect on the importance of philosophy in education • Explain how the three approaches to Educational Philosophy could be demonstrated in the classroom	C1.2 C3.1	C1.2.1 C3.1.1	2
		7.1.2. Major educational philosophies and educational theories and their application to the classroom	• Summarise the major philosophies and educational theories and how they apply to classroom practice • Discuss how Eclecticism applies to one's teaching practice	C1.2 C3.1 D1.1	C1.2.1 C3.1.1 D1.1.2	4
	7.2. Personal Teaching Philosophy	7.2.1. Developing one's teaching philosophy	• Write a personal teaching philosophy	C1.2 D1.1	C1.2.1 C1.2.2 D1.1.3	4

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
8. Assessment	8.1. Developing Understanding of Assessment	8.1.1. Assessment approaches	• Outline the purpose and timing of diagnostic, formative and summative assessment • Explain the role of teacher observation and questioning and peer and self-assessment in classroom-level assessment • Develop simple assessment instruments • Write examination questions across a range of types	B2.1 B2.2	B2.1.1 B2.1.3 B2.2.1 B2.2.2 B2.2.3	5
		8.1.2. Assessment principles	• Outline the principles of high-quality assessment design • Describe the characteristics of authentic assessment • Outline the steps in planning for authentic tasks in the context of a unit of work • Explain the principle of constructive alignment	A4.1 B2.1	A4.1.3 B2.1.1	3

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
		8.1.3. Assessment 'pillars' and tools	• Outline the four pillars of basic education assessment • Discuss the types of tasks that are appropriate for assessing 21st century skills • Explain the importance of using a variety of assessment tools	A4.1 B2.1 B2.2	A4.1.1 A4.1.3 B2.1.1 B2.2.2	2
		8.1.4. Authentic Assessment: Assessment rubrics	• Outline the assessment principles reflected in the use of rubrics • Name the elements of an assessment rubric • Explain the steps in developing an assessment rubric • Write criteria-standards descriptors for an assessment rubric	A4.1 B2.1 B2.2	A4.1.3 B2.1.1 B2.2.1	2
	8.2. Educational Assessment and Data	8.2.1. Assessment data that can inform educational processes	• Discuss the difference between qualitative and quantitative assessment data • Discuss different ways that teachers use assessment data • Define validity in relation to educational assessment	A4.1 B2.1 B2.2	A4.1.3 B2.1.2 B2.2.1 B2.2.2 B2.2.3	4

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
			• Identify the difference between content validity, construct validity and concurrent validity • Define reliability in relation to educational assessment • Understand the difference between validity and reliability • Identify issues of fairness in relation to assessment • Explain the importance of objectivity in assessment			
		8.2.2. Designing test questions	• Explain the difference between restricted response (close-ended) and constructed response (open-ended) questions • Describe different types of restricted response questions and why teachers might choose to use them • Discuss when constructed response questions are appropriate to use • Identify strategies teachers can use to make constructed response questions fair and more objective	A4.1 B2.1	A4.1.3 B2.1.3	4

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
		8.2.3. Designing a whole test – putting it together	• Discuss how teachers can identify the skills and knowledge that they need to include in a test • Discuss why using different types of questions in a test can enable students to show what they know and can do • Discuss the purpose of a table of specifications and identify the steps used to design a table of specifications for a test • Identify test questions with different levels of difficulty • Work as a team to create a test	A4.1 B2.1 B2.2	A4.1.3 B2.1.3 B2.2.2	2
		8.2.4. Analysing test data	• Identify how difficult test questions are by analysing student responses • Discuss how teachers use test data to plan for student learning and to report learning progress • Identify patterns of reliability and validity from assessment data	B2.1 B2.2	B2.1.2 B2.2.1 B2.2.2	2

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
9. Supportive and Safe Learning Environment	9.1. Creating a Supportive and Safe Learning Environment	9.1.1. An inclusive school and classroom	• Outline characteristics of an inclusive school • Discuss the importance of teacher beliefs and expectations in terms of student learning • Outline strategies to make middle school students feel supported and safe in the classroom	A1.2 A3.2 B3.2 B4.1 C3.2	A1.2.1 A3.2.1 A3.2.2 B3.2.3 B4.1.2 C3.2.1	2
	9.2. Inclusive Education and Students with Intellectual Disabilities, Learning Disorders and Learning Difficulties	9.2.1. Inclusive education	• Compare the medical and social models of disability • Define inclusion, integration, segregation, and exclusion • Communicate to stakeholders why removing the barriers to learning is important	A1.2 A3.2 B3.1 C3.1 C3.2	A1.2.1 A3.2.1 A3.2.2 B3.1.1 B3.1.2 C3.1.1 C3.1.2 C3.2.1	3
		9.2.2. Students with intellectual disabilities, learning disorders and learning difficulties	• Explain the difference between intellectual disabilities, learning disorders, and learning difficulties • Outline broad characteristics of different types of disabilities and the challenges they present for teaching and learning	A1.2 B3.1 C3.1 C3.2	A1.2.1 B3.1.1 B3.1.2 C3.1.1 C3.1.2 C3.2.1	1

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
		9.2.3. Differentiation and individualised education plans	• Identify learning activities that will allow for teacher observation to ascertain students' learning needs • Identify strategies that support differentiation for students with additional needs • Explain the purpose of and process involved in developing and monitoring an Individualised Education Plan	A1.2 B3.1 C3.1 C3.2	A1.2.1 B3.1.1 C3.1.1 C3.1.2 C3.2.1	2
	9.3. Conflict Resolution and Peace Education	9.3.1. Responses to conflict	• Explain why middle school students need conflict resolution skills • Compare constructive and destructive responses to conflict • Outline the five conflict response modes of the Thomas-Kilmann Instrument	B3.1 B3.2 C3.3	B3.1.2 B3.2.2 C3.3.1	2
		9.3.2. Conflict resolution and peace education in the curriculum	• Discuss methods and techniques for developing conflict resolution skills • Outline competencies developed through conflict resolution and peace education • Connect conflict resolution and peace education with the Middle School Curriculum	A4.1 B3.2 C3.3	A4.1.1 B3.2.2 B3.2.4 C3.3.1	2

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
	9.4. Classroom Management	9.4.1. Establishing classroom procedures and rules	• Explain the importance of setting classroom procedures, rules and positive and negative consequences • List key considerations in setting procedures, rules and consequences • Design procedures, rules and consequences for a middle school classroom	B3.1 B3.2	B3.1.3 B3.2.1	2
		9.4.2. Effective and inclusive classroom management practices	• Explain the shift in focus from 'behaviour management' to 'creation of supportive and safe learning environments' in professional standards • Identify principles and practices associated with effective and inclusive classroom management • Role play proactive classroom management techniques	B3.1 B3.2	B3.1.2 B3.2.1 B3.2.2 B3.2.3 B3.2.4	2

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
	9.5. Role of Technology in the Learning Environment	9.5.1. Active, ethical, responsible and safe uses of technology	• Discuss the digital divide and active use of technology in the context of Myanmar • Explain why middle school students need knowledge and skills relating to academic integrity and cyber safety	A2.2	A2.2.1 A2.2.3	2
10. Teacher Professionalism	10.1. Professional Standards and Career Advancement	10.1.1. Teacher Competency Standards Framework (TCSF) and career advancement	• Reflect on the TCSF as a link between pre-service and in-service teacher learning • Demonstrate developing understanding of the qualifications and requirements for career advancement in Myanmar's education system • Review the competency domains, areas and standards for School Heads	C1.1 D1.1 D2.1	C1.1.1 C1.1.2 D1.1.3 D2.1.3 D2.1.4	3
	10.2. Professional values and dispositions	10.2.1. Ethical practice: Professional ethics and teacher code of practice	• Identify the principles informing the five precepts of education and duties of the Myanmar teacher • Reflect on the obligations and duties of the Myanmar teacher with reference to codes of ethics and professional conduct from international settings	C1.1 C1.3 C2.1	C1.1.1 C1.1.2 C1.3.1 C2.1.2	3

Units	Sub-units	Lessons	Learning Outcomes	TCSF		Periods
				Minimum Requirements	Indicators	
			• Participate in group discussion regarding challenging ethical scenarios from practicum			
	10.3. Professional growth and development	10.3.1. Reflective practice: Teacher as a reflective thinker	• Identify sources of evidence to improve teaching practice and student learning • Use the TCSF to reflect on key learnings in Year 2 Educational Studies	D.1.1	D1.1.1 D1.1.2 D1.1.3	2
		10.3.2. Collaborative learning: Continuous professional development	• Discuss characteristics of professional learning networks • Review and revise action plan for building a professional learning network • Identify opportunities for non-formal and informal learning relevant to professional development needs	D2.1	D2.1.2 D2.1.3 D2.1.4	2
		10.3.3. Initiative for research culture	• Create a poster communicating action research findings and reflections on the process and value of action research	D3.1	D3.1.1 D3.1.2	4
Total number of periods						80

This module will prepare student teachers with the competencies required to teach various learning areas and subjects through modelling the values and attitudes promoted in the basic education curriculum for the types of citizens and society Myanmar envisions to create. The purpose of this module is to introduce student teachers to the basic concepts of Educational Theory, Educational Technology, Educational Management, Educational Psychology and Educational Assessment, and apply them in the teaching/learning process and in real life situations. Student teachers will become aware of the educational trends, different philosophies and learning theories across the regions (local and global) and time (ancient and current). They will also understand the importance of developmental milestones of the students in all domains. Student teachers will master pedagogical knowledge and be able to choose and apply the appropriate pedagogical practices for their teaching depending on learners' needs and learning situation. Moreover, they will be able to distinguish characteristics of test, measurement, evaluation and assessment and apply them in the teaching/learning process. To educate student teachers to become effective professionals, two elements in Educational Studies will be considered: i) the understanding of knowledge and its application situated in the disciplines of education such as psychology and the history of education; and ii) critical reflection about the holistic development of learners to help student teachers develop positive attitudes, behaviour and skills so to develop professional attitudes and values.

The learning area outlines what student teachers in Education Degree Colleges will explore in order to prepare them to be ready for teaching students in primary and middle schools. It is important that teachers use educational knowledge and theory in their professional lives appropriately. It further reassures the teaching as a valuable profession, and the significance of primary and middle school teachers in the learners' development and learning process in their lifespans. The disciplines of education will help inform student teachers about their role as educators situated in the principles for the 21st century.

Learning outcomes for student teachers for Educational Studies

This learning area aims to prepare student teachers to be ready to facilitate students' learning of primary and middle school by being able:

- To build a strong foundation on the basic concepts of educational theories and psychology, and facilitate how these concepts can be applied in diverse teaching-learning situations towards becoming well-prepared, efficient and quality teachers.
- To apply the competencies gained around Educational Studies learning area in their teaching practice to effectively support their students' learning process to achieve the learning objectives across different learning areas and subjects.

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 Educational Studies module include:

Table B. Teacher competencies in focus: Year 2 Educational Studies

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 A1.1.2 Prepare learning activities to align with students' level of cognitive, linguistic, social, and physical development
	A1.2 Demonstrate understanding of how different teaching methods can meet students' individual learning needs	A1.2.1 Identify various teaching methods to help students with different backgrounds (gender, ethnicity, culture) and abilities, including special learning needs, learn better A1.2.2 Identify focused and sequenced learning activities to assist students to link new concepts with their prior knowledge and experiences
A2: Know appropriate use of educational technologies	A2.1 Demonstrate understanding of appropriate use of a variety of teaching and learning strategies and resources	A2.1.1 Plan learning experiences that provide opportunities for student collaboration, inquiry, problem-solving and creativity A2.1.2 Use teaching methods, strategies and materials as specified in the textbooks and additional low cost support materials, to support student learning

Competency standard	Minimum requirements	Indicators
	A2.2 Demonstrate understanding of appropriate use of Information and Communication Technology (ICT) in teaching and learning	A2.2.1 Describe the function and purpose of online and offline educational tools and materials to support the teaching and learning process A2.2.3 Describe and demonstrate the understanding of basic concepts and principles of media and information literacy
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 A4.1.2 Prepare lesson plans reflecting the requirements of the curriculum and include relevant teaching and learning activities and materials A4.1.3 Describe the assessment principles underpinning the Lower Secondary curriculum
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
	A5.2 Demonstrate understanding of how to vary delivery of subject content to meet students' learning needs and learning context	A5.2.1 Describe ways to contextualise learning activities for the age, language, ability and culture of students to develop understanding of subject related principles, ideas and concepts 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 B 1.1.2 Select instructional material to link learning with students' prior knowledge, interests, daily life and local needs B1.1.3 Encourage students' awareness of their own thought processes and use of reflection to build new understanding
	B1.3 Demonstrate good lesson planning and preparation in line with students' learning ability and experience	B1.3.1 Plan and structure lesson to ensure all the lesson time is used effectively B1.3.2 Provide lesson introductions to link new learning to prior learning, to engage students' interest and to motivate them in learning B1.3.3 Prepare focused and sequential learning experiences that integrate learning areas and are responsive to students' interests and experience B1.3.4 Use questioning techniques and examples, to introduce and illustrate concepts to be learnt
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 B2.1.3 Use questioning and discussion techniques to check students understanding and provide feedback
	B2.2 Demonstrate capacity to keep detailed assessment records and use the assessment information to guide students' learning progress	B2.2.1 Record students learning progress accurately and consistently B2.2.2 Use varied assessment practices to monitor and record students' learning progress and inform further planning of the curriculum B2.2.3 Communicate students' learning progress and achievement to students, parents and other educators

Competency standard	Minimum requirements	Indicators
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	B3.1.1 Use space and classroom materials and resources to ensure involvement of all students in learning activities B3.1.2 Encourage students to interact with each other and to work both independently and in teams B3.1.3 Model and promote good health and safety practices to ensure students' wellbeing and safety within the classroom and school
	B3.2 Demonstrate strategies for managing student behaviour	B3.2.1 Create, explain, display and enforce the agreed classroom rules and procedures to ensure student health and safety B3.2.2 Encourage students to interact with each other with mutual respect and safety B3.2.3 Learn to know each student's background and needs and interact regularly with all students B3.2.4 Encourage well-adjusted behaviour of students by collaborative teamwork and independent learning
B4: Work together with other teachers, parents, and community	B4.1 Demonstrate strategies for working together with other teachers, parents, and the local community to improve the learning environment for students	B4.1.2 Describe strategies to promote parents' involvement in their child's learning at school, at home and in the community
C1: Service to profession	C1.1 Demonstrate values and attitudes consistent with Myanmar's tradition of perceiving teachers as role models	C1.1.1 Comply with professional codes of conduct, rules and regulations in line with the five traditional responsibilities of the Myanmar teacher C1.1.2 Consistently express positive attitudes, values and behaviours, consistent with what is expected of teachers by students, colleagues, parents and communities
	C1.2 Demonstrate understanding of the underlying ideas that influence one's practice as a professional teacher	C1.2.1 Identify theories and concepts that inform approaches to teaching and learning C1.2.2 Describes own approach to teaching and learning
	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
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.

Competency standard	Minimum requirements	Indicators
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
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 opportunities	D2.1.2 Participate in professional development activities related to identified goals for improving practice D.2.1.3 Establish goals for own professional development as a teacher D2.1.4 Participate in professional activities conducted by school clusters and recognised professional associations
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	D3.1.1 Identify relevant professional learning material to improve own 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. 109 – 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 6

Myanmar's Education System and Curriculum Agendas

In this unit, you will explore the changing structure of schooling and emphases in teaching and learning in Myanmar. You will become familiar with the broad expertise of middle school teachers, and the legislative and policy documents that are most relevant to you as pre-service teachers.

You will explore important curriculum agendas involving Education for Sustainable Development (ESD) and human rights education. Both ESD and human rights education are described as lifelong learning processes, which shape a complex range of competencies (i.e., knowledge and understanding, skills and practices, and values and dispositions). These competencies enable students to contribute to a more sustainable and fairer future.

Both ESD and human rights education are cross-cutting curriculum agendas that call for more integrated approaches to curriculum design. You will develop understanding of teaching and learning strategies and methods that are aligned with ESD, human rights education and integrated curriculum agendas.

Expected learning outcomes

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

- Outline the changing structure of schooling in Myanmar;
- Discuss broad expertise of middle school teachers;
- List key legislative and policy documents related to education in Myanmar;
- Identify the dimensions of sustainable development;
- Outline sustainability issues that are relevant to the Myanmar middle school context;
- Discuss the characteristics and underpinning principles and values of ESD;
- List key competencies for ESD;
- Identify effective teaching and learning strategies and techniques to develop ESD competencies;
- Identify elements of a whole-school approach to ESD;
- Discuss characteristics and initiatives of a sustainable school;
- Define human rights education and explain its importance in the curriculum;
- Outline competencies developed through human rights education;
- Discuss key international human rights standards, including the Universal Declaration of Human Rights and the Convention on the Rights of the Child;
- Outline teaching and learning strategies and methods and relevant issues for human rights education;
- Explain different approaches to integrated curriculum design; and
- Discuss appropriate teaching and learning strategies for an integrated approach to Middle School Curriculum.

Competencies gained

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

A3.2 Demonstrate respect for the social, linguistic and cultural diversity of the students and their communities

A4.1 Demonstrate understanding of the structure, content and expected learning outcomes of the basic education curriculum

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

A5.2 Demonstrate understanding of how to vary delivery of subject content to meet students' learning needs and learning context

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.

Key terms

Action learning, competencies, discrimination, dimensions of sustainable development, Education for Sustainable Development, environmental limits, human rights education, integrated approach, right, sustainability, sustainable development

6.1. Overview of Myanmar Education System

In this sub-unit, you will explore the changing structure of schooling and emphases in teaching and learning in Myanmar. You will be provided with an overview of the broad expertise of middle school teachers. You will become familiar with the legislative and policy documents that are most relevant to you as pre-service teachers.

6.1.1. Education reform and the middle school

Expected learning outcomes

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

- Outline the changing structure of schooling in Myanmar;
- Discuss broad expertise of middle school teachers; and
- List key legislative and policy documents related to education in Myanmar.

National Educational Reform Agenda

The United Nations declared access to a quality education as a basic human right (Article 26, Universal Declaration of Human Rights) and a Sustainable Development Goal (Goal 4).

A quality education transforms the outlook for individuals, entire nations, and humankind at large. Myanmar's education system is currently facing "multi-dimensional challenges, relating to access, quality and equity."[1] In the *National Education Strategic Plan (NESP), 2016-2021*[2], the Ministry of Education identified nine priority areas for reform:

1 Ministry of Education, 2016.
2 Ibid.

1. Preschool and kindergarten education
2. Basic education access, quality and inclusion
3. Basic education curriculum
4. Student assessment and examinations
5. Teacher education and management
6. Alternative education
7. Technical and vocational education and training
8. Higher education
9. Management capacity development and quality assurance.

New structure of schooling and new Basic Education Curriculum

One of the most "emblematic reforms" in the National Education Strategic Plan is to change the structure of the education system from a 5-4-2-year to a 6-4-3-year structure.[3] The changes that are underway are presented in Table 6.1.

Table 6.1. Reform to structure of schooling

Stages of schooling	5-4-2-year structure	Students' age	6-4-3-year structure	Students' age
			KG	5
Primary school	Grade 1/KG Grade 2/Standard 1 Grade 3/Standard 2 Grade 4/Standard 3 Grade 5/Standard 4	5 6 7 8 9	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	6 7 8 9 10
Middle school	Grade 6/Standard 5 Grade 7/Standard 6 Grade 8/Standard 7 Grade 9/Standard 8	10 11 12 13	Grade 6 Grade 7 Grade 8 Grade 9	11 12 13 14
High school	Grade 10/Standard 9 Grade 11/Standard 10	14 15	Grade 10 Grade 11 Grade 12	15 16 17

3 Rwehera, 2017, p. 12.

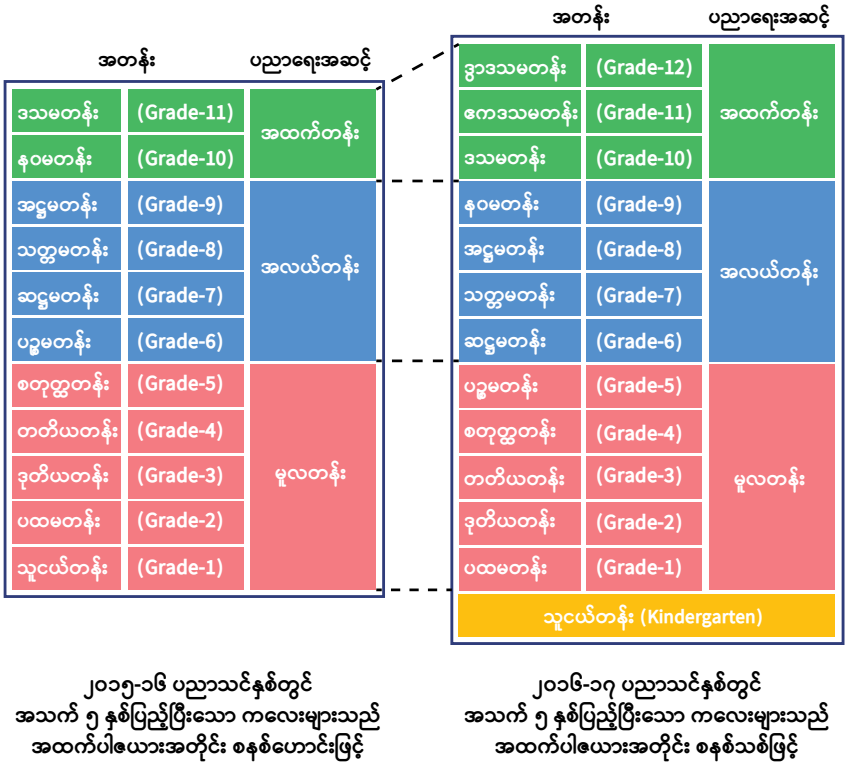


Figure 6.1. From old to new schooling structure

Alongside reforms to the structure of schooling, a new Basic Education Curriculum is being implemented in schools (Kindergarten to Grade 12). The new curriculum has already been implemented in Kindergarten, Grades 1-3, and Grade 6. The next phases involve implementation in:

- Grades 4, 7 and 10 (2020/21)
- Grades 5, 8 and 11 (2021/22)
- Grades 9 and 12 (2022/23).

Expertise of middle school teachers

The Teacher Competency Standards Framework (TCSF) for Beginning Teachers provides a broad overview of a middle school teacher's expertise:

- Lower secondary teachers are aware of the significant developmental changes of young adolescents. They understand the potential impact of this stage of development on students' engagement, interest, and capacity to learn at the same time as the student is transitioning from primary into secondary school.
- They have a sound understanding of ways to integrate pedagogical knowledge with content knowledge to make learning of subject concepts relevant and meaningful. They prepare lessons and the learning environment to maximise each student's active participation.
- According to the Curriculum Framework for Education Degree Colleges in Myanmar, middle school teachers are subject area *specialists*. They are trained to effectively teach the three core subjects (Myanmar, English, and Mathematics) and elective subject areas.
- This contrasts with primary school teachers, who are trained as *generalist* teaching staff. Primary school teachers are trained to effectively teach all primary school level and kindergarten level classes, as specified in the Basic Education Curriculum. The focus of their training is to ensure that they can effectively teach early literacy and numeracy, the foundational skills needed for further learning.[4]

Learning activity 1. Discussing aspirations for specialisation

The purpose of this learning activity is to discuss aspirations for specialisation with your peers.

- What phase of students' learning interests you?
  - See Annex 1. Differences in TSCF minimum requirements for beginning KG, primary, and lower secondary/middle school teachers.
- Have you decided whether you are going to undertake the primary or middle school specialisation in Years 3 and 4?
- If yes, what are the reasons for your decision?
- If no, how are you going to find out the information that you need to make this decision?
- Who could you speak to?

4 Teacher Competency Standards Framework (TCSF) for Beginning Teachers.

Learning activity 2. Becoming aware of key strategic documents

The purpose of this activity is to raise your awareness of the legislative and policy documents that are most important to you as student teachers.

You can access these documents in your Education Degree College e-library.

Are there other documents that you and your teacher educators believe are important to add to this list? Look at the publication/version details. What can be said about the current pace of change in Myanmar's education system?

Table 6.2. Key strategic documents

Category	Document	Publication/Version details
Legislation	1. National Education Law	2014, Parliamentary Law No. 41 2015 Amendment
Strategic Plan	2. National Education Strategic Plan, 2016-21 Summary	Ministry of Education, 2016
Schools Quality Assurance Standards Framework	3. Basic Education School Quality Assurance Standards Framework (BE-SQASF) Manual	Ministry of Education. Department of Basic Education Draft October 2019
Competency Standards Frameworks	4. Teacher Competency Standards Framework (TSCF) Beginning Teacher	Ministry of Education, Department of Higher Education, 2020
	5. Competency Standards Frameworks for School Heads and Education Officers in Basic Education	Ministry of Education, Department of Basic Education, 2019
Curriculum Frameworks	6. Myanmar National Curriculum Framework	6th Version
	7. Curriculum Framework for Education Degree Colleges in Myanmar	Ministry of Education, Department of Higher Education Draft June 2019
Policy	8. National Assessment Policy for Basic Education	Ministry of Education Department of Myanmar Examinations 1st Edition, September 2019

Category	Document	Publication/Version details

Review questions

1. What will be the new structure of schooling in Myanmar?
2. What is the broad expertise of a middle school teacher?
3. What are the key legislative and policy documents related to education in Myanmar?

6.2. Education for Sustainable Development (ESD)

Youth and teachers have a crucial role to play in the shift towards **sustainability**.[5] In this sub-unit, you will explore the **dimensions of sustainable development.** You will look at the essential characteristics of an **Education for Sustainable Development (ESD)** programme, and the types of issues that are relevant to the Myanmar middle school context.

Further, you will review the **competencies,** which are developed through an ESD programme, and the learning and teaching strategies and techniques that are most effective in developing these competencies.

The sub-unit concludes with a whole-school approach to sustainability.

6.2.1. ESD definitions, frameworks, issues, and resources

Expected learning outcomes

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

- Identify the dimensions of sustainable development;
- Outline sustainability issues that are relevant to the Myanmar middle school context; and
- Discuss the characteristics and underpinning principles and values of ESD.

5 United Nations WCED, 1987, Foreword.

Sustainable Development Definition and Goals

In the 1987 report, *Our Common Future*, the UN World Commission on Environment and Development defined sustainable development as "that which meets the needs of the present generation without compromising the ability of future generations to meet their own needs."[6]

In Year 1, you were introduced to 17 interconnected Sustainable Development Goals (SDGs) which were set by the United Nations General Assembly. According to the UN, the SDGs are "a blueprint to address the global challenges we face."[7]

Box 6.1. Sustainable Development Goals

Sustainable Development Dimensions

In order to participate in sustainable development, we need to balance considerations relating to different systems or dimensions of sustainable development. The dimensions of sustainable development are represented in various ways.

6 United Nations WCED, 1987, Ch. 2.1.
7 United Nations, 2019.

Figure 6.2 shows four interconnected systems:

- *Natural/ environmental systems*, which provide life support systems (air, water, food);
- *Economic systems*, which provide a means of livelihood (employment and money);
- *Social systems*, which provide ways for people to live together peacefully and equitably; and
- *Political systems*, which shape policy and decision-making regarding the ways social and economic systems use the natural environment

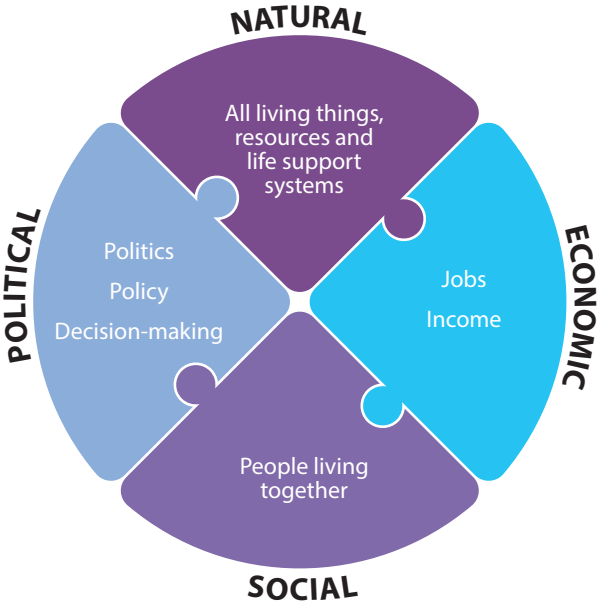


Figure 6.2. Dimensions of sustainable development as four interconnected systems

Figure 6.3 (following) communicates that both the *economy* (i.e. economic systems) and *society* (which includes social and political systems) are constrained by the limits of the *environment* (i.e., environmental systems).

Environmental limits are the range of conditions beyond which there is a significant risk of irreversible changes to the services provided by natural systems to humans.[8]

8 Haines-Young, Potschin & Cheshire, 2006.

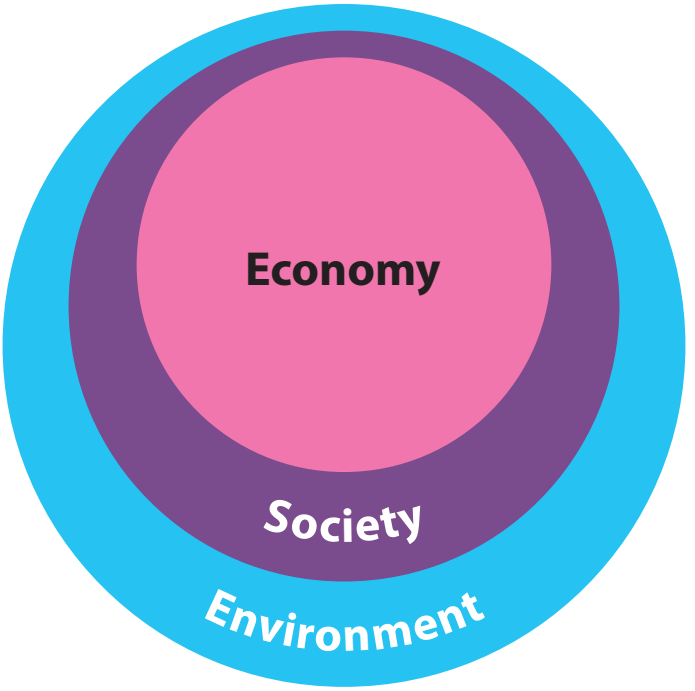


Figure 6.3. Three dimensions of sustainable development

Learning activity 1. Comparing representations of dimensions of sustainability

The purpose of this activity is to compare representations of the dimensions of sustainability.

- What do you think is the more accurate representation in terms of the relationship between humans and the environment? Figure 6.2 or Figure 6.3 ?
- What do you think is the more helpful representation in terms of pursing a sustainable development agenda? Figure 6.2 or Figure 6.3?
- What happens if humans disregard environmental limits?

Myanmar Sustainable Development Plan, 2018-2030

The Myanmar Sustainable Development Plan, 2018-2030[9] is structured around three pillars and five goals, which address the different dimensions of sustainability.

Table 6.3. Three pillars of the Myanmar Sustainable Development Plan

		
Pillar 1: Peace and Stability The achievement of peace is integral to Myanmar's journey towards sustainable and inclusive development. It will involve addressing both *political and economic dimensions* simultaneously (i.e., Goals 1 and 2).	Pillar 2: Prosperity and Partnership This pillar and Goal 3 are focused on the creation of quality jobs, together with the expansion of the private sector as the driver of *environmentally and socially responsible economic growth.*	Pillar 3: People and Planet Strengthening *human capital and protecting natural systems* (i.e., Goals 4 and 5) are recognised as essential in meeting national development objectives and ensuring sustainable economic growth in Myanmar.

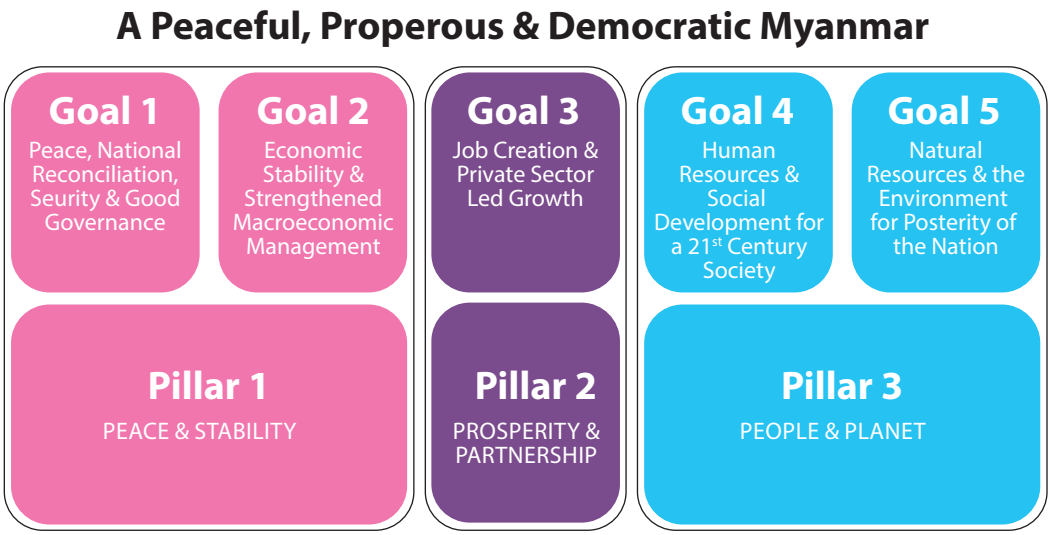


Figure 6.4. Myanmar Sustainable Development Plan

9 Ministry of Planning and Finance, 2018.

ESD and Myanmar's Sustainability Challenges

Education for Sustainable Development (ESD) is a lifelong learning process. It leads to an "informed and involved citizenry", which collectively has the creative problem-solving skills, the scientific, technological and social literacies, and the commitment to engage in sustainable development.[10]

ESD is a cross-cutting curriculum agenda. In your e-library, you can access UNESCO's ESD Teacher Guides for the Middle school grades. These are high quality resources, which have been created for the Myanmar context, to support teachers in making links to ESD in a range of subject areas. Take the opportunity to peruse the Teacher Guides (Grades 6 to 9), in your own time.

ESD is important for Myanmar. As these Teacher Guides state:

Myanmar is extremely vulnerable to climate change as well as environmental exploitation. Myanmar is a diverse country with rich history and cultures, which also deserve protecting. In recent years, the country has experienced rapid economic and political development.[11]

Figure 6.5 aligns Myanmar's priorities with the dimensions of sustainable development. Note that representation recognises **cultural systems** as a dimension of sustainability.

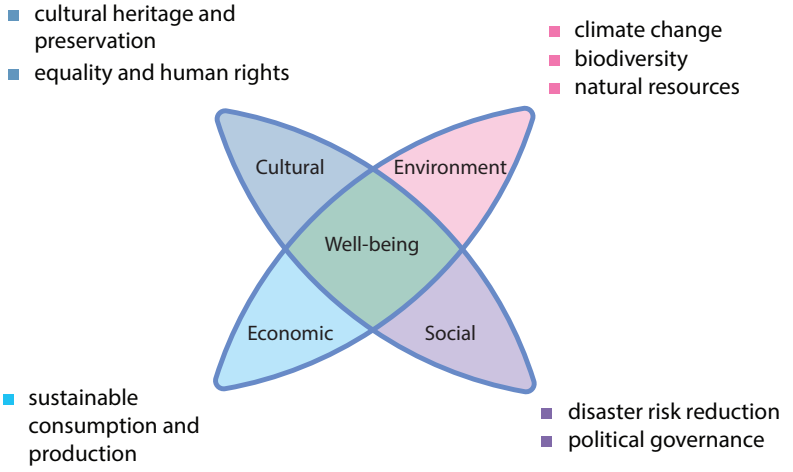


Figure 6.5. Myanmar's priorities aligned with the sustainable development dimensions

10 Fien & Maclean, 2000, p. 37.
11 UNESCO, 2017, p. 1.

Learning activity 2. Exploring an ESD issue and UNESCO's ESD Teacher Guides

The purpose of this activity is for you to explore an ESD issue and the UNESCO (2017) ESD Teacher Guides.

Box 6.2 presents an excerpt from the Grade 9 Teacher Guide. A link to ESD is made in the context of an Economics lesson on agriculture, livestock and fishery.

Read the excerpt and discuss the following questions:

1. Which SDGs are relevant to this issue?
2. Which dimensions of sustainability are relevant to this issue?

Outline learning activities and/or actions that students may participate in related to this issue.

Box 6.2. Economics lesson: Agriculture, livestock and fishery in Myanmar

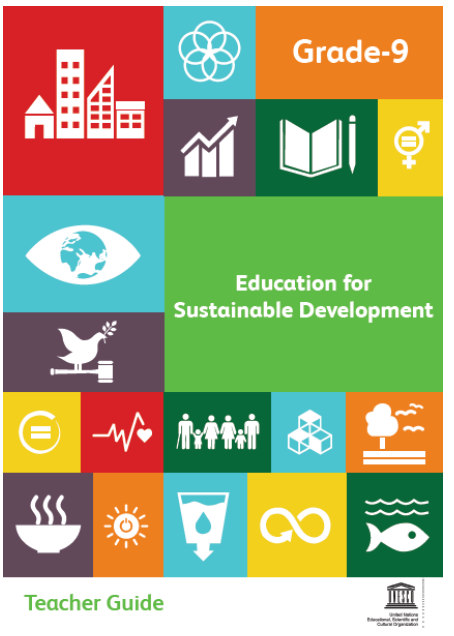
ESD link:

It is very important that agriculture and livestock and fishery are made sustainable in Myanmar. People rely on these sectors to survive. Plants and animals rely on a healthy environment. An unhealthy environment or overuse of these resources could lead to many negative effects (e.g., not enough food, contaminated food, not enough income for farmers and fishermen etc.).

Some sustainable techniques could include using less pesticides, treating and feeding animals well and not over-fishing. However, it is not just the responsibility of farmers and fishermen.

People who consume the goods from these sectors can also take part. For example, we can eat less meat and fish and eat more vegetables.

Grade 9 ESD Teacher Guide



Reflection questions:

What did you eat this past week? Did it come from one of these sectors?

How are agriculture, livestock, and fishing all related?

Possible answers:

Students should realise that most of what they ate in the past week came from one or more of these sectors.

These sectors are all related because they all rely on the environment. Also, a change in one sector can cause changes in another. For example, if a farmer uses pesticides on a crop, the pesticides can later run off into rivers. This could kill the fish or contaminate them. Also, people will be eating unhealthy food. This shows us that *everything is connected*.

ESD characteristics and principles

1. *ESD is relevant to:*
   - human society's greatest challenges, such as climate change, environmental stress, unsustainable production and consumption, growing inequalities and conflict, human rights issues, and human health issues (e.g., virus pandemics)
   - students' present and future needs.

2. *ESD is holistic, with consideration of:*
   - dimensions of sustainable development
   - local, national, and global scales
   - approaches to learning that develop the whole person.

3. *ESD is inquiry- and action-based, providing opportunity for students to*:
   - investigate issues
   - develop, implement, and evaluate action plans
   - partner with community members and organisations to enact change.

4. *ESD is critically reflective, promoting:*
   - higher order thinking skills
   - reflection on power and decision-making in society.

5. *ESD is values-based, and*
   - builds understanding of the principles and values of sustainable development; and
   - allows opportunity to for critically reflect on and clarify on one's own values (i.e., values clarification). [12]

Learning activity 3. Reflecting on the principles and values in the Earth Charter

The purpose of this activity it to develop understanding of the underlying principles and values of sustainable development.

The Earth Charter is an ethical framework to promote global engagement in sustainable development. While the Earth Charter project began as a United Nations initiative, it turned into a civil society initiative and was launched as a people's charter in 2000.[13]

The Earth Charter was the result of 10 years of international dialogue and represents "…the most inclusive process ever associated with the creation of an international declaration. This process is why it has legitimacy as a guiding ethical framework."[14]

For this activity, you are going to read a version of the Earth Charter which has been written for children between 8-12 years.[15] The original Earth Charter can be located in the e-library.

Read Box 6.3, and identify where the following principles and values have informed the Charter:

- ***Interdependence:*** The relationships of mutual dependence between all elements and life forms within natural systems. It recognises the connections and links between humans at a local and global level. It means that decisions taken in one place will affect what happens elsewhere.
- ***Intergenerational equity:*** A notion that views humanity as a partnership between all generations. It is the hallmark of sustainability—meeting the

12 Burdon, 2012, p. 318.
13 Earth Charter Initiative, 2012-2016.
14 One Planet Network, n.d.
15 One Planet Network, n.d.

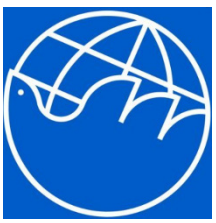
needs of the present generation while leaving equal or better opportunities for future generations.

- ***Interspecies equity:*** The consideration of the need for humans to treat creatures decently, and to protect them from cruelty and avoidable suffering. It is based on an understanding that:
  - Humans are one of the many species on the planet
  - All species deserve respect.
- ***Conservation:*** The careful use, protection and management of natural ecosystems and resources to ensure their future existence.
- ***Stewardship:*** The responsibility of being a caretaker or custodian of the environment by managing activities with due respect for the health of that environment.
- ***Quality of life:*** The standard of life that an individual enjoys. It goes beyond measures of income. It also includes an individual's opportunity to:
  - interact in a healthy natural environment
  - enjoy positive relationships with others; and
  - participate in dignifying work.

You may highlight text and write the relevant principle/value next to the text.

Box 6.3. Earth Charter for children, aged 8 to 12 years

We live in an important time of the Earth's history. All people on this Earth have to align to define a new future: to protect our environment and climate, respect human rights and create a world where all of us are able to live in peace and justice. We have the responsibility to save life, now and in future.



The Earth is our home: The Earth is only a small piece of our great universe. The Earth itself is full of life, numerous plants, animals and human beings. For our survival, we depend on our Earth, its water, the air, plants and animals. So, we need to care for life on Earth.

The world's situation: The way we live nowadays has a negative impact on the Earth. With the production and consumption of different goods, we rob the Earth's resources like water, air, forests, and soils. We threaten the habitat and diversity of numerous plants and animals.

All over the world, we observe injustice, war and people, who are forced to starve or suffer from sickness, due to inadequate or insufficient food or lack of financial means to consult a doctor.

What can we do? Everybody can change something: With different actions, no matter how big or small, we can initiate a better future.

All of us are responsible: To change something in our world, we need to take responsibility for our actions. Every decision and every action have an impact. Everything is linked on our Earth. We need to think carefully how to care for our rivers, forests and climate, and how to protect plants and animals. We need to consider our interaction with others.

The way ahead of us

The present situation of our Earth needs a positive and courageous way of living, with empathy and respect for every living creature.

It is necessary that we all feel this interdependence and start caring for each other. We need good ideas from different people and different cultures. We can learn from one another. We need to feel and prove with our hearts what is good for us.

The Earth Charter is a roadmap which may show us the correct way. There are various ways of living without threatening life. It is important to discuss future steps. In a group it is much easier to initiate change. The decisions we make need to last for a long time - for the children of our children and many others.

Everybody is able to take action and everybody has an important role to play: families, schools, communities, religions, the media, as well as governments.

Everybody shall try living in line with the Earth Charter's principles. People shall remember a time when people loved taking action and a time when life was celebrated again.

6.2.2. ESD competencies and pedagogies

Expected learning outcomes

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

- List key competencies for ESD; and
- Identify effective teaching and learning strategies and techniques to develop ESD competencies.

Key competencies for ESD

ESD competencies involve the full range of knowledge and understanding, skills and practices, and values and dispositions, which support learners to participate in actions and partnerships that address real-world sustainability challenges and opportunities.[16]

16 Wiek, Withycombe, & Redman, 2011.

Learning activity 1. Matching ESD competencies with their definitions

The purpose of this activity is to build understanding of the ESD key competencies.

An indicative list of ESD competencies are presented in Table 6.4. Discuss each competency with your partner and use lines to match the competency with its correct definition.

Table 6.4. ESD competencies and their definitions

ESD competency	Involves being able to:
Constructing knowledge through research	Consider the connections between elements of the economy and the environment and the social well-being of all communities.
Thinking critically	Analyse risk; create individual and collective visions; and deal with uncertainty and change.
Systems thinking	Participate in transformation processes with others.
Facing the future and imagining better futures	Cooperate with people regardless of their gender, religion, ethnic and social origin.
Solving issues, problems and conflicts	Collect data/information from different sources and with different tools; assess quality; and construct knowledge.
Communicating and negotiating with others	Critically reflect upon diverse perspectives; and develop an alternative frame of reference by changing one's own worldviews.
Building partnerships and collaborating	Contribute to the solving of issues, problems and conflicts at the local, national and global level.
Thinking and acting inclusively	Reflect on own and others' norms and values.
Showing solidarity and responsibility	Communicate constructively in spoken and written language.
Reflecting on values	Develop an attitude of global citizenship and to share responsibility for ecological risks.
Changing perspectives	Question norms, practices, opinions, attitudes, claims and decisions.

Learning activity 2. Scoping learning activities that promote ESD competencies

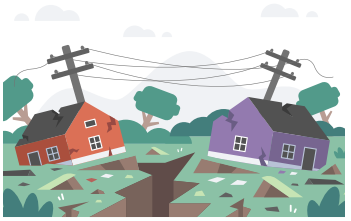
The purpose of this activity is to scope ESD learning activities that promote ESD competencies.

Box 6.4 outlines ESD inquiries that would be appropriate for middle school students. Select one of these inquiries and a grade level.

Broadly scope relevant learning activities that focus on developing 3-4 ESD competencies.

Box 6.5 then presents an example for your reference.

Box 6.4. ESD inquiries for the middle school[17]

	***Safe water availability and access:*** Students investigate the availability of and access to safe, fresh water throughout the world. They identify the effect of human activity on freshwater systems and explain how this may lead to environmental challenges. They research local water initiatives and projects and how they can be involved and change their own behaviours.
	***Disaster preparedness and community resilience:*** Students investigate different kinds of disasters to develop an understanding of their causes, effects, and the types of assistance people and communities need to recover. They also explore how disaster preparedness can help to reduce the impact of disasters and build hope and resilience for the future.
	***Food security for all:*** Students investigate the types and amounts of foods eaten around the world, and the environmental, economic, political, and cultural factors that affect access to food. They develop an understanding of why some people in the world have more than enough to eat, while others struggle to have the basics for survival. They explore ways people could work together to achieve food security for all.
	***Urbanisation and poverty:*** Students explore the patterns of urbanisation throughout the world and analyse issues that impact on poor people's lives in urban settings.
	***Refugees:*** Students develop an understanding of situations which cause people to flee their homes, the rights of the people who are forced to flee, and the processes that protect and support these people.

17 Commonwealth of Australia, 2012, n.p.

	***Sustainable energy sources:*** Students investigate the energy sources that people use to meet their daily needs, with a particular focus on ways of generating electricity. They develop key understandings about the environmental impact of different energy sources (non-renewable or renewable) and opportunities for decisions and actions that can make a difference for a sustainable future.

Box 6.5. Example of learning activities designed to develop ESD competencies

	**STIMULUS:** ***Safe water availability and access:*** Students investigate the availability of and access to safe, fresh water throughout the world. They identify the effect of human activity on freshwater systems and explain how this may lead to environmental challenges. They research local water initiatives and projects and how they can be involved and change their own behaviours.

Grade 9 ESD inquiry and action

Grade 9 students, from a middle school located in the Central Dry Zone of Myanmar, investigate water availability for household and agricultural use within their region. As part of this inquiry, they access information from a range of online sources.[18] They learn about water, soil and land conservation projects, taking place in the Central Dry Zone, as well water infrastructure projects, including the installation of water pumping systems, wells and rainwater tanks.

The students also investigate water availability and use within their own school. They survey the principal, Parents and Teacher Association (PTA) and the School Improvement Planning (SIP) Committee members, and teachers. Survey findings reveal that safe water availability is a pressing issue. Some of the small water tanks installed on the school rooftop can no longer be used because they are rusted and have holes and the water is contaminated.

As the most senior students in the Middle school, they work with the PTA and SIP Committee to host a water tank donation ceremony. The ceremony coincides with World Water Day (22 March). At the ceremony, students deliver a presentation about water to parents and invited guests. Students also arrive at personal action plans to reduce unnecessary water consumption.

Targeted ESD competencies

- ***constructing knowledge through research*:** students gather information through secondary sources, as well as primary sources (i.e. they generate their own data through their school survey)
- ***solving issues, problems, and conflicts*:** students contribute to solving the school's water problem
- ***building partnerships and collaborating*:** students work with the PTA and SIP Committee to host the ceremony
- ***communicating and negotiating with others**:* students present inquiry findings to parents.

18 United Nations Development Programme, 2019.

Teaching and learning strategies and techniques to develop ESD competencies

Action learning model

One of the characteristics of ESD is that it is inquiry- and action-based. In Unit 2, you explored models for inquiry-based learning. An **action learning model** is presented in Table 6.5. This model allows opportunity for students to develop ESD competencies through planning for, implementing, and reflecting on, authentic actions.

Table 6.5. Action learning model[19]

Model phase	Purpose of phase – Role of the student
Investigate an issue	• Investigate a sustainability issue • Assess the current situation • Explore sustainability concepts and ideas • State a case for change.
Define the scope of the action	• Explore options for change • Identify partners and available resources • Seek consensus • Develop a statement of the agreed direction for action.
Develop a proposal for action	• Generate and select ideas • Develop and modify these to make them ready for implementation • Prepare, communicate, and agree upon the proposal.
Implement the proposal	• Implement the proposal.
Evaluate and reflect	• Assess the success of the action and the efficiency of the processes used • Identify future directions and the learning to come from the action.

19 Australian Government Department of the Environment, Water, Heritage and the Arts, 2010.

Figure 6.6. Action learning in the community

Six families of strategic questions

The six families of strategic questions is a framework that may be used to support initial scoping activities, in order to ***identify an appropriate issue*** for action learning.[20] This framework supports students to identify issues of concern to them in their school or local community, clarify how they feel about these issues, envisage how the situation may be improved, and consider how they may be able to contribute to action.

The six families of strategic questions are as follows:

1. ***Observation*** *questions*:
    - How does the issue/problem affect your school or local community?
    - What do you know for certain?
    - What are you not sure about?

20 Peavey, 1994.

2. ***Feeling*** *questions:*
   - How do you feel about the situation?
   - Has this problem affected your own physical or emotional well-being?

3. ***Visioning*** *questions:*
   - How can the situation be changed?
   - How would you like it to be?

4. ***Change*** *questions:*
   - Who can make a difference?
   - What will it take to bring the current situation closer towards your vision?

5. ***Personal inventory and support*** *questions:*
   - What would you like to do that might be useful in bringing about these changes?
   - What support do you need to make this contribution?

6. ***Personal action*** *questions:*
   - How can you best collaborate with others to work on this issue?

Homework activity. Reading 'Six families of strategic questions' example

The purpose of this activity is to see how the six families of strategic questions can be used to support initial scoping of action learning. Read the example provided by a Myanmar educator in Annex 2.

Sustainable Development compass rose

Another questioning framework that can be used within ESD is the Sustainable Development compass rose. The compass rose supports students to examine a sustainable development issue from a systems perspective.

Instead of North, South, East and West, the four main compass points align with the ***dimensions of sustainability***, as per Figure 6.7. Importantly, the NE, SE, SW and NW markers can be used to frame questions that are related to more than one dimension.

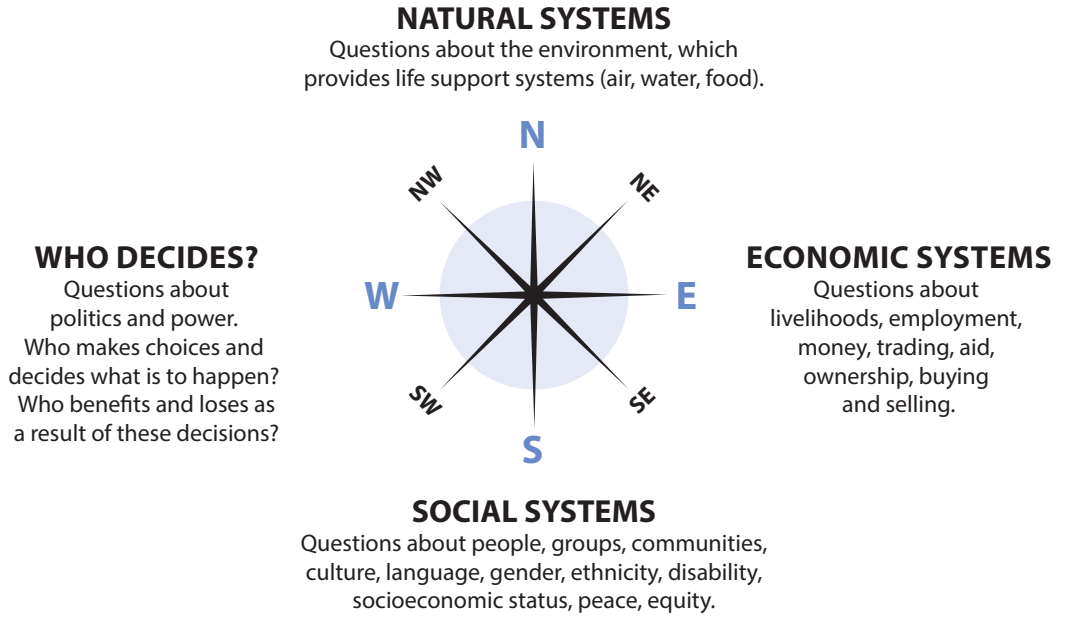


Figure 6.7. Sustainable development compass rose

Learning activity 3. Framing questions on the compass rose

The purpose of this activity is for you to have opportunity to frame questions using the sustainable development compass rose.

Box 6.7 presents questions aligned with each of the compass directions to support an inquiry in ***'Sustainable Energy Sources'*** (i.e. one of the inquiry topics outlined in Box 6.4). Read through the questions together as a group.

Draw the compass rose on a flip chart. Generate questions for each direction of the compass to support an ESD inquiry into ***'Urbanisation and poverty'*** (also from Box 6.4). At the top of your flip chart, you may wish to identify an overarching inquiry question.

Box 6.6. Example of learning activities designed to develop ESD competencies

STIMULUS:

Sustainable energy sources: Students investigate the energy sources that people use to meet their daily needs, with a particular focus on ways of generating electricity. They develop key understandings about the environmental impact of different energy sources (non-renewable or renewable) and opportunities for decisions and actions that can make a difference for a sustainable future.

School context: Middle school in rural area

Overarching inquiry question: What is the future of energy for Myanmar's rural population?[21]

Social systems:

- What proportion of Myanmar's rural population are on the electrical grid?
- What is the feeling among rural communities regarding Myanmar's reliance on hydropower?
- What energy sources do Myanmar's rural population currently use to meet daily needs?

Natural systems:

- What has been the impact of the Hat Gyi hydropower dam on the Salween River's biodiversity?
- Why are there power shortages and blackouts in the dry season?
- What will be the impact on the environment of importing coal to fuel power plants?

Economic systems:

- What is the percentage of renewable and non-renewables in Myanmar's energy mix?
- What has been the impact of hydropower on Myanmar's fishing sector?
- What is the future of solar power in Myanmar?

Who decides? Political systems:

- What is the government's goal in terms of providing full access to the electricity grid?
- How can the Myanmar government support the emergence of the renewable energy?
- How is the government working with multinationals to address Myanmar's energy challenges?
- How can the school leadership work with community to provide sustainable energy sources for our rural school?

21 Mock, May 30, 2019.

6.2.3. Whole-school approach to ESD

Expected learning outcomes

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

- Identify elements of a whole-school approach to ESD; and
- Discuss characteristics and initiatives of a sustainable school.

Whole-school approach to ESD

Effective ESD is not just related to curriculum and teaching and learning. It requires the involvement of the whole school.[22] A whole-school approach to ESD also recognises the importance of the school's leadership, resource management, grounds, and collaboration with parents and the community.

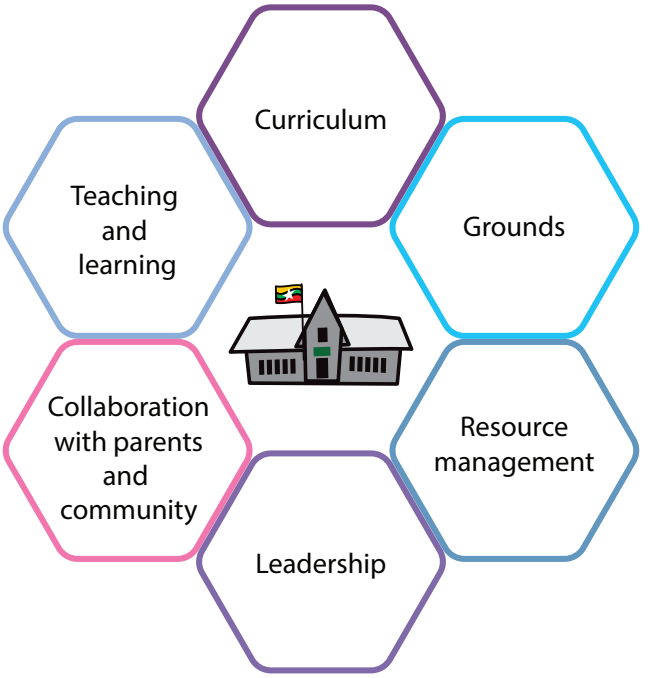


Figure 6.8. A whole-school approach to ESD

22 Australian Department of Environment and Heritage, 2005.

The elements of the whole-school approach to ESD, presented in Figure 6.8, align with Myanmar's new Competency Standards for School Heads/Principals in Basic Education; in particular, those standards relating to school leadership:

- A1.1. Develop the *vision of the school* in collaboration with teachers, students and other stakeholders.
- A.1.2. Ensure *involvement of stakeholders* (students, teacher and staff, parents and communities, school alumni, local organisations, well-wishers, and school board of trustees) in the development of school improvement plans.
- A.1.5. Facilitate *school quality improvement* in accordance with the School Quality Assurance Standards Framework (SQASF).

According to Myanmar's new SQASF, which you explored in Unit 1, every School Quality Improvement Plan needs to have an improvement agenda relating to:

- learning and teaching; and
- the school's infrastructure and resources.

There are two standards associated with the school's infrastructure and resources. These standards are as follows:

1. School infrastructure, facilities, its environment, and the materials the school uses, are *welcoming* and keep students and *staff safe and healthy*.
2. School infrastructure and resources support *effective teaching and student learning*.

The school grounds can become an important resource for learning and teaching.

Figure 6.9. School grounds as an important resource for learning and teaching

What does a sustainable school look like?

- ✓ Leadership understands and enables sustainable practices
- ✓ Whole-school planning takes place
- ✓ Integrated curriculum is encouraged
- ✓ Learning and teaching environment is cooperative and supportive
- ✓ Inquiry and participatory action are congruent with sustainability
- ✓ Deeper thinking and experiential learning are promoted
- ✓ Student leadership is developed
- ✓ Creativity and innovation are rewarded
- ✓ Environment and people are valued
- ✓ School is welcoming and inclusive
- ✓ Staff, students, and parents engage respectfully and care for one another
- ✓ Staff, students, and parents contribute to development of school's programmes and buildings
- ✓ Ongoing improvements are made to the school
- ✓ Resource consumption is managed
- ✓ School grounds are cared for and viewed as a learning environment
- ✓ Community partnerships are nurtured.[23]

23 Lang, J. 2007.

Figure 6.10. A sustainable school

Learning activity 1. Thinking about whole-school initiatives as a context for ESD

The purpose of this activity it to think about whole-school initiatives that may serve as a context for ESD learning curriculum.

In Unit 2, you explored a hypothetical scenario regarding planning and planting a sustainable garden. Box 6.7 presents an insight into an Australian teacher's experience of a whole-school approach to sustainability. The teacher discusses what they perceive to be the ***school's most important sustainability initiative*** from the perspective of:

- teaching and learning; and
- resource management.

Box 6.7. Teacher discusses the school's most important sustainability initiative

> Well, the main initiative that got us started [in terms of ESD] was developing a School Environmental Management Plan. From our plan, the school has initiatives that support sustainability.
>
> Probably the most significant is our permaculture garden. The students are all involved in planting vegetables, fruits and herbs, as well as maintaining the garden beds. The students also have a worm farm. They have been recycling their food scraps from lunches. The worm juice is used as fertiliser on the garden and is sold to finance new equipment and seeds. The students recycle their materials and use mulch on garden beds to reduce water use.
>
> The science programme has been useful in incorporating ESD into the classroom. It provides a good platform for learning about the environment and associated issues. However, we incorporate it across many areas of the curriculum.
>
> The students all have a garden journal [for English].
>
> Maths can be integrated as well, as students have been looking at how much money they are making from their produce stall at the markets and how they could re-use materials. They have been drying their own seeds to reduce our costs. The students are also keeping a tally of what birds they see during eating time.
>
> So, it is a whole integration of areas and ways of learning.[24]

Figure 6.11. All students are involved in planting vegetables, fruits, and herbs

Part A

Aside from a school garden, generate a list of whole school or school improvement initiatives that may serve as important contexts for ESD learning in Myanmar middle schools.

24 Lasen, Skamp, & Simoncini, 2017, p. 402

Part B

Choose one of these initiatives and outline it in more detail, with reference to as many elements of a whole-school approach to sustainability as possible.

Table 6.6. Whole-school initiatives with links to elements of a whole-school approach to ESD

Part A. Whole-school initiatives:

Part B. **Whole-school focus:**		
Curriculum	***Teaching and learning***	***Grounds***
Collaboration with parents and community	Leadership	Resource management

Review questions

1. What are the dimensions of sustainable development?
2. What ESD issues are relevant to the Myanmar middle school context?
3. What are the essential characteristics and underlying principles and values of ESD?
4. What learning strategies may be most effective in developing the ESD competencies?
5. What are the phases of an action learning model?
6. How can the six families of strategic questioning be used to scaffold action learning?
7. How can the Sustainable Development compass rose support ESD inquiries?
8. What are the elements of a whole-school approach to ESD?
9. What are characteristics of a sustainable school?

6.3. Human Rights Education

Human rights education may be implemented as part of an ESD agenda or as a cross-cutting curriculum agenda. In this sub-unit, you will explore the rationale for human rights education, relevant competencies, teaching and learning strategies and methods, and emphases at different stages of schooling. You will build understanding of international human rights standards, including the Universal Declaration of Human Rights and the Convention on the Rights of the Child. You will plan human rights learning activities based on the theme of child labour.

6.3.1. Human rights education in the middle school

Expected learning outcomes

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

- Define human rights education and explain its importance in the curriculum;
- Outline competencies developed through human rights education;
- Discuss key international human rights standards, including the Universal Declaration of Human Rights and the Convention on the Rights of the Child; and
- Outline teaching and learning strategies and methods and relevant issues for human rights education.

Human rights

A **right** is a moral or legal entitlement to have or do something.[25] A right is closely related to a responsibility. They are like two sides of the one coin, as can be seen in Box 6.8. We are responsible for respecting the rights of others.

25 Australian Human Rights Commission, 2016.

Box 6.8. Rights and associated responsibilities

Right: I have a right to speak freely and express my ideas and opinions.

Responsibility: I have a responsibility to be respectful of other people's ideas and opinions even if they are different to mine.

Right: I have the right to be treated the same as everyone else, no matter my age, sex, race, nationality, beliefs or other personal characteristics.

Responsibility: I have a responsibility to treat others equally.

Right: I have the right to believe in a religion or belief, or in no religion at all.

Responsibility: I have the responsibility to respect different religions and beliefs of other people and the ways that they choose to practice their beliefs.[26]

Human rights belong to all of us, regardless of whether we are a school student in Myanmar, the Prime Minster of Australia, or the United Nations Secretary General. Human rights allow us to live full and satisfying lives, and to be treated equally and fairly. Human rights recognise our worth and dignity, and the importance of mutual respect and cooperation.

Human rights cannot be taken away.[27] Their denial is not only an "individual tragedy but also creates conditions of social and political unrest, sowing the seeds of violence and conflict within and between societies and nations."[28] It is important to remember that:

- *[Countries]:* No country has achieved a perfect human rights record. Human rights set out ideals, which we work towards step-by-step.
- *[Groups]:* There are vulnerable groups in all societies. These groups include those that have faced historical **discrimination** (e.g. girls, ethnic groups) and marginalised groups, such as out-of-school children, families affected by AIDS, persons with disability, exploited children and children recruited by military forces.
- *[Individuals]:* Our personal actions should reflect respect for human rights.[29]

26 Australian Human Rights Commission, 2016.
27 Australian Human Rights Commission, 2016.
28 United Nations [UN] Office of the High Commissioner for Human Rights [OHCHR], 2004, p. 8.
29 Sinclair et al, 2008.

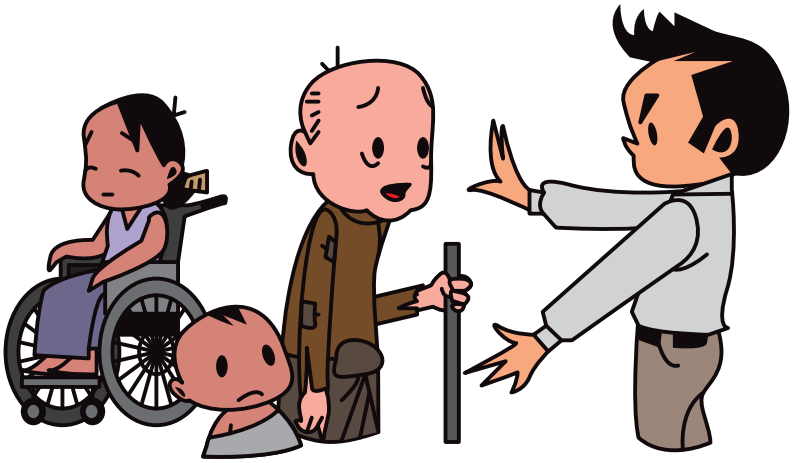


Figure 6.12. Vulnerable groups in society

Human rights education and its importance in curriculum

Human rights education is a lifelong learning process that builds the competencies that promote and uphold human rights.[30] *Knowing* about human rights is not enough.[31] Throughout schooling, students must also develop the skills and practices and values and dispositions to act together to protect and promote human rights.

Learning activity 1. Identifying human rights education competencies

The purpose of this activity is to for you to consider the skills and practices, and values and dispositions, which are developed by human rights education.

Table 6.7 presents the knowledge and understanding that are developed through human rights educations. You are to complete the table by identifying the skills and practices and values and dispositions, which are shaped by a human right education curriculum. Examples are provided.

30 UN, 2012.
31 Council of Europe, 2015.

Table 6.7. Human rights competencies

Knowledge and Understanding	• Key concepts such as: freedom, justice, equality, human dignity, non-discrimination, democracy, universality, rights, responsibilities, interdependence and solidarity • Main social changes, historical events and reasons leading to the recognition of human rights • Key international human rights standards that exist to implement the protection of human rights • Local, national, international bodies, non-government organisations, individuals working to support and protect human rights
Skills and practices	• Critical thinking: finding relevant information, evaluating evidence, being aware of preconceptions and biases, and making decisions on the basis of reasoned judgement
Values and dispositions	• A commitment to personal development and social change

Teaching and learning strategies and methods

Human rights education may be implemented as part of an ESD agenda or as a stand-alone, cross-cutting curriculum agenda, with strong links to subjects, such as Social Studies/History/ Geography, Morality and Civics, and Life Skills and Local Curriculum.

Human rights education starts from what students ***know and understand through their own experiences***. It affords students the opportunity to research relevant issues, discuss new ideas, learn from each other, and contribute to change. Human rights education can have a number of potential benefits.

Human rights education provides opportunity for students to:

- research contemporary issues relating to law, human rights, politics, and the environment;
- participate in active learning, including discussing and debating controversial issues;
- envisage possible futures, where the world is a better place;
- collaborate with peers and community partners to protect and promote human rights in their school and communities; and
- critically reflect on abuses to human rights, and advocate for change.

Figure 6.13. Envisage possible futures where the world is a better place

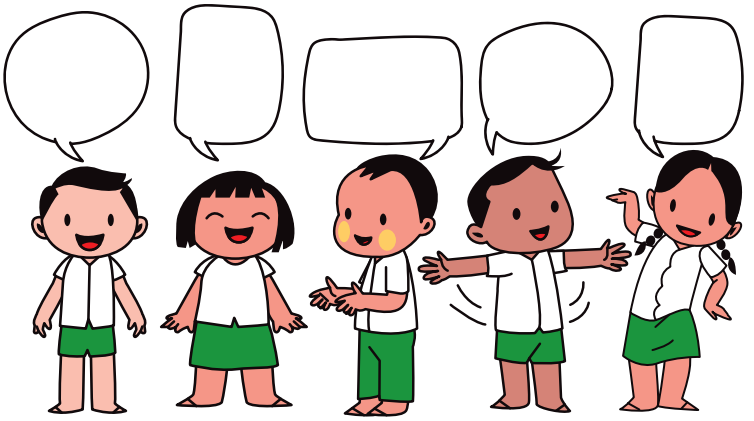


Figure 6.14. Class discussion about human rights issues

The following strategies and methods can be effective in human rights education:

- Brainstorming
- Class discussions (Figure 6.14)
- Cooperative group learning activities
- Case studies
- Interviews with guest speakers
- Field trips and community visits (Figure 6.15)
- Research projects/inquiries
- Role play and simulations
- Creative expression
- Reflective activities.

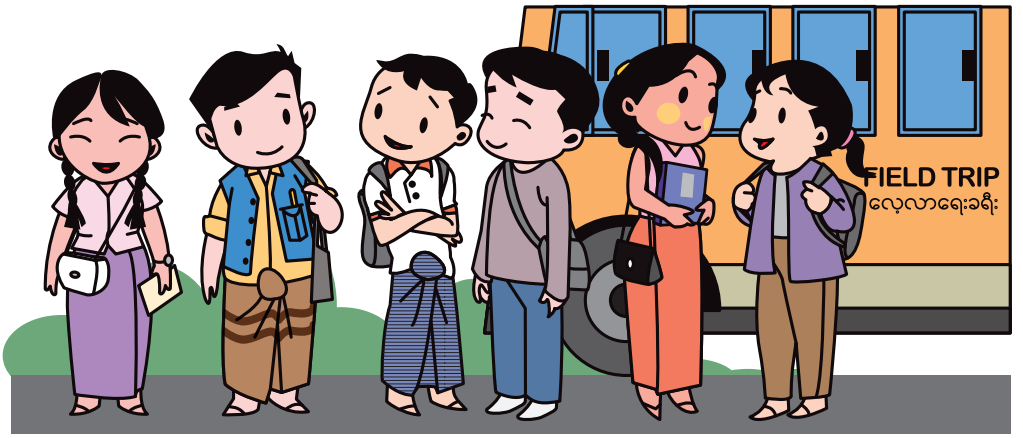


Figure 6.15. Field trips and community visits

Learning activity 2. Reflecting on human rights education

The purpose of this activity is to examine the extent to which you learnt about human rights education in your own schooling.

Table 6.8 outlines key concepts and student activities for human rights education for different stages of schooling. Reflect on the progression from lower to upper primary to middle school.

Were links to human rights education made visible in your schooling? In what subject areas was it integrated? Do you think human rights education is an important curriculum agenda? Provide reasons.

Table 6.8. Key concepts and student activities for human rights education[32]

Stage	Key concepts	Key student activities
Lower primary	• Respect for self • Respect for parents and teachers • Respect for others	• Self-expression/ listening • Cooperation/ sharing • Small group work
Upper primary	• Distinguishing wants from needs and rights • Social responsibility	• Distinguishing between fact and opinion • Performing school or community service
Middle school	• Knowledge of specific human rights • Citizenship	• Doing research/ gathering information • Citing evidence in support of ideas • Sharing information • Understanding other points of view • Civic participation
High school	• Knowledge of human rights as universal standards • Integration of human rights into personal awareness and behaviour	• Participation in civic organisations • Fulfilling civic responsibilities

32 United Nations Office of the High Commissioner for Human Rights, 2004

Figure 6.16. Respect for self and others, social responsibility, and citizenship

International Human Rights Standards

After World War II, governments came together to form an international organisation called the United Nations. One of the first actions of the United Nations was to draft a document outlining basic human rights shared by all people. The Universal Declaration of Human Rights was adopted by the UN General Assembly in 1948.

The Declaration consists of 30 articles. These articles form the basis for protecting and promoting human rights around the world. The Declaration has been endorsed by all countries in the world. Many countries have included its provisions in their laws or constitutions.[33]

33 Australian Human Rights Commission, 2016.

Box 6.9. Articles from the Universal Declaration of Human Rights

Article 1. We are all born free and equal.

Article 2. Human rights belong to everyone.

Article 3. Everyone has the right to life, liberty and security.

Article 4. No-one shall be held in slavery.

Article 5. No-one has the right to torture you.

Article 6. Everyone has the right to be treated as a person in the eyes of the law.

Article 7. Everyone is equal before the law.

Article 8. Everyone has the right to be protected by the law.

Article 9. No-one shall be arrested, detained or exiled without a good reason.

Article 10. Everyone has the right to a fair and public trial.

Article 11. Everyone is innocent until proven guilty.

Article 12. Everyone has a right to privacy.

Article 13. Everyone has the right to freedom of movement.

Article 14. Everyone has the right to seek asylum from persecution.

Article 15. Everyone has the right to a nationality.

Article 16. Everyone has the right to marry and raise a family.

Article 17. Everyone has the right to own property.

Article 18. Everyone has the right to freedom of thought, conscience and religion.

Article 19. Everyone has the right to freedom of opinion and expression.

Article 20. Everyone has the right to freedom of assembly and association.

Article 21. Everyone has the right to take part in the government of their country.

Article 22. Everyone, as a member of society, has a right to social security.

Article 23. Everyone has the right to work and to fair working conditions.

Article 24. Everyone has the right to rest and leisure.

Article 25. Everyone has the right to a decent standard of living.

Article 26. Everyone has the right to education.

Article 27. Everyone has the right freely to participate in the cultural life of the community.

Article 28. Everyone has the right to live in a free and fair world.

Article 29. Everyone has a responsibility to respect and protect human rights.

Article 30. Everyone has human rights and they cannot be taken away.

Learning activity 3. Reviewing United Nations human rights instruments

The purpose of this activity is for you to familiarise yourself with the Universal Declaration of Human Rights and other UN human rights instruments.

Part A Access the Myanmar version of the Universal Declaration of Human Rights, from your Education Degree College e-library. Reflect on whether you enjoy all of the rights in the Declaration. Discuss with your group.

Part B Research each of the UN instruments in Table 6.9. Add brief descriptions of the instruments to the table. Descriptions of some of the instruments have been provided for you.

Table 6.9. Key UN human rights instruments[34]

Instrument	Description
Universal Declaration of Human Rights, 1948*[35]	• Sets out fundamental human rights to be universally protected.
Convention relating to the Status of Refugees [Geneva Convention], 1951	• Defines who a refugee is; and • Sets out the rights of individuals, who are granted asylum, and the responsibilities of nations that grant asylum.
International Convention on the Elimination of All Forms of Racial Discrimination, 1965	
International Covenant on Civil and Political Rights, 1966	
International Covenant on Economic, Social and Cultural Rights, 1966*[36]	
Convention on the Elimination of All Forms of Discrimination against Women [CEDAW], 1979 [often described as an International Bill of Rights for Women]	
Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984	
Convention on the Rights of the Child, 1989*	• Sets out the civil, political, economic, social, health and cultural rights of children.
International Convention of the Protection of the Rights of all Migrant Workers and Members of their Families, 1990*	

**Access the Myanmar version in your Education Degree College e-library*

34 United Nations [UN] Office of the High Commissioner for Human Rights [OHCHR], 2004, p.13
35 United Nations Office of the High Commissioner for Human Rights [OHCHR], 1998.
36 Ministry of Foreign Affairs, 1996.

Learning activity 4. Reflecting on the Convention on the Rights of the Child

The purpose of this activity is for you to reflect upon the Convention on the Rights of the Child.

As can be seen in Table 6.9, the Convention on the Right of the Child, 1989, sets out the civil, political, economic, social, health and cultural rights of children. The Convention was the first legally binding international instrument adopted specifically to protect the rights of children.[37]

Access the simplified version of the UN Convention on the Rights of the Child in English, which is in your e-library. Familiarise yourself with Articles 1-43 of the Convention.

Box 6.10 is an online media article reporting on Myanmar's Child Rights Law. What do you know about this new law? Which article in the Convention on the Rights of the Child is related to registration at birth?

Box 6.10. Online media report by UN Children's Fund

> The enactment of the new Child Rights Law by the Government of Myanmar a landmark step
>
> Today's enactment of the Child Rights Law demonstrates Myanmar's commendable efforts to align national policies and regulatory frameworks with the UN Convention on the Rights of the Child that Myanmar ratified in 1991. Under the newly enacted Child Rights Law, a child is defined as anyone under the age of 18.
>
> Today, all children born in Myanmar are guaranteed to the fundamental and unconditional right to register at birth. Birth registration is the first right of the child and a stepping-stone to enjoying other rights such as the right to health, education and protection. With the establishment of a minimum age of marriage (18 years) and to employment (14 years), the value of childhood is recognised and helps allow children be children.[38]

37 Council of Europe, 2015.
38 UNICEF, July 2019

Figure 6.17. A positive commitment to childhood

Learning activity 5. Scoping a learning activity for human rights education

The purpose of this activity is to draw upon your learnings about human rights education, over the last four periods, to engage in a lesson scoping activity based on the issue of child labour.

Ashique Hasmir is a real person. His information was sourced from materials from the International Labour Organisation and Free the Children and has been presented in the Council of Europe's *Manual for Human Rights Education with Young People*.[39] Reflect on his personal and family circumstances.

Consult Grade 6 Basic Education Curriculum documents and identify a subject area and outline ***one key learning activity*** that may relate to:

- the story of Ashique specifically; OR
- child labour in Myanmar.

39 Council of Europe, 2015.

You may undertake some research online if you decide to select the second option.

Box 6.11. Ashique profile

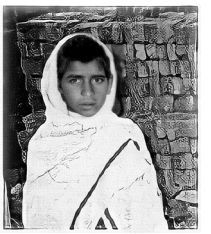
Personal Data

Name: Ashique Hasmir

Age: 11 years old

Nationality: Pakistani

Family: Parents, 1 sister and 3 brothers, 2 grandparents



Source: Council of Europe, 2017

Work Data

Work: Brick factory

Hours: 12-16 hours a day (half hour break)

Days per week: 6 days

Production: 600 bricks per day

Wage: $US1.50 for 1000 bricks (50% goes to family loan repayment)

Age started: 5 years old

Family Situation

Family income: about $US80/month

Family income is very low and consequently insufficient to send the children to school and to provide adequate food and health care.

Family loan: Family bonded for 2 years because they took a loan of about of about $US125. Now, with the loan interest, amount owed is $US310.

Schooling: Sent to school for 3 months by his father but the factory owner removed him and put him back to work. His father was punished because of what he had done.[40]

Review questions

1. What are the benefits of human rights education?
2. List some of the competencies shaped by human rights education.
3. Identify three rights included in the Universal Declaration of Human Rights.
4. Identify three rights included in the Convention on the Rights of the Child.
5. Which human rights issues may be explored in a middle school classroom?

40 Council of Europe, 2015, p.104

6.4. Integrated Approaches to Curriculum Design

In this sub-unit, you will explore three approaches to integrated curriculum design: multidisciplinary, interdisciplinary, and transdisciplinary approaches. You will consider scenarios of integrated curriculum design and reflect on appropriate teaching and learning strategies and methods.

6.4.1. Teaching and learning strategies in integrated curriculum

Expected learning outcomes

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

- Explain different approaches to integrated curriculum design; and
- Discuss appropriate teaching and learning strategies for an integrated approach in the Middle School Curriculum.

Benefits of an integrated curriculum

In simple terms, integrated curriculum is about making connections. Integration builds on the relationships which exist among all things. In Year 1, you learnt about integrated curriculum in the context of KG.

Myanmar's KG curriculum views children as *holistic learners* with social, emotional, and intellectual needs. Rather than subject areas, the KG curriculum competencies through experiential and hands-on learning**,** addressing broad developmental goals (e.g., to be healthy physically and mentally, to promote an understanding of the environment etc.).

Teachers who are interested in integrated curriculum usually align with "a student-centred, experiential approach."[41] Research evidence shows that students participating in integrated approaches do as well as, or better than, students in traditional classrooms.[42]

Integrated curriculum can:

- lead to deeper learning, where students seek to understand a topic in depth and take the lead in their learning;
- lead to increased student engagement and motivation; and
- be an effective way to teach 21st century skills.

Approaches to curriculum integration

Multidisciplinary approach

A multidisciplinary approach to curriculum integration is based on planning for teaching and learning around a ***common theme*** (e.g., child labour) or ***agenda*** (e.g., ESD) in different subject areas. Each subject is still distinct and separate.[43]

For instance, middle school teachers may collaboratively plan to incorporate the theme of child labour into their respective subject areas of History, Geography, Myanmar, and Mathematics.

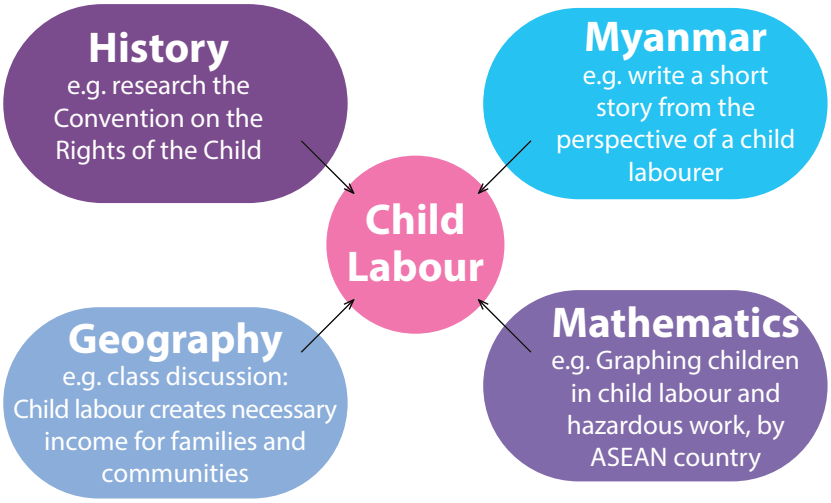


Figure 6.18. A multidisciplinary approach to integration

41 Drake & Reid, 2018, p. 40.
42 Drake & Reid, 2018.
43 Drake & Burns, 2004.

Learning activity 1. Scoping a multidisciplinary theme across subject areas

The purpose of this activity is for you to have opportunity to scope how a theme may translate into learning activities across subject areas.

Utilising the template in Figure 6.19, select a theme and scope it across four subject areas.

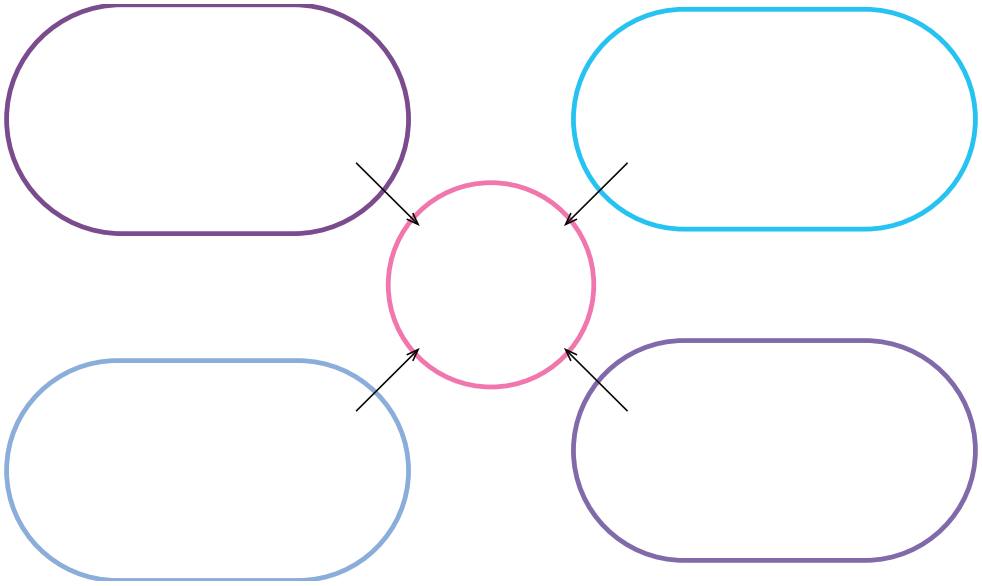


Figure 6.19. A multidisciplinary approach to integration

Interdisciplinary approach

An interdisciplinary approach to curriculum integration is based on planning around ***common learnings*** across subject areas. The aims are to develop understanding of ***interdisciplinary concepts*** (e.g., change, cause, consequences, interdependence, systems) and transferable or essential skills. The subject areas are still evident but less important. An interdisciplinary approach is more typical in a primary classroom where teachers are generalists and teach the same cohort of students across subject areas.

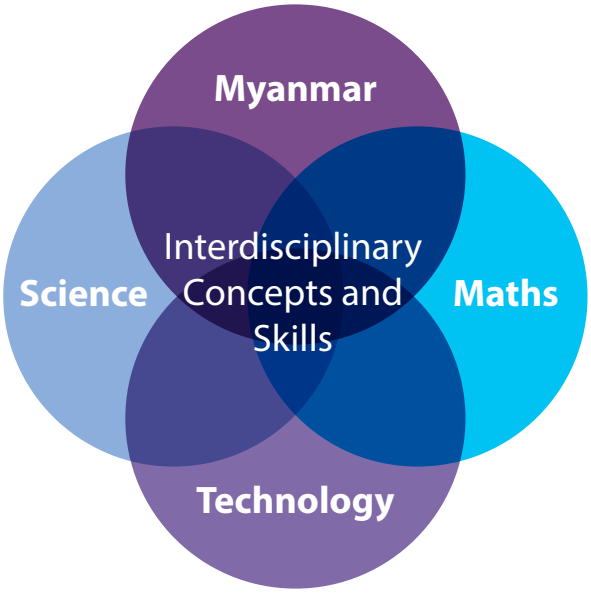


Figure 6.20. An interdisciplinary approach to integration

An example of an interdisciplinary integration in the Primary school is presented in Box 6.12.

Box 6.12. Grade 6 interdisciplinary curriculum

In a Grade 6 class, students construct handmade kites from materials, such as paper, straws, aluminium foil, skewers, and string. They learn *essential skills* related to collaboration, research, written communication, design and construction. They develop a deep understanding of ratio and proportion as they design and refine their kites – first on the computer and then by hand. They study diverse topics as electromagnetism and the use of kite flying in celebrations. Students also write poetry and prose and read stories about kites.[44]

44 Adapted from: Drake & Burns, 2004.

Transdisciplinary approach

In a transdisciplinary approach to integration, teachers plan for student learning in authentic contexts. Students may engage in inquiry-, action-, or project-based learning. Subjects lose their boundaries as students apply interdisciplinary and disciplinary understandings and skills in real settings. Students may collaborate with each other or with community partners and share their work with authentic audiences. Inquiry and curriculum integration fit well together. Powerful inquiry questions transcend subject areas.

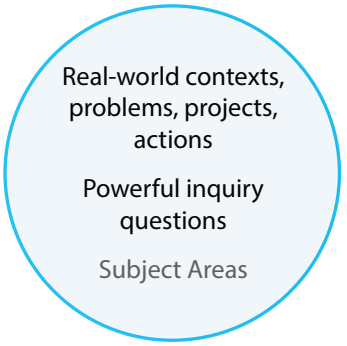


Figure 6.21. A transdisciplinary approach to integration

Learning activity 2. Reflecting on the strengths of a transdisciplinary project

The purpose of this activity is to review the strengths of a Grade 7 transdisciplinary project.

Reflect on the strengths of this project, outlined in Box 6.13, in terms of student engagement and learning.

1. Would this project be motivating and engaging for students? Provide reasons.
2. Would students learn worthwhile knowledge and skills through participating in the project?
3. How *may* a project such as the Endangered Species project shape students' futures?

Box 6.13. Grade 7 transdisciplinary middle school project[45]

Project context

The Endangered Species project runs for eight weeks. It is a model of how schools can develop an integrated and performance-based approach to teaching, learning and assessment. The project has been a collaborative effort involving the school's leadership team, teachers across a number of disciplines, and professional scientists, and other community members. Together, they have developed an integrated curriculum, hands-on and technology-driven instruction, community learning, and alternative assessments.

Project aims

The project has four main aims:

1. Integrate the Grade 7 curriculum in Science, English, ICT, Mathematics and Social Studies around a contemporary, real-world issue that engages students (i.e., endangered animals).
2. Apply technology and implement other hands-on learning experiences in ways that relate to real problems and tasks, which people face in the world of work.
3. Link with the community to provide rich information resources, community learning, and a sense of realism to the project.
4. Engage students in performance assessments in the areas of Applied Mathematics and Science, technology use, collaboration, and communication (speaking, writing, and visual forms).

Project phases

Phase 1: Student Research and Paper

The project begins in Life Sciences, where students learn about endangered species – a topic which seems to excite many of them because of their love of animals and because it is a current environmental issue. Students conduct individual research on a particular species, choosing from a list of 25 endangered species.

Phase 2: Developing a "Recovery Plan"

In the second phase of the course, students work in small groups to develop a recovery plan for their endangered animal. Students self-select into these groups based on the animal of interest. This gives students choice, which important to student engagement.

Phase 3: Presentations to the "Board of Directors"

The project culminates with a group presentation of the recovery plan to a hypothetical zoo "Board of Directors."

Each group gives a 15-minute presentation to the board made up of zoo professionals and teachers. The students must present and defend their plan, convincing the board that the proposal deserves funding. The panel often ask challenging questions and offers critique at the end. A teacher, who worked closely with the group, completes a performance evaluation sheet.

Review questions

1. What are three different approaches to integrated curriculum design?
2. What learning strategies are associated with a transdisciplinary approach to integration?

45 Kushman, n.d.

Unit Summary

Key messages

- One of the key reforms in the National Education Strategic Plan is to change the structure of the education system from a 5-4-2-year to a 6-4-3-year structure.
- As a student teacher it is important to be familiar with key education legislative and policy documents in order to have an understanding of national education agendas and reform initiatives in schools.
- Sustainable development calls for consideration of natural, economic, social and political systems or dimensions.
- ESD is a lifelong learning process, leading to an informed and involved citizenry.
- ESD is a cross-cutting curriculum agenda, which can link to all subject areas.
- ESD is important for Myanmar, which is extremely vulnerable to climate change and environmental exploitation. Myanmar is a diverse country with rich history and cultures, which also deserve protecting.
- The UNESCO (2017) ESD Teacher Guides are high quality resources which support Myanmar teachers to make links to ESD in a range of subject areas.
- ESD learning experiences are relevant, holistic, values-based, inquiry- and action- based, and critically reflective.
- ESD competencies involve the full range of knowledge and understanding, skills and practices, and values and dispositions, which support learners to participate in actions and partnerships that address real-world sustainability challenges and opportunities.
- ESD competencies can be developed within the context of Middle school inquiries and actions relating to safe water availability and access, disaster preparedness and community resilience, food security, poverty and urbanisation, refugees, and sustainable energy sources.
- In action learning, students investigate an issue, define the scope of the action, develop a proposal for action, implement the proposal, and evaluate and reflect.

- The six families of strategic questions is a framework that may be used to support initial scoping activities, in order to identify an appropriate issue for action learning
- The Sustainable Development compass rose supports students to examine a sustainable development issue from a systems perspective.
- In addition to curriculum and teaching and learning, a whole school approach to ESD recognises the importance of the school's leadership, resource management, grounds, and collaboration with parents and the community.
- Human rights belong to all of us. Human rights cannot be taken away.
- Human rights education is a lifelong learning process that builds the competencies that promote and uphold human rights.
- Human rights education may be implemented as part of an ESD agenda or as a stand-alone, cross-cutting curriculum agenda.
- Human rights education provides opportunity for students to investigate and discuss contemporary and controversial issues, envisage possible futures, participate in active learning, collaborate with community partners, and take a positive stand against and critically reflect on abuses to human rights.
- The Universal Declaration of Human Rights consists of 30 articles, which form the basis for protecting and promoting human rights around the world. All countries have endorsed the Declaration. Many countries have included its provisions in their laws or constitutions.
- The Convention on the Rights of the Child was the first legally binding international instrument adopted specifically to protect the rights of children. It sets out the civil, political, economic, social, health and cultural rights of children.
- Teachers who are interested in integrated curriculum usually align with a student-centred, experiential approach.
- A multidisciplinary approach to curriculum integration is based on planning for teaching and learning around a common theme or agenda in different subject areas.
- An interdisciplinary approach to curriculum integration is based on planning around common learnings across subject areas (i.e., development of understanding of interdisciplinary concepts and transferable skills).
- A transdisciplinary approach to curriculum integration is based on planning for student learning in authentic contexts. Subjects lose their boundaries as students apply interdisciplinary and disciplinary understandings and skills in real settings.

Unit reflection

Reflective question:

The two education agendas explored in this unit are ESD and human rights education. Both ESD and human rights education are:

- relevant to human society's greatest challenges and students' future needs;
- holistic (i.e., engaging the whole person and multiple perspectives); and
- experiential (i.e., inquiry- and action-based), developing higher order thinking and reflective skills.

Rather than specific to a particular agenda, one could argue that these are the characteristics of a quality education. Do you agree? Provide reasons for your position.

Further reading

6.2. Education for Sustainable Development

Australian Department of the Environment and Heritage. (2005). *Educating for a sustainable future: A national environmental education statement of Australian schools*. Retrieved from http://www.seedengr.com/sustainable-future.pdf

Australian Department of the Environment, Water, Heritage and the Arts. (2010). *Sustainability curriculum framework: A guide for curriculum developers and policy makers*. Retrieved from https://cpl.asn.au/sites/default/files/journal/Sustainability%20Curriculum-Framework. pdf

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6.3. Human Rights Education

Council of Europe. (2015). Compass. *Manual on human rights education with young people*. (2nd ed.). Retrieved from https://www.coe.int/en/web/compass/home

Sinclair, M., Davies, L., Obura, A., & Tibbitts, F. (2008). *Learning to Live Together: Design, monitoring and evaluation of education for life skills, citizenship, peace and human rights*. Eshborn, Germany: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) in collaboration with UNESCO (IBE).

6.4. Integrated Approaches to Curriculum Design

Drake, S. & Reid, J. (2018). Integrated curriculum as an effective way to teach 21st century capabilities. *Asia Pacific Journal of Education, 1*(1), 31-50.

Unit 7

Educational Philosophy

This unit begins by looking at the importance of philosophy in education. The two fields of philosophy and education are interrelated here to better inform teaching practice. The three approaches to educational philosophy are: teacher-centred, student-centred, and society-centred.

This unit then examines how these approaches are demonstrated in the classroom. It goes on to explore major educational philosophies and their application to the classroom. Finally, it covers the creation of one's own philosophy of teaching, beginning with a teaching metaphor and culminating with a personal teaching philosophy.

Expected learning outcomes

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

- Critically reflect on the importance of philosophy in education;
- Explain how the three approaches to Educational Philosophy could be demonstrated in the classroom;
- Summarise the major philosophies and educational theories and how they apply to classroom practice;
- Discuss how Eclecticism applies to one's teaching practice; and
- Write a personal teaching philosophy.

Competencies gained

C1.2 Demonstrate understanding of the underlying ideas that influence one's practice as a professional teacher

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

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

Key terms

Critical theory, eclecticism, educational philosophy, essentialism, existentialism, globalisation, idealism, perennialism, postmodernism, pragmatism, progressivism, realism, reconstructionism, society-centred approaches, student-centred approaches, teacher-centred approaches

7.1. Educational Philosophy and its Implications for Teaching

As teachers, you will make many decisions and take many actions. While at time these decisions and actions seem automatic, they are actually based on your ideas and beliefs about how students learn and the roles and responsibilities of teachers.

When you examine educational philosophies and are tasked with putting into words your own educational philosophy, you become aware of just what your philosophy entails.

This sub-unit looks at the importance of educational philosophies to your teaching and the major educational philosophies, and how you apply to classroom practice.

7.1.1. Importance of Educational Philosophy

Expected learning outcomes

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

- Critically reflect on the importance of philosophy in education; and
- Explain how the three approaches to Educational Philosophy could be demonstrated in the classroom.

Educational Philosophies

An educational philosophy is a personal statement of a teacher's guiding principles about 'big picture' education-related issues, such as how student learning and potential are most effectively maximised, as well as the role of educators in the classroom, school, community, and society.[46]

46 Lewis, 2019

Whether or not you are aware of it, you come into each classroom setting with unique ideas and beliefs about:

- why and how you want to teach;
- why teaching is important; and
- how best to teach your students.

Educational philosophies put into words what you are thinking and doing as a teacher, and from those words, you can reflect, make changes, and improve your practice.

As you learnt in Year 1, the word philosophy comes from two Greek words: *philo*, meaning 'love' and *sophy*, meaning 'wisdom.' So philosophy means 'love of wisdom.'

Your own educational philosophy describes your ideas, beliefs, and goals as a teacher. It is part of your professional identity; how you perceive yourself as a professional and in relation to a profession. It is a combination of beliefs and attitudes, values, motives, and experiences through which individuals define themselves, in their current or anticipated professional life.

Figure 7.1. Teaching philosophy map

A teaching philosophy is like a map that gives you direction, purpose, objectives and focus for your practice.

When you plan and implement your curriculum, it is important for you to understand why you have made the decisions you made, and these decisions are based on your educational philosophy.

Reasons to develop an educational philosophy include:

- Teachers have a great impact on students' lives, so they need to be aware of their ideas and beliefs.
- A philosophy helps you understand your values and ensure that they are positive ones that you want to relay to your students.
- Having a philosophy enables you to reflect on and analyse, your decisions and actions.

Learning activity 1. The importance of philosophy in education

The purpose of this activity is to critically reflect on the importance of philosophy in education.

For this learning activity, you will work in groups of four student teachers. Begin by individually reading the article in Box 7.1.[47] As you read it, highlight the key words that tell you why the author thinks a Philosophy of Education is important.

Box 7.1. Papadopoulos on the importance of having a philosophy of education

I'm becoming increasingly convinced of the need to reflect deeply on the most important high-level questions around learning and education. I also feel strongly that this is something anyone who has a view on education or is involved in the field should also take the time to do. This involves thinking about questions such as:

- What should the aim of education be?
- Who should be educated?
- What should be taught, and should this differ with interests and abilities?
- How should we be educated?

The fact that these questions have been asked for many centuries and are yet to be answered discourages many from examining them in the first place.

After all, why study questions that never go away? Why not just get on with the job instead of philosophising and having abstract discussions? While these objections are understandable, I think they miss the point completely. Organisations, whether they are governments, businesses or schools work the way they work because of the way people think.

47 Papadopoulis,n.d.

Policies and rules didn't create the problems we have, and they won't solve them either. If you want to improve any system you need to look at the ways people think and interact with each other before changing the rules. And that is what educational philosophy is all about.An unwillingness to look at the big questions in education also fails to recognise its fundamental importance and to treat it with the respect it deserves.

Our educational system prepares the next generation to enter society and imparts ideas, values and beliefs that will shape young people's thinking and behaviour for the rest of their lives.

The magnitude of this task can't be overstated and it's not just the responsibility of teachers and school administrators but also of parents to think deeply about the type of educational system they want for their children. Education is too important to be left up to guesswork. Its recipients are not cogs in a machine but living, breathing human beings who have one life to live.

When you have read and highlighted the article, discuss with your group why Papadopoulos thinks a Philosophy of Education is important. When you reach agreement, write Papadopoulos' reasons in the left column of Table 7.1. The importance of a Philosophy of Education.

Then, discuss these questions with your group:

- Which points do you agree with?
- Which ones do you disagree with?
- Are there any points you would add regarding why you think philosophy in education is important?
- Why do you think a Philosophy of Education is important?

Then, in no more than 100 words, write why you think a Philosophy of Education is important in the right-hand column of Table 7.1. When you have written about why you think a Philosophy of Education is important, your teacher educator will bring the class together to discuss this activity.

Table 7.1. The Importance of a philosophy of education

Reasons why Papadopoulos thinks a philosophy of education is important	Why a philosophy in education is important

Learning activity 2. Consider some philosophical questions

The purpose of this activity is to begin to think about one's personal philosophy.

This is a whole-class activity, designed to get student teachers thinking about their own philosophical ideas about teaching and learning. You will be given a sheet of paper with the following questions:

- What should the aim of education be?
- Who should be educated?
- What should be taught, and should this differ with interests and abilities?
- How should we be educated?

When you receive your sheet of paper, you must solicit five answers to each question from class members. You can only ask a class member one question and you must complete the activity within the given time.

Three approaches to Educational Philosophy

In Year 1, you learnt that there are three types, or approaches to Educational Philosophy:

- **Teacher-centred approaches** – These philosophies say that knowledge is transferred from one generation of teachers to the next.
- **Student-centred approaches** – These philosophies focus on individual students achieving their potential, and how teaching can best support this.
- **Society-centred approaches** – These philosophies go beyond individuals to focusing on educating groups of people.

As you read through their descriptions, think back on your practicum classes and your own classes when you were a student and consider how each philosophy might have been demonstrated in the classroom.

Teacher-centred approaches ensure that ideas about teaching and learning are passed on through the generations and continue to impact on what and how we teach. The teacher is seen as the authority, imparting knowledge, and values so that students can master learning.[48] The teacher sets goals (learning outcomes) and success in teaching is judged by how well students do on tests.

Student-centred approaches are ones that stress the importance of students and their success in school. This happens through the teaching or training and assisting of students within the classroom. Students are considered unique and individual, with individual learning needs. The learning environment is more flexible, to cater to

48 Lynch, 2016a

the needs of learners and often teachers and students co-construct the curriculum, including what will be studied and how it will be studied.[49]

Society-centred approaches seek to make sense of how society affects current and future education. They focus beyond individual students and curriculum to whole groups of people, such as minority groups, societies of the whole world. Their goal is to improve society through education.

Learning activity 3. Role-play the three approaches to Educational Philosophy

The purpose of this activity is to explore how the three approaches to Educational Philosophy could be demonstrated in the classroom.

For this activity, you will work in groups of three student teachers. Each of you will role-play the teacher who uses one of the three approaches to educational philosophy (teacher-centred, student-centred, and society-centred). When you are role-playing the teacher, the other two group members will role-play middle school students.

The scenario is:

Two Inthama middle school students, Than Win and Thu Thu Aung, have just moved to your school in Yangon from Inn Paw Khone village on Inle Lake. This is their first day of school. As their teacher:

- What are you going to do when they arrive?
- How will you approach their learning?

Do a two-minute role-play of each approach, and then discuss:

- What happened in the role-play?
- How do you think Than Win and Thu Thu Aung felt?

Your teacher educator will then bring the class together to discuss this activity.

49 Lynch, 2016b

Learning activity 4. Carousel of approaches to Educational Philosophy in the classroom

The purpose of this activity is to consider how the three approaches to Educational Philosophy would look, sound, and feel in the classroom.

This activity will be conducted as a carousel. Carousel is one of the cooperative learning strategies you studied in Unit 5, Educational Psychology. For this activity, you will be divided into nine groups and every student teacher is given a coloured marker.

During the carousel activity, you will be answering questions as you would in a Y-chart activity: What does it look like? What does it sound like? What does it feel like? The difference is that rather than writing your answers on a worksheet in one section of the 'Y', you will be moving around the room, writing your answers on poster paper about how each approach to Educational Philosophy looks, sounds, and feels.

For example, an approach might *look* neat and orderly, with the teacher in control or the class, or might look like students are busily involved in their own projects, etc. An approach might *sound* very quiet and like people are concentrating or it may sound noisy, as people share their ideas, etc. An approach might *feel* welcoming, restrictive, challenging, etc.

There will be nine sheets of poster paper with questions on them, on the walls of the classroom. Your group will be stationed at one of them, and that will be the poster with the question you must answer first.

When your teacher educator instructs you to do so, each group member will write their answers to the question on the poster. Answers should be no more than two or three words.

When you have written your answer, your teacher educator will tell you to 'Stop' and then 'Move". You and your group will move clockwise to the next poster and write your answers to the next question on that poster.

This will continue until every group has written an answer on all nine posters. You will then move one more time, and this time you will be standing in front of the poster where you began.

Your group will take down your original poster, bring it to the class discussion and share what is written on it with the whole class.

7.1.2. Major educational philosophies and educational theories and their application to the classroom

This lesson has four periods.

It looks at educational philosophies within the three approaches to educational philosophy, and at some of the educational theories associated with each of the philosophies:

- Within the teacher-centred approach, we look at the Philosophies of Idealism and Realism, and from them the Educational Theories of Perennialism and Essentialism.
- Within the student-centred approach, we look at the Philosophies of Pragmatism and Existentialism and, from them the Educational Theories of Progressivism and Reconstructionism.
- Within the society-centred approach, the Philosophies of Postmodernism and Existentialism and, from them the Educational Theories of Critical Theory and Globalisation.

This lesson also introduces a fourth approach: Eclecticism. Eclecticism is from the Greek word, *eklektikos* which means 'selective'. It is an approach to educational philosophy that draws upon, or selects, ideas from a number of other philosophies, rather than staying with one set of ideas. Many teachers take an eclectic approach, as they find good ideas in a variety of different philosophies.

Expected learning outcomes

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

- Summarise the major philosophies and educational theories and how they apply to classroom practice; and
- Discuss how Eclecticism applies to one's teaching practice.

Philosophies and educational theories associated with the three approaches to Educational Philosophy

In this lesson, we will be looking at a variety of philosophies and educational theories, how they fit into one of the three approaches, and how they can be applied to classroom practice.

Teacher-centred philosophies (also called Authoritarian-focused philosophies) include:

- Idealism
- Realism

Educational theories associated with Idealism and Realism include:

- Perennialism
- Essentialism

Student-centred philosophies (also called Non-Authoritarian philosophies) include:

- Pragmatism
- Existentialism

Educational theories associated with Pragmatism and Existentialism include:

- Progressivism
- Reconstructionism

Society-centred philosophies (also called Non-Authoritarian philosophies) include:

- Postmodernism
- Existentialism

Educational theories associated with Postmodernism and Existentialism include:

- Critical Theory
- Gloabalisation

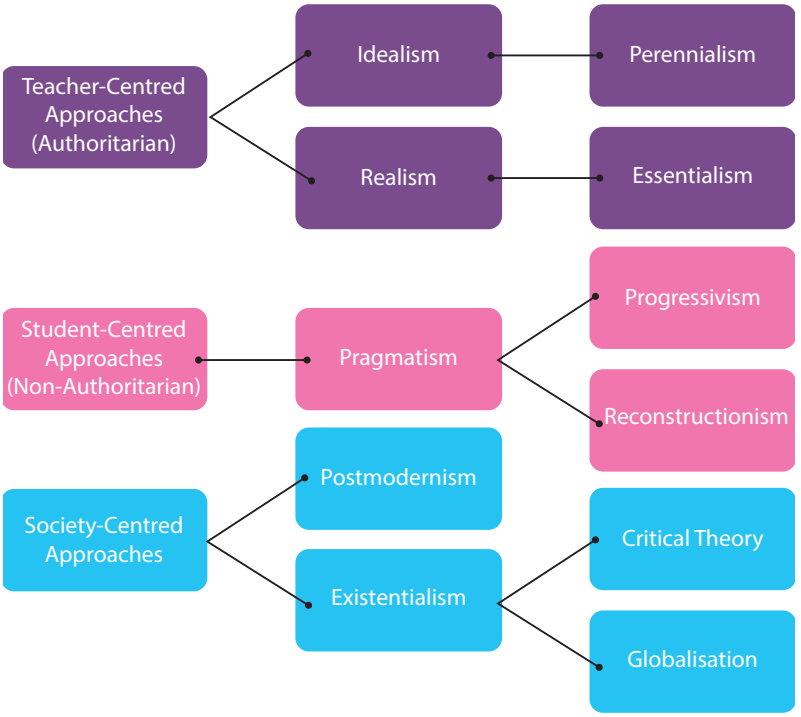


Figure 7.2. Relating approaches to Educational Philosophies and Educational Theories

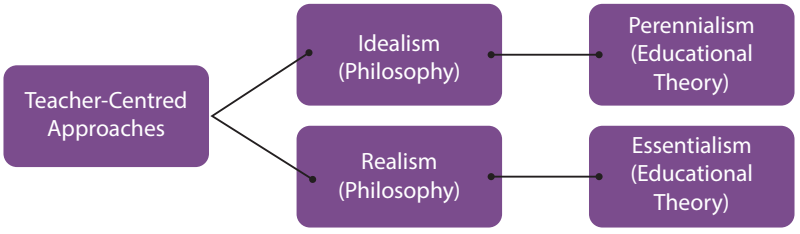


Figure 7.3. Teacher-centred approaches expanded

The two educational philosophies that are teacher-centred, or authoritarian, are **Idealism** and **Realism**.

Idealism

This is one of the oldest philosophies, dating back to Socrates and Plato. It teaches that truth and values are universal and absolute and that ideas are the only reality. In schools, curriculum is the same for all students and is based around ideas. The aim of teaching is to develop intellectual capacity in student as they absorb broad and enduring ideas and values.

Cognitive/ intellectual development is the focus of the curriculum, as students are taught the three "R"s (reading, writing and arithmetic) and habits of mind, such as perseverance and open-mindedness. By secondary school, students are taught the classics of philosophy, mathematics, history, literature, and politics, with the purpose of comprehending their underlying principles.[50]

Realism

Realism is also an older philosophy, dating back to Aristotle and the ancient Greeks. It is a belief that reality can be found in our physical world and that knowledge comes through experience and reasoning. The purpose of schools is to master the laws of the universe through reasoning, observation, and experimentation. Students are seen as apprentices, mastering information and skills in preparation for their roles in the working world.

Curriculum is structured and organised in specific subjects such as mathematics, science and languages. Learning is through demonstration and repetition, given by teachers who are expert in their disciplines. Teachers explain concepts and give examples. Then students complete some activities and get feedback from teachers, and then undertake a test to demonstrate their understanding.[51]

From teacher-centred approaches and the philosophies of Idealism and Realism, come the educational theories of **Essentialism** and **Perennialism**.

50 Tan, 2006.
51 Tan, 2006.

Essentialism

Essentialism is an educational theory that views education as a way of teaching children a common core of essential skills, facts, and knowledge of the culture for the purpose of preserving it. Further, it aims to develop good citizens who have sound discipline and respect for authority. Knowledge and skills are taught through the uniform transmission of information from the teacher to the students.

Three basic principles of Essentialism are:

- there is a core of information to be disseminated to the next generation;
- hard work and discipline are vital to education; and
- education is delivered through a teacher-centred approach.[52]

Information transmitted includes the basics, or core concepts, relevant to the culture, such as history, literature, science, reading, writing, speaking, mathematics and technology, and this core curriculum can change over time.[53]

Values conveyed include hard work, respect for authority and discipline. Students, who are being prepared to become valuable contributors to society, practice and demonstrate their understanding through memorising, rote learning and practicing for assessment tasks such as examinations and text.

In practice, Essentialism would see teachers as experts in their fields and models of "intellectual pursuit and moral character."[54] The teacher would stand at the front of a disciplined class lecturing and setting high standards, and students would be taking notes. This is a common model that has been used in universities for some time. Students practice through worksheets or projects and are assessed through examinations, essays, tests, etc.

52 Tan, 2006.
53 Tan, 2006.
54 Tan, 2006, p. 32.

Figure 7.4. Essentialism

Perennialism

Perennialism is an educational theory which states that teachers should teach the things that are relevant to all people throughout time, or, "those considered as important and applicable today as they were when they were written."[55] Principles, rather than facts, are the focus of this educational theory.

The aim of teaching is to develop students' intellectual powers and get them to think rationally and critically, as they seek enduring truth. Perennialism assumes that at their most basic or essential levels, nature and humans do not change.

Schools are meant to be training grounds for the 'intellectual elite'; giving students a grounding in the classics and in community traditions, and curricula comes from the classics rather than on current events. Schooling, particularly in the early years, is a means of getting children ready for adulthood.[56]

55 Lynch, 2016a
56 Cohen, 1999.

This progresses to subjects such as art, music, literature, science, and mathematics, which are taught through the classics. All students are taught the same content in the same way. Classroom rules are strict – no noise or chaos, and specific behaviours are required and rewarded (with negative behaviours punished).

A Perennialist teacher is "liberally educated, knowledgeable, and intellectually and morally exemplary."[57]

Teachers must guide or coach students to cultivate their intellect, through mastery of subject content and developing reasoning skills, as well as through a pre-planned sequence of learning, beginning with basic skills in the early years of schooling and advancing to study of literature, history and philosophy from the worlds' greatest thinkers in the later years.

Students learn through rote learning (memorisation), with a general education programme for the intellectually gifted and a vocational programme for the average student.[58]

Figure 7.5. Perennialist teaching style

57 Tan, 2006, p. 31.
58 Cohen, 1999.

Learning activity 1. Reflection and role-play of teacher-centred educational theories

The purpose of this activity is to distinguish between Essentialism and Perennialism. For this activity, you will begin with individual reflection; then work in groups of five student teachers.

Individually, begin by reflecting on the:

- teacher-centred classroom practices you saw in your practicum schools; and
- teacher-centred classroom practices you experienced when you were in school.

Choose two examples from your reflections. Describe these examples in short paragraphs in the boxes in Table 7.2. Then, get together as a group and each student teacher will share their two examples with the group. When they have read their two examples, the group must decide if each example is Essentialism or Perennialism. Write the choice in the box beneath each example in Table 7.2. Teacher-centred educational theories.

When all five group members have shared their examples and decided whether they are Essentialism or Perennialism, the group must choose:

- The best example of Essentialism
- The best example of Perennialism

From these two, the group must choose one example and create and practise a two-minute role-play, either of the Essentialism example or of the Perennialism example.

Your teacher educator will bring the class together and each group will present their role-play. The class must decide whether each role-play is Essentialism or Perennialism.

Table 7.2. Teacher-centred educational theories

Example #1 of teacher-centred practice	Example #2 of teacher-centred practice
Essentialism or Perennialism?	**Essentialism or Perennialism?**

Student-Centred Approaches Expanded

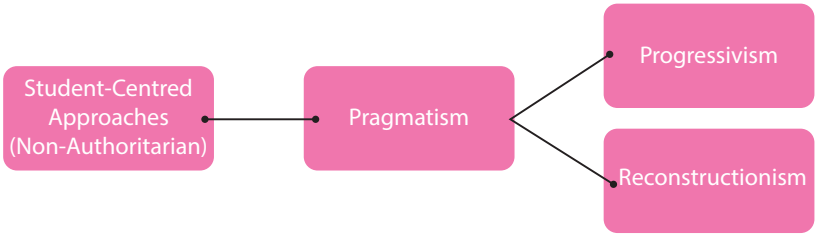


Figure 7.6. Student-centred approaches expanded

The Educational Philosophy that is student-centred, or non-authoritarian, is **Pragmatism.**

Pragmatism

Another name for Pragmatism is Experimentalism. This philosophy sees reality as "always changing and…dependent on what we observe and experience."[59] Values and knowledge, rather than being permanent and universal, are changeable dependent on individual experiences.

Because of the nature of change, schools should equip students with academics and problem-solving skills, and opportunities to build social relationships.

Through activities, problems, resolutions to the problems, and a network of social relationships, students will grow by learning more effective, meaningful and satisfying ways to deal with a changing reality and to direct the course of their own lives.[60]

In Pragmatism, teachers and students actively participate in learning and trial new ways of doing things. Content and activities are designed around student interests and needs and are often present as projects. Curriculum is integrated rather than segregated.[61]

59 Tan, 2006, p. 26.
60 Gutek, 2004, in Tan, 2006, p. 26.
61 Tan, 2006.

Pragmatic teachers empower their students with knowledge, skills and dispositions. They are facilitators of learning rather than the source of knowledge, organising the learning environment and guiding students as they apply their knowledge to solving relevant problems.[62]

From Student-centred approaches and the philosophy of Pragmatism come the educational theories of **Progressivism** and **Reconstructionism.**

Progressivism

Progressivism aims to prepare "students for active participation in a liberal democratic system."[63] They hold the belief that there are no universal truths and that knowledge and values depend on human experience. In a break from traditionalist views, Progressivists believed that children learn best when they are pursuing their own interests and they learn by doing.

Ideas and questions, which arise from the students themselves, need to be tested through experimentation.[64]

With the belief that people are basically good, teachers focus on learning experiences as a way of gaining knowledge. Active learning is supported through flexible teachers guiding individuals in their learning and problem-solving.

Two famous Progressivist educators were John Jacques Rousseau (1712–1778) and John Dewey (1859–1952). Rousseau, whose ideas were also known as 'Humanism', promoted education in a natural context, with children's interests guiding the curriculum. Dewey added that learning is more effective in the context of social interactions as students solve problems.

Rather than transmitters of knowledge, Progressivist teachers were seen as facilitators of learning. In the classroom, teachers set up and guide experiences, through questions and suggestions and students explore ideas and issues.

62 Tan, 2006.
63 Tan, 2006, p. 33.
64 Cohen, 1999.

Learning takes place in small groups, learning stations and authentic activities such as field trips, art experiences, guest speakers and projects where students can choose how and what they learn.[65]

Reconstructionism

Reconstructionism (or Social Reconstructionism) is an educational theory that emphasises examining long-term social issues, through education, as a way of achieving goals of social reform; creating a better social order and ultimately a better world. Curricula highlights issues of social reform, with the aim of producing problem-solvers and leaders. It aims to identify and correct social problems, such as racism, pollution and poverty and create a world government where people control institutions and resources.[66]

Schools are seen as going beyond academics to become social agencies, empowering student to solve both personal and social issues. "A reconstructionist programme of education critically examines controversial issues, cultivates a planning attitude in teachers and students, and enlists them in social, educational, political and economic change as means of total cultural renewal."[67]

Curriculum is multidisciplinary and interdisciplinary.

In the classroom, students are engaged in discussions about social or moral dilemmas to understand the implication of one's actions. Students decide on the aims for their learning, designing projects to address the dilemma.

Reconstructionist teachers' goals are to nurture students who want to solve global as well as personal issues to change society for the better.[68] Teachers provide guidance and further information through newspaper or online articles, guest speakers, videos or field trips. They also assist students to create action plans, which students research and then implement, analyse. Students present their findings in a variety of ways, including reports, slide presentations, posters, presentations, or webpages.[69]

65 Lynch, 2016c, 2017; Tan, 2006.
66 Tan, 2006, p.6.
67 Tan, 2006, p. 35.
68 Tan, 2006.
69 Lynch, 2016c.

Figure 7.7. Reconstructionism

The two educational theories of the student-centred approach are similar in some ways and different in other ways. This next activity requires you to consider the characteristics and commonalities of each of the student-centred theories of education:

- Progressivism
- Reconstructionism

You will have to conduct further research and discuss issues with others to complete this activity.

Learning activity 2. Compare student-centred educational theories

The purpose of this activity is to research and compare Progressivism and Reconstructionism.

For this learning activity, you will work in groups of six student teachers.

Three group members will research each of the following student-centred philosophies:

- Progressivism
- Reconstructionism

You can get information from your textbook notes, the Education Degree College e-library, or online.

You can also reason logically to determine some of the answers, based on existing information.

1. Research your educational theory's:
   - Key points
   - Purpose of education
   - Role of teacher
   - Role of students
   - Example lesson topics
   - Example teaching strategies
   - How learning would be assessed.

2. When you have found the information, fill it in under your educational theory's column in Table 7.3. Student-centred educational theories.
3. Share your information with the other three group members and fill in their information in the other column of Table 7.3. Student-centred educational theories.
4. Then, as a group of six, compare the two educational theories, considering what they have in common and how they are different.
5. Complete the Venn diagram, Figure 7.8.
6. Compare Table 7.3. Student-centred educational theories, to show the similarities and differences in the two educational theories. Your teacher educator will bring the class together to discuss this activity.

Table 7.3. Student-centred educational theories

	Progressivism	Reconstructionism
Philosophical approach	Student-centred	Student-centred
Key points		
Purpose of education		
Role of teacher		
Role of students		
Example lesson topics		
Example teaching strategies		
How learning would be assessed		

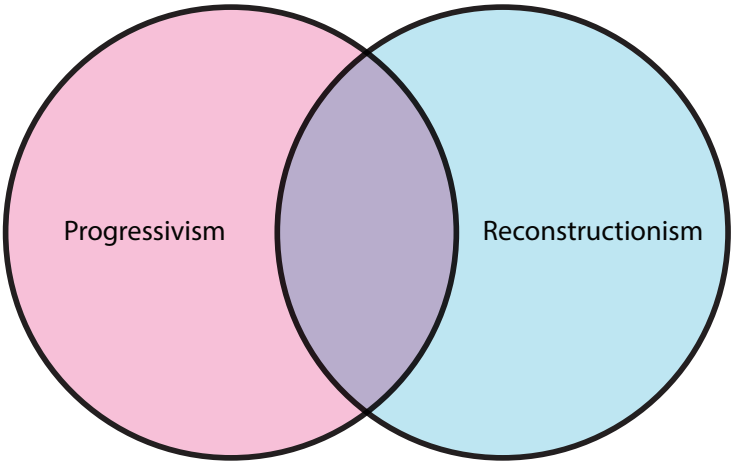


Figure 7.8. Comparing the two Educational Theories

Learning activity 3. Quick quiz

The purspose of this activity is to review learning about Educational Philosophy.

For this activity, you will work in pairs to complete the sentences, based on your understanding of the textbook. Your teacher educator will give each pair a quiz to complete and then tell you when to begin.

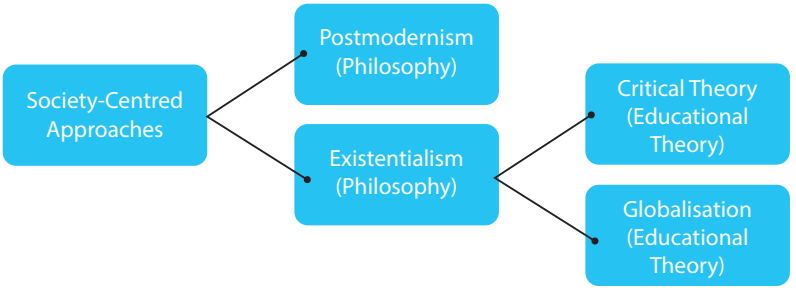


Figure 7.9. Society-centred approaches expanded

Society-centred approaches expanded

The Educational Philosophies that are society-centred are Postmodernism and Existentialism.

Postmodernism

Postmodernists reject the idea of universal truth, claiming that knowledge is constructed by people in power, who use that knowledge to oppress and exploit others. They believe that education in schools should empower and transform students, so that they "reject the dominant or master narratives in favour of a variety of narratives, develop their own identities, and transform society by emancipating the marginalised groups from oppression."[70]

Postmodern curriculum is inter-disciplinary, focusing on social issues and problems. Teachers not only teach but guide students' understanding of how curriculum content serves ideological and political interests. Begin with concrete information about students' personal history, identity and experience, curriculum then moves on to examine more abstract concepts of culture, history and politics.[71] "A variety of narratives should be used for the students to see the plurality of voices from those in power and those who are marginalised."[72] Students learn from multiple perspectives and are able to reflect on and reinterpret their identities and histories.

Existentialism

Existentialism is an educational philosophy that focuses on students choosing their own purpose in life (existence) and educational pathway, based on their character and beliefs. Truth and reality are not universal, but constructed by the individual. Freedom to determine what is true or false, right or wrong, beautiful or ugly rests with individual's free will. Individuality is valued alongside freedom as students are prepared for social adjustment, to create meaning and to see beyond their personal interests and goals.

In an existentialist classroom, helping students to understand themselves as individuals with unique ways of understanding and interacting with the world and to accept their thoughts, feelings and actions is given priority, with subject content relegated to a secondary focus. "Schools should provide a broad education with many options for students to explore, reflect on and articulate their convictions."[73]

70 Tan, 2006, p. 29.
71 Tan, 2006.
72 Tan, 2006, p. 30.
73 Tan, 2006, p. 27.

Students learn to self-direct their learning rather than following a set curriculum, as they look for meaning in life and determine what is true or false, right or wrong, beautiful or ugly. Humanities and the Arts are encouraged as they allow students to explore issues in their lives and express themselves in creative ways.

The Existential teacher respects student agency and is open-minded and reflective. While they offer information they deem important, but students have a large choice of what and how they learn. Teachers act as facilitators, helping students to find appropriate methods and resources to support their learning.[74]

Teachers and students engage in dialogue about 'real life' moral and philosophical issues and individual responses are encouraged. Assessment is authentic; students set their own criteria and produce creative assignments, often in the form of creative writing, paintings or a portfolio.

Figure 7.10. Existentialism

74 Lynch, 2016c.

From society-centred approaches and the philosophies of Postmodernism and Existentialism come the educational theories of Critical Theory and Globalisation.

Critical Theory

Critical Theory is a theory of education that looks at power relationships within institutions, organisations, and instruction, with a view to changing systems to overcome oppression and improving the human condition. A key idea is that wealthy, upper class people control schools and these schools marginalise lower class students.

Critical theorists seek to empower students against oppression by analysing the social and academic structure of schools in terms of power and from that analysis making changes towards more equitable education.

Critical theorists view curriculum as having both an overt, official form and also a covert, or 'hidden' curriculum, where ideas and beliefs that support dominant class values are promoted, without being spoken. This hidden curriculum further marginalises lower classes. Critical theorists suggest using unbiased textbooks and for teachers to encourage students to express their own beliefs and values, rather than what is popular at the time.[75]

Similar to Reconstructionism, curriculum in Critical Theory deals with social problems, such as poverty, violence, and hunger, and taking action on them. Teaching strategies and techniques include:

- inquiry;
- dialogue;
- taking multiple perspectives; and
- community-based learning.[76]

75 Lynch, 2016b.
76 Houston Community College, n.d.

Figure 7.11. Critical Theory

Globalisation

Globalisation promotes understanding, interacting and developing relationships with people around the world. This happens through the processes of:

- communication;
- economics;
- politics; and
- education.

Information is communicated globally through a variety of media, including books, email, the internet, television, and other technology.

Example of familiarity with technology:

- Teachers in developed countries, with affordable access to technology, are expected to incorporate technology into every aspect of their teaching.
- Teachers in areas of other countries do not have the same expectations placed upon them. Technology, at the moment, is not within the scope of many of them.

Regardless of expectations or where they live, all students will, at some point, come into contact with technology. Because of this, dialogue on a global level is important. Teachers from all countries should encourage their students to be aware of advances in technology.[77]

Figure 7.12. Globalisation

Learning activity 4. Apply Critical Theory and Globalisation to the classroom

The purpose of this activity is to apply Critical theory and Globalisation to classroom practice.

For this learning activity, you will be divided into six groups: three for Critical Theory and three for Globalisation. Within both Critical Theory and Globalisation:

- One group will represent Kindergarten and Grade 1
- One group will represent Grades 2-4
- One group will represent Middle School: Grades 5 to 8.

77 Lynch, 2016b.

Each group will read the article "Climate Change Matters to Myanmar" in Box 7.2, and discuss what it is saying. Then they will brainstorm how they could use the article and its message:

- From their educational theory perspective (Critical Theory or Globalisation)
- At the year levels they represent (Kindergarten and Grade 1; Grades 2 to 4; or Middle School) to teach students about climate change.

Groups will then write their ideas on a sheet of poster paper. They can be in the form of an activity, as dot points, illustrations, etc. When posters are complete, groups will hang them on the wall. Your teacher educator will bring the class together to do a gallery walk. Each group will present their ideas.

Box 7.2. Climate change matters to Myanmar

U Ohn Win and Peter Batchelor

Myanmar Times

20 September 2019

Retrieved from https://www.mmtimes.com/news/climate-change-matters-myanmar.html

Myanmar faces many development challenges, but climate change presents the greatest of all. While the effects of climate change are felt in many ways, it is the threat to the country's future development that makes it so significant.

Myanmar's location and physical diversity means climate change takes many forms – in the dry zone, temperatures are increasing, and droughts are becoming more prevalent, while the coastal zone remains at constant risk of intensifying cyclones. Extreme flooding in the current wet season has seen over 190,000 people seek emergency shelter, with the damage to homes, schools and farms compounding the impact of last year's floods, and those from the year before.

More intense and frequent climatic events would greatly affect Myanmar, which is already one of the most vulnerable countries to extreme weather events. With memories of 2008's catastrophic Cyclone Nargis still vivid, the development gains that have been made in recent years remain highly susceptible to such risks.

The need to prepare for, respond to, and recover from, these natural disasters costs time and resources that could otherwise be spent on more pressing development priorities. There is no question that Myanmar must work with the international community to slow down and reverse global warming, while also building its resilience.

The government of Myanmar recognises that a clean environment, with healthy and functioning ecosystems, is the foundation upon which the country's social, cultural and economic development must be sustained. It has therefore committed to a national development framework that incorporates the notion of environmental sustainability for future generations by systematically embedding environmental and climate considerations into all future policies and projects.

The Myanmar Sustainable Development Plan (2018-2030) has committed Myanmar to a climate-sensitive development pathway and is complemented by the new National Environmental Policy and Myanmar Climate Change Policy, which were both recently launched by President U Win Myint. Both policies have benefitted from technical support from international partners like the United Nations Development Programme (UNDP) and extensive public consultations across Myanmar.

Together, these new policies set a vision for Myanmar as a climate-resilient, low-carbon society that is sustainable, prosperous and inclusive for the well-being of present and future generations. They are also the basis for Myanmar's implementation of the Paris Agreement to help keep global temperature increases to 1.5 degrees Celsius above pre-industrial levels.

Myanmar's ambitious approach to reducing greenhouse gas emissions includes reversing the decline of the country's forests. For example, the government has committed US$500 million (K766.6 billion) over 10 years for the Myanmar Rehabilitation and Reforestation Programme. Nature-based solutions, such as protecting coastal mangrove forests, can help mitigate climate change by storing huge amounts of carbon dioxide while also building natural barriers to reduce the impact of cyclones and storm surges.

The energy sector contributes two-thirds of greenhouse gas emissions in the Asia-Pacific region. Therefore, energy development in Myanmar must be climate smart and cannot ignore the sector's changing economic outlook. The government is committed to increasing the use of renewable energy while providing electricity to the millions of people who still lack reliable access.

New forms of renewable energy – including solar and biomass – will contribute nine percent of the country's energy mix by 2030. The distribution of fuel-efficient cooking stoves is being rapidly expanded to 5 million households. This will improve people's health while helping avoid deforestation by people gathering firewood.

Myanmar's private sector has a vital role to play in responding to climate change, but this also presents great opportunities as the economy expands. Green technology and innovation will help us accelerate toward a low-carbon economy. The government will continue promoting green businesses and aligning incentives for the private sector to introduce low-carbon technology.

Myanmar will be part of the climate change solution at the UN Climate Action Summit being held in New York on Monday. While the government continues its efforts, it does need the support of partners like the UNDP.

Technological know-how is needed to support actions on the ground, such as in the form of affordable renewable energy.

Finance is needed to support investments in human resources and innovative solutions. Training and technical assistance is needed to strengthen the capacities of all players – government, communities and the private sector.

The UN Climate Action Summit will be a critical forum for global leaders to come together to present strong new actions to reverse climate change. It is also an opportunity to recognise the valuable efforts of developing countries like Myanmar, and to redouble support for countries pursuing sustainable, low-carbon development.

The world is in a desperate race against climate change. Strong and urgent action, both internationally and locally, is critical to protecting Myanmar's current and future development. We must all act together if we are to win this race to ensure a sustainable future for the world.

U Ohn Win is Union minister of Natural Resources and Environmental Conservation, and Peter Batchelor is UNDP's representative in Myanmar.

Eclecticism - A fourth approach to Educational Philosophy

While there are three main approaches to philosophy in education, there is a fourth approach.

It is called eclecticism. It is an approach, used by most teachers, that draws upon parts of a number of approaches, philosophies, and educational theories to help us to understand and implement teaching and learning.

The term, 'eclecticism' comes from the word 'elect', which means to choose and pick up.[78] An Eclectic approach involves choosing the best ideas from a number of different philosophies and combining them into an approach that suits the various needs of individual teachers and students.

It is a bit like filling a shopping bag with a variety of resources that you need to cook healthy and interesting meals for you and your family. An Eclectic teacher might draw on some of these ideas for one situation or student and other ideas for a different situation or different students.

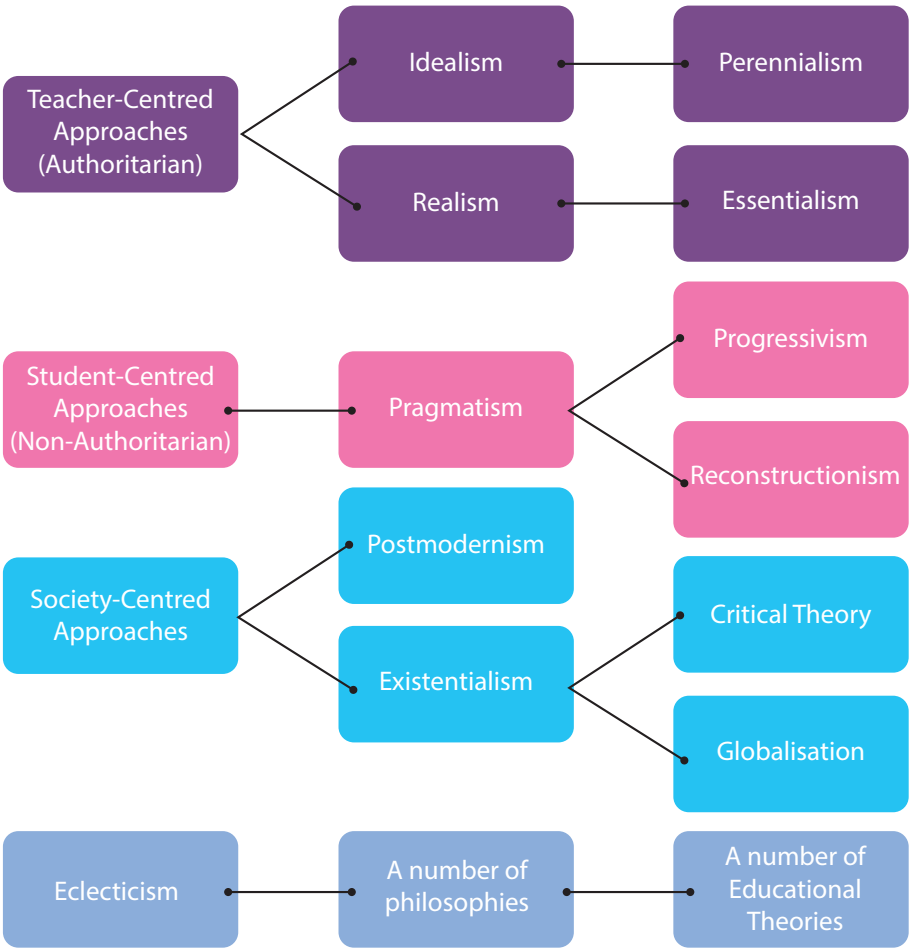


Figure 7.13. Eclecticism – a fourth approach to educational philosophy

78 Educational System, 2013.

Figure 7.14. Shopping bag

Learning activity 5. Fill an eclectic shopping bag

The purpose of this activity is to select ideas from each of the three approaches, the philosophies and the educational theories that would suit student teachers' individual philosophies.

For this activity, you will work individually and in groups of five student teachers. You will be given a shopping bag, and there will be idea cards available to complete this activity.

Begin by critically reflecting on each of three approaches, five philosophies and six educational theories you have learnt about in this lesson:

- Teacher-centred approach:
  - Philosophies: Idealism and Realism
    - Educational Theories: Perennialism and Essentialism

- Student-centred approach
  - Philosophy: Pragmatism
    - Educational Theories: Progressivism and Reconstructionism

- Society-centred approach
  - Philosophies: Postmodernism and Existentialism
    - Educational Theories: Critical Theory and Globalisation

Consider and choose ideas that you agree with and decide how you could use that idea in your teaching practice. Write each idea and how you could use it on an Idea Card and place the card in your shopping bag.

When you have filled your shopping bag with idea cards, get together in your group of five student teachers to 'unpack' each shopping bag, sharing the ideas that you chose with your group.

Discuss:

- Whether overall, your group preferred teacher-centred, student-centred, or society-centred approaches
- Which of the five philosophies was the most popular? Which was the least popular?
- Which ideas from the five philosophies were chosen more frequently?
- What were the five best ideas for how those ideas could be used in the classroom?

You will then use the drawing materials to decorate the outside of your shopping bag, to demonstrate with images, words and colour your eclectic philosophy. When you finish, each group will display their shopping bags on their table.

Your teacher educator will bring the class together and each group will present their shopping bags to the class, along with their responses to each of the above questions.

Review questions

1. What is an Educational Philosophy?
2. What are three approaches to Educational Philosophy?
3. Why is it important for teachers to have a philosophy of education?
4. What is the difference between teacher-centred, student-centred, and society-centred approaches?
5. What is Eclecticism and how does it apply to teaching?

7.2. Personal Teaching Philosophy

7.2.1. Developing one's teaching philosophy

This lesson comprises four periods.

Expected learning outcome

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

- Write a personal teaching philosophy.

Review of teaching philosophy

In Year 1, you developed a presentation about your teaching philosophy, based on the three main approaches to educational philosophy. The key questions you addressed were:

- What do I believe is worthwhile teaching? (e.g., skills, attitudes, knowledge)
- Whom would I teach?
- How would I teach?

In Year 2, we are taking this further, having examined more specifically a variety of approaches to educational philosophies and educational theories, and adding Eclecticism to the three main approaches.

In this lesson, you will participate in a number of activities to help you formulate your personal philosophy of teaching, which is an assessable activity for Year 2 Educational Studies.

We will begin by looking at metaphors of teaching.

Metaphors of teaching

Metaphor is a common, everyday technique for talking about objects or events in terms appropriate to other objects or events. Rather than confusing the issue, presenting facts of one sort as if they belong to another group can develop richer and deeper understandings of the world and our place in it. Metaphors of teaching have been used for many years as a route for teachers and preservice teachers to explore their philosophies and approaches to pedagogy.[79]

Examples of metaphors[80] in English include:

- My brother was boiling mad. (This means he was very angry)
- The assignment was a breeze. (This means that the assignment was easy).
- It is going to be clear skies from now on. (This means that there will be no obstacles in the future).
- Her voice is music to his ears. (This means that her voice makes him feel happy)
- Laughter is the best medicine. (This means that laughter is the best way to heal problems).
- His words are pearls of wisdom. (This means that what he says is very wise).

Examples of metaphors in Myanmar include:

- Hsin thay ko sate thayay hnint phone (ဆင်သေကို ဆိတ်ရေနှင့်ဖုံး): Hiding the elephant carcass under the goat-skin. (This means that someone is covering up a mistake with an excuse)
- Ko nga chin, ko chin (ကိုယ့် ငါးချဉ် ကိုယ်ချဉ်): Home-made sour fish tastes better. (This means that we should not criticise others while not recognising our own faults).
- Hsin phyu taw hme, kyan sote (ဆင်ဖြူတော်မှီ ကြံစုပ်): He who stays with the elephant will eat the elephant's food. (This means to be cautious not to let people use you).
- Myat hnar thi nga pi ma wal ya (မျက်နှာသီ ငပိမဝယ်ရ): Don't buy fish paste from your friend. (This means keep your friends separate from people with whom you do business.

79 Sorin, 2008, p. 67.
80 Literary Devices Editors, 2013.

- A sate pin yay laung (အဆိပ်ပင်ရေလောင်း): Beware of watering a poisonous plant. (This means be careful not to ignore potential danger).[81]

Learning activity 1. Deconstruct a Myanmar metaphor

The purpose of this activity is to deconstruct metaphors and consolidate the meaning of 'metaphor'. For this activity, you will work in groups of four student teachers. Brainstorm metaphors you have heard. From your brainstorm, choose one metaphor and create a poster of the metaphor.

Your poster can include:

- Drawings
- Cut out images
- Words
- Symbols.

Your poster should demonstrate the metaphor and include an explanation of how the meaning applies to a life situation. Groups will display their posters on the classroom walls and the class will do a gallery walk to each poster, which the group who created it will explain.

Teaching metaphors

In a teaching metaphor, the teacher, or the act of teaching, are described in terms of something else, such as tending a garden or baking a cake. This is then elaborated to make the connections with teachers and teaching. Here are some examples of teaching metaphors:

Teaching is like being a chef. Some teachers choose to follow the recipe word for word, other times they might add something new or leave an ingredient out. This comes with experience, reflection, and feedback. Teachers need to remember to get in there and taste what they are cooking!

81 Htwe, 2019.

Teaching is like being a gardener. Sometimes I stand in front of [the garden], holding my thumb up like a regular artist – assessing it as a work of art.

Teaching is like being a coffee addict. People drift in and out (other professionals… parents… colleagues. There are different types of coffee, tea, hot chocolates, milkshakes, iced tea, iced coffee and iced chocolates (blends of different flavours and strengths and cultures – representing curriculum policies, strategies, learning styles, diversity, learning environment). The coffee shop manager is the principal. Staff (teachers) – support the manager.[82]

Learning activity 2. Think as a teacher

The purpose of this activity is to identify what is important to you as a teacher. The Centre for Teaching Excellence[83] adapted this activity as a way of assisting student teachers to begin to develop their teaching philosophies. For this activity, you will work individually in the context of the whole class:

1. On a sheet of paper, draw a picture of yourself working as a teacher. From the list of metaphors (below), what metaphor for teaching does your picture suggest?
2. Ask yourself where do you fit and why? If you don't fit anywhere, come up with your own metaphor and explain it briefly.
3. Then consider why your metaphor does or does not fit with those listed. What do you believe or value instead? This should help emphasise what is important to you as a teacher and reveal why you do what you do.

Metaphors:

- **Lamplighters** - They attempt to illuminate the minds of their learners.
- **Gardeners** - Their goal is to cultivate the mind by nourishing, enhancing the climate, removing the weeds and other impediments, and then standing back and allowing growth to occur.
- **Muscle builders** - They exercise and strengthen flabby minds so learners can face the heavyweight learning tasks of the future.

82 Sorin, 2008, pp. 74–75.
83 Apps, 1991, pp. 23-24; Centre for Teaching Excellence, n.d.

- **Bucket fillers** - They pour information into empty containers with the assumption that a filled bucket is a good bucket. In other words, a head filled with information makes an educated person.
- **Challengers** - They question learners' assumptions, helping them see subject matter in fresh ways and develop critical thinking skills.
- **Travel guides** - They assist people along the path of learning.
- **Factory supervisors** - They supervise the learning process, making certain that sufficient inputs are present and that the outputs are consistent with the inputs.
- **Artists** - For them teaching has no prescriptions and the ends are not clear at the beginning of the process. The entire activity is an aesthetic experience.
- **Applied scientists** - They apply research findings to teaching problems and see scientific research as the basis for teaching.
- **Craftspeople** - They use various teaching skills and are able to analyse teaching situations, apply scientific findings when applicable, and incorporate an artistic dimension into teaching.

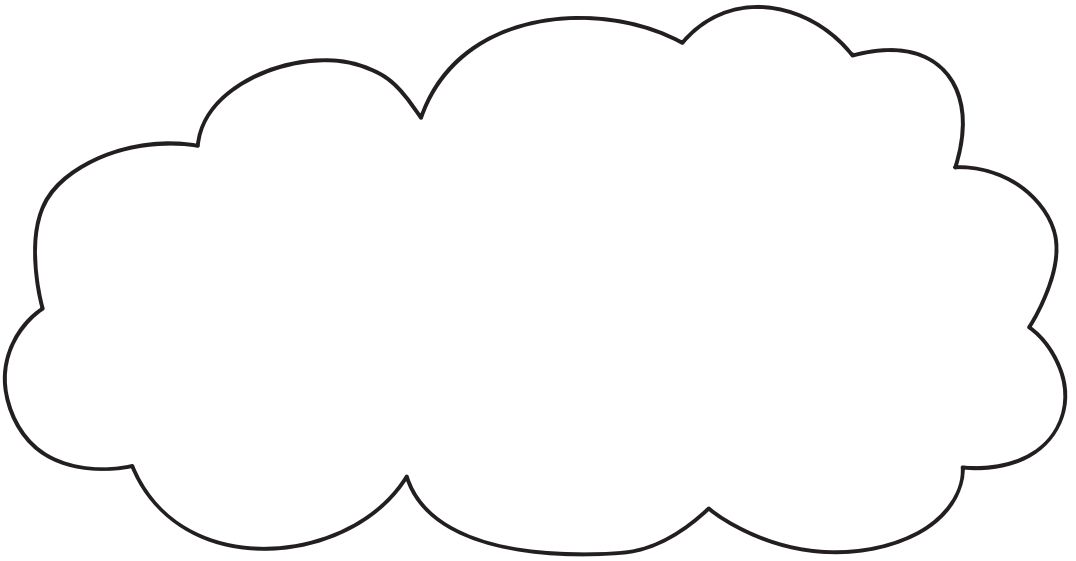


Figure 7.15. Metaphor cloud

During this period and the next, you will be participating in activities to help you determine your personal philosophy of teaching, as you prepare for your formative task; writing a personal philosophy of teaching.

Learning activity 3. Beliefs about teaching and learning

The purpose of this activity is to help you create your teaching philosophy. The Centre for Teaching Excellence at the University of Waterloo in Canada adapted this activity,[84] and it has been further adapted for Myanmar Year 2 student teachers. In Table 7.4, Beliefs about teaching and learning, you will respond to the following questions in the appropriately numbered boxes, to develop a comprehensive record of your beliefs about teaching and learning. From the information you record, you should gain a better understanding of yourself as a teacher.

Key themes should emerge to help you create your teaching philosophy:

1. Why do you believe your students want to learn? Describe them as learners in any way you can (words, images, colours).
2. What are your aims for teaching? What do you hope to accomplish when you teach? What do your aims say about you as a teacher?
3. Create a list in response to the following prompt: "When I teach, I:" Once you've created the list, reflect on why you do what you do.
4. What do you believe about learning? How would you describe it? What are your sources for your beliefs?

Table 7.4. Beliefs about teaching and learning

1. Students as learners	2. Aims for teaching
3. When I teach, I…	4. Beliefs about learning

84 Apps, 1991, pp. 23-24; Centre for Teaching Excellence, n.d.

When you have finished, your teacher educator will bring the class together to discuss this activity.

Learning activity 4. Self-reflective interview

The purpose of this activity is to further support you to develop your personal teaching philosophy. The Centre for Teaching Excellence at the University of Waterloo in Canada adapted this activity,[85] and it has been further adapted for Myanmar Year 2 student teachers.

Imagine that you have been teaching for 10 years. A reporter from a teaching journal asks to interview you for a special edition on the qualities of effective teachers. Think about how you would respond to the following questions:

- What is a "personal best" achievement for you as a teacher during the past year?
- Who is the best teacher you have ever known? What personal qualities made this person a great teacher?
- If you could give others a box that contained your best quality as a teacher, what would be in that box?
- What would you like your students to say about you at the end of the school year?
- If you wrote a book about teaching, what would the title be?

Then, work in pairs to interview each other.

Give your partner your textbook so they can write your answers in Table 7.5. Self-reflective interview.

Take turns interviewing each other and writing the answers. Then, return the textbooks to their owners and each person should reflect on the answers they gave to their interview. Discuss with your partner what each interview says about your respective teaching philosophies.

Your teacher educator will bring the class together to discuss this activity.

85 Grasha, A. 1996, p.55.

Table 7.5. Self-reflective interview

Question	Self-reflective answer
1. What is a "personal best" achievement for you as a teacher during the past year	
2. Who is the best teacher you have ever known? What personal qualities made this person a great teacher?	
3. If you could give others a box that contained your best quality as a teacher, what would be in that box?	
4. What would you like your students to say about you at the end of the school year?	
5. If you wrote a book about teaching, what would the title be?	

Developing your personal teaching philosophy

"It is important to identify your own philosophy of education in order to understand your own system of values and beliefs so that you are easily able to describe your teaching style to potential employers."[86]

86 Lynch, 2017

In Year 1, you began developing your personal teaching philosophy by considering:

- Your beliefs about what is worthwhile teaching, regarding skills, attitudes, and knowledge
- Whom you would ideally like to teach
- Methods and strategies you would use in your teaching.

You also considered characteristics of a good and effective teacher. You did further research into one of the three main approaches to educational philosophy, including identifying and describing two philosophers, educators or psychologists who use the chosen approach.

In Year 2, we are taking these ideas forward. This year you are asked to write your personal teaching philosophy. This will be based on:

- Your Year 1 philosophy presentation and critical reflections about it
- Your further understanding of the four approaches to educational philosophy and the philosophies and educational theories classified under each approach.
- Your thoughts and memories of good teachers and teaching.
- Your reflections from the activities you have completed in this unit.

We will now examine examples of personal teaching philosophies to further inform your development of your own personal teaching philosophy. Here are six examples:

Example 1:

- My philosophy of education is that all children are unique and must have a stimulating educational environment where they can grow physically, mentally, emotionally, and socially. It is my desire to create this type of atmosphere where students can meet their full potential. I will provide a safe environment where students are invited to share their ideas and take risks.
- I believe that there are five essential elements that are conducive to learning:

    1. The teacher's role is to act as a guide.
    2. Students must have access to hands-on activities.
    3. Students should be able to have choices and let their curiosity direct their learning.

4. Students need the opportunity to practice skills in a safe environment.
5. Technology must be incorporated into the school day.[87]

Example 2:

- I believe that all children are unique and have something special that they can bring to their own education. I will assist my students to express themselves and accept themselves for who they are, as well embrace the differences of others.
- Every classroom has its own unique community; my role as the teacher will be to assist each child in developing their own potential and learning styles. I will present a curriculum that will incorporate each different learning style, as well as make the content relevant to the students' lives. I will incorporate hands-on learning, cooperative learning, projects, themes, and individual work that engage and activate students learning.[88]

Example 3:

- I believe that a teacher is morally obligated to enter the classroom with only the highest of expectations for each and every one of her students. Thus, the teacher maximises the positive benefits that naturally come along with any self-fulfilling prophecy. With dedication, perseverance, and hard work, her students will rise to the occasion.
- I aim to bring an open mind, a positive attitude, and high expectations to the classroom each day. I believe that I owe it to my students, as well as the community, to bring consistency, diligence, and warmth to my job in the hope that I can ultimately inspire and encourage such traits in the children as well.[89]

Example 4:

- I believe that a classroom should be a safe, caring community where children are free to speak their mind and blossom and grow. I will use strategies to ensure our classroom community will flourish, like the morning meeting, positive vs. negative discipline, classroom jobs, and problem-solving skills.

87 Cox, 2019.
88 Cox, 2019.
89 Cox, 2019.

- Teaching is a process of learning from your students, colleagues, parents, and the community. This is a lifelong process where you learn new strategies, new ideas, and new philosophies. Over time, my educational philosophy may change, and that's okay. That just means that I have grown and learnt new things.[90]

Remember: Teaching philosophies develop and change over the course of a career. In this Teacher Education course, you will revisit your teaching philosophy every year. You might notice how it has changed as you learn more things and have more experiences in schools and classrooms.

Learning activity 5. Deconstruct a teaching philosophy

The purpose of this activity is to examine examples of personal philosophies of teaching philosophies. For this activity, you will work in four groups. Your teacher educator will assign each group one of the four examples of personal teaching philosophies to deconstruct.

Within each group, divide in half so that two smaller groups are working together to begin this activity. In your smaller group, read and discuss your assigned philosophy, focusing on what it says and what may be missing, in terms of:

- The aim of education
- Who should be educated
- How students learn
- What should be taught
- Differentiation according to students' backgrounds, interests, and abilities
- The role of the teacher
- How the teacher should teach
- Role of the student.

Record what is written for each of the above points in Table 7.6, and then decide whether the information is:

- adequate;
- needing more information; or
- missing.

90 Cox, 2019.

Write your decision in the column, 'Adequate, Needs More, or Missing' in Table 7.6.

You will then share your ideas with the other half of your group, who have also deconstructed the same philosophy. Come to a consensus about whether the information is adequate, needs more information or is missing altogether.

Then, as a full group, write or rewrite sections of your assigned personal teaching philosophy.

Your teacher educator will bring the class together to discuss these examples. Each group will report on their decisions and rewrites.

Table 7.6. Teaching philosophies checklist

Example #____ Criteria	What is written?	Adequate, Needs More, or Missing?	Rewrite
Aim of education			
Who should be educated?			
How students learn			
What should be taught			
Differentiation			

Example #____ Criteria	What is written?	Adequate, Needs More, or Missing?	Rewrite
Role of the teacher			
How the teacher should teach?			
Role of the student			

Table 7.7. Planning a personal teaching philosophy

Criteria	My Ideas
Aim of education	
Who should be educated?	
How students learn	
What should be taught	

Criteria	My Ideas
Differentiation	
Role of the teacher	
How the teacher should teach?	
Role of the student	

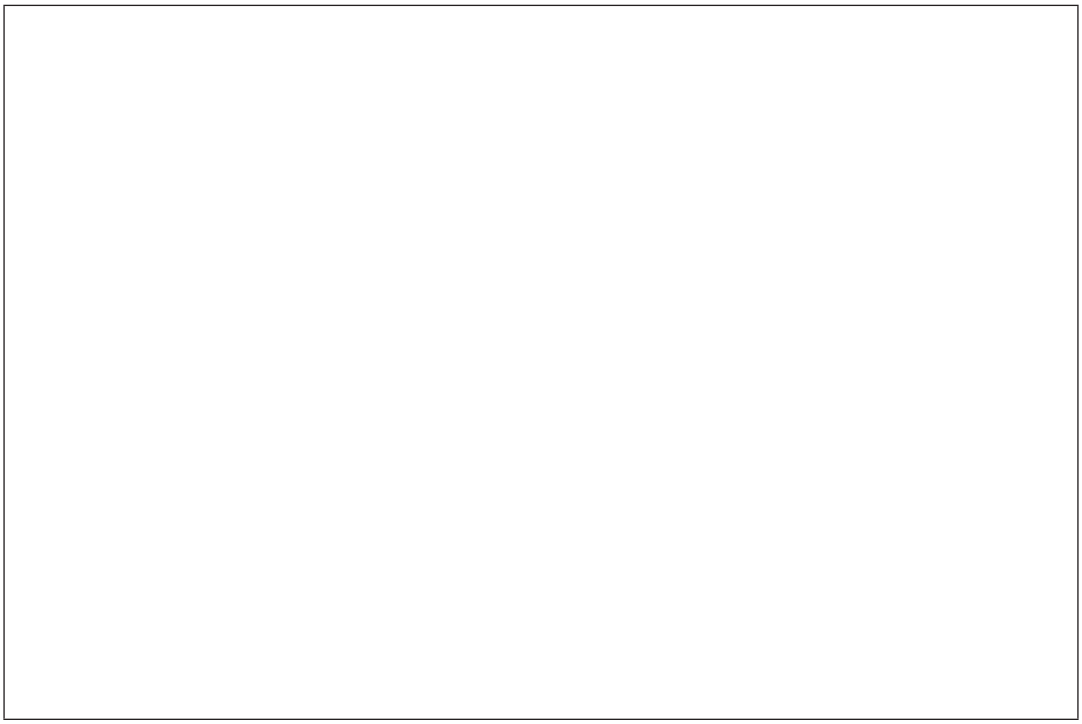
Learning activity 6. Write a personal philosophy of teaching

The purpose of this activity is to complete personal teaching philosophy assessment task. During this period, you will work individually to write your personal teaching philosophy. You can refer to:

- Your Year 1 philosophy presentation and critical reflections about it
- Your Year 2 Student Teacher Textbook, which includes:
  - The four approaches to educational philosophy and the philosophies and educational theories classified under each approach.
  - Table 7.7. Planning a personal teaching philosophy.

You can begin by brainstorming and writing your draft in Box 7.3. Your teacher educator will offer paper for your final copies. Your philosophy should be 250-300 words. You will have 40 minutes to complete this assessment task. When you have completed your personal philosophy of teaching, submit it to your teacher educator for assessment.

Box 7.3. Draft philosophy of teaching



Review questions

1. Provide three examples of metaphors not mentioned in the Student Teacher Textbook.
2. Why is developing a teaching philosophy important?

Unit Summary

Key messages

- The three approaches to Philosophy of Education studied in Year 2 are:
  - Teacher-centred approaches say that knowledge is transferred from one generation of teachers to the next.
  - Student-centred approaches focus on individual students achieving their potential, and how teaching can best support this.
  - Society-centred approaches go beyond individuals to focusing on educating groups of people.
- Each approach has philosophies and educational theories associated with it.
  - Teacher-centred approaches include the philosophies of Idealism and Realism and the educational theories of Perennialism and Essentialism.
  - Student-centred approaches include the philosophy of Pragmatism and the educational theories of Progressivism and Reconstructionism
  - Society-centred approaches include the philosophies of Postmodernism and Existentialism and the educational theories of Critical Theory and Globalisation.
- A fourth approach is Eclecticism. It is an approach that draws upon the best ideas from other approaches to develop a philosophy that suits individual teacher's beliefs.
- When developing a personal philosophy of teaching, considerations include:
  - The aim of education
  - Who should be educated
  - How students learn
  - What should be taught
  - Differentiation according to students' backgrounds, interests and abilities
  - The role of the teacher
  - How the teacher should teach
  - Role of the student.

Unit reflection

- What are the four main approaches to Educational Philosophy?
- What is Eclecticism?
- Why do many teachers take an Eclectic approach?
- What are the main philosophies of education? How are they different?
- What is a metaphor of teaching?
- Why is Philosophy of Education important?

Further reading

Information about an anti-bullying lesson for the early school years can be found in the Education Degree College e-library.

Unit 8

Assessment

This unit focuses on developing understanding of:

- assessment approaches, principles, tools, and instruments; and
- educational assessment, data, and statistics.

Expected learning outcomes

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

- Outline the purpose and timing of diagnostic, formative and summative assessment;
- Explain the role of teacher observation and questioning and peer and self-assessment in classroom-level assessment;
- Develop simple assessment instruments;
- Write examination questions across a range of types;
- Outline the principles of high-quality assessment design;
- Describe the characteristics of authentic assessment;
- Outline the steps in planning for authentic tasks in the context of a unit of work;
- Explain the principle of constructive alignment;
- Outline the four pillars of basic education assessment;
- Discuss the types of tasks that are appropriate for assessing 21st century skills;
- Explain the importance of using a variety of assessment tools;
- Outline the assessment principles reflected in the use of rubrics;
- Name the elements of an assessment rubric;
- Explain the steps in developing an assessment rubric;

- Write criteria-standards descriptors for an assessment rubric;
- Discuss the difference between qualitative and quantitative assessment data;
- Discuss different ways that teachers use assessment data;
- Define validity in relation to educational assessment;
- Identify the difference between content validity, construct validity and concurrent validity;
- Define reliability in relation to educational assessment;
- Understand the difference between validity and reliability;
- Identify issues of fairness in relation to assessment;
- Explain the importance of objectivity in assessment;
- Explain the difference between restricted response (close-ended) and constructed response (open-ended) questions;
- Describe different types of restricted response questions and why teachers might choose to use them;
- Discuss when constructed response questions are appropriate to use;
- Identify strategies teachers can use to make constructed response questions fair and more objective;
- Discuss how teachers can identify the skills and knowledge that they need to include in a test;
- Discuss why using different types of questions in a test can enable students to show what they know and can do;
- Discuss the purpose of a table of specifications and identify the steps used to design a table of specifications for a test;
- Identify test questions with different levels of difficulty;
- Work as a team to create a test;
- Identify how difficult test questions are by analysing student responses;
- Discuss how teachers use test data to plan for student learning and to report learning progress; and
- Identify patterns of reliability and validity from assessment data.

Competencies gained

A4.1 Demonstrate understanding of the structure, content and expected learning outcomes of the basic education curriculum

B2.1 Demonstrate capacity to monitor and assess student learning

B2.2 Demonstrate capacity to keep detailed assessment records and use the assessment information to guide students' learning progress

Key terms

Authentic assessment, assessment as learning, assessment for learning, assessment of learning, constructive alignment, criteria, diagnostic assessment, exemplars of student work, formal assessment, formative assessment, informal assessment, moderation processes, performance-based assessment tasks, reliable, standards, standards descriptors, student profile, summative assessment, unit-level learning outcomes, valid

8.1. Developing Understanding of Assessment

In this sub-unit, you will develop deeper understanding of diagnostic, formative and summative assessment approaches. You will review principles of assessment, as outlined in the *National Assessment Policy for Basic Education* and the international literature.

There will be a focus on authentic performance-based tasks – their characteristics, alignment with other elements in a unit of work, and appropriateness in assessing 21st century skills.

You will explore the four pillars of basic education assessment: classroom-level assessment, school-based assessment, school completion, and sample-based assessment. A variety of assessment tools will be presented, relative to the revised levels of Bloom's Taxonomy. Finally, you will be presented with a series of steps to support you to develop a rubric.

8.1.1. Assessment approaches

Expected learning outcomes

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

- Outline the purpose and timing of diagnostic, formative and summative assessment;
- Explain the role of teacher observation and questioning and peer and self-assessment in classroom-level assessment;
- Develop simple assessment instruments; and
- Write examination questions across a range of types.

Definitions and broad approaches to assessment

In any classroom, teachers need to know how well their students are learning, whether they have successfully achieved the learning outcomes, and where further help is needed. Teachers need to provide feedback to students about their learning and support students in assessing and reflecting on their own learning. Further, teachers need to report to parents on students' progress and achievement of learning outcomes.

In Myanmar's new *National Assessment Policy for Basic Education*, assessment is defined as … an ongoing process for providing evidence to support decisions regarding improvements in student learning. It involves:

- making expectations explicit and public;
- setting appropriate criteria and high standards for learning quality;
- systematically gathering, analysing, and interpreting evidence to determine how well performance matches those expectations and standards; and
- using the resulting information to document, explain, and improve student performance.

While the key focus of assessment is on improving student learning, assessment can be classified according to three broad approaches, which:

- serve different purposes; and
- are undertaken at different points in the learning process.

The *National Assessment Policy for Basic Education* provides definitions for these broad approaches to assessment, as follows:

Diagnostic assessment provides teachers with information about students' prior knowledge and misconceptions before the beginning of a learning activity. It also provides a baseline for understanding how much learning has taken place after the learning activity is completed.

Formative assessment involves teachers using a wide variety of strategies, such as observation and questioning, to identify on-going difficulties in students' learning and respond to their individual needs in a timely manner. It also involves students

being constant reviewers and self-assessors of their work. Formative assessment usually occurs throughout the teaching and learning process to clarify and support students' knowledge, understanding and ability to apply their learning to an array of tasks.

Summative assessment refers to strategies designed to confirm what students know at the end of a stage of learning and whether or not they have met the curriculum outcomes or goals of their individual learning achievement. It is designed to provide evidence of achievement to parents, other educators, students themselves, and outside groups (e.g., employers, other educational institutions).

Figure 8.1. Summative assessment provides evidence of achievement to parents

Learning activity 1. Unpacking key definitions relating to assessment approaches

The purpose of this activity is for you to develop deeper understanding of the differences between the broad approaches to assessment.

Read the definitions for diagnostic, formative and summative assessment. For each approach, identify its purpose and when it occurs in the teaching and learning process. Record your responses in Table 8.1.

Once completed, review the 'When does it occur' column. Reflect on how these approaches work together in a classroom. Draw a diagram to communicate your understanding.

Table 8.1. Broad assessment approaches

Approach	Purpose	When does it occur
Diagnostic assessment		
Formative assessment		
Summative assessment		

Diagnostic assessment

In Year 1, you learnt that diagnostic assessment is an essential but often overlooked element of the lesson planning process. Diagnostic assessment may be used to assess prior learning and misconceptions. Importantly, one addition to the Year 2 lesson plan template, is the element of ***prior knowledge.*** Prior knowledge can be ascertained through questioning, individual tasks (e.g., completing KWL charts, responding to initial writing prompts, reflecting in journals), pair and group work, quizzes, tests, and surveys.

Diagnostic assessment data can support the planning and design of differentiated strategies to support inclusion. In Unit 3, you looked at differentiation of teaching and learning, in response to assessment of students' ***readiness*** – that is, what the student already knows and can do, in relation to the new knowledge and skills to be learnt.

Diagnostic assessment usually takes place ***at the start*** of a school year, semester, term or teaching unit.[91] While there are standardised diagnostic tools and processes, which are implemented in education systems and subject areas, teachers typically decide:

- how to undertake diagnostic assessment most effectively;
- which students will be assessed (i.e., either individual students, small groups, or the whole class); and
- the timing and frequency of diagnostic assessment.

91 Ontario Ministry of Education, 2013.

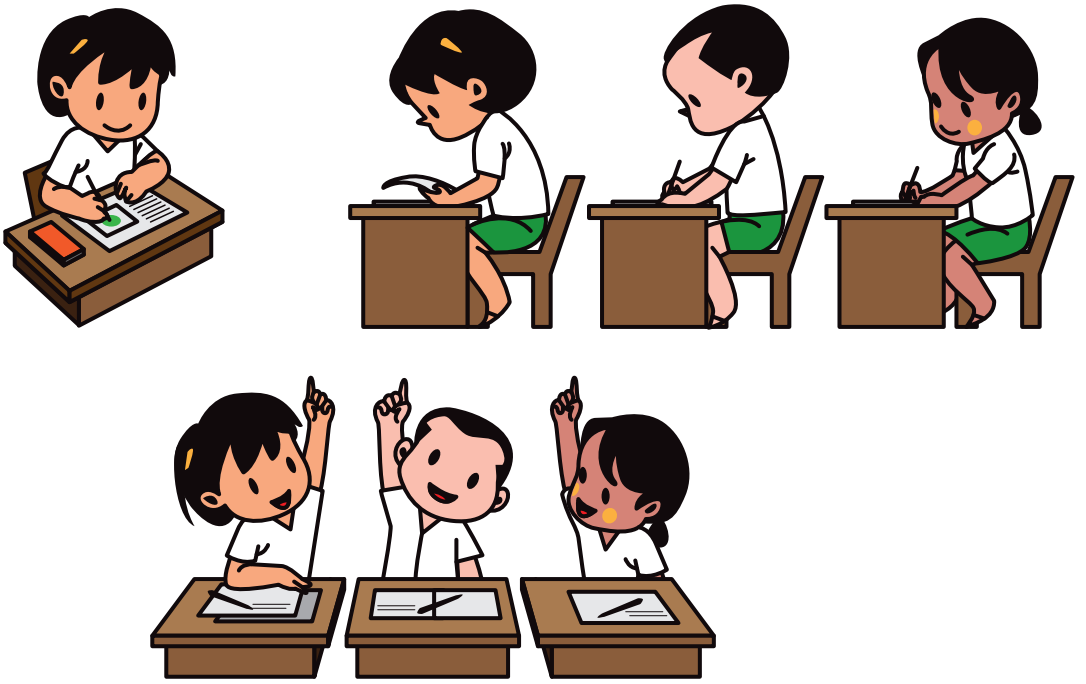


Figure 8.2. Diagnostic assessment: individual task, group questioning and class test

Formative assessment: Assessment *for* learning, and Assessment *as* learning

Teachers observe, interact and change with students on a constant basis throughout the school day. As such, there could be *no richer source of information about student learning, change and progress*. This formative and intuitive assessment is one of the most powerful influences in promoting students' educational growth and development.[92]

92 Griffin, P., n.d.

The purpose of formative assessment is to provide ongoing feedback that can be used by teachers and students to improve student learning (i.e., assessment *for* learning). Formative assessment occurs continuously in a classroom. Teachers:

- observe students participating in activities and tasks;
- question students and assess what types of questions students ask;
- listen to students' contributions in class or group discussions
- interact and support students in the process of learning; and
- review students' work.[93]

Teachers use information from formative assessment to adjust the pace and content of the lessons that they are teaching and respond to individual student needs.

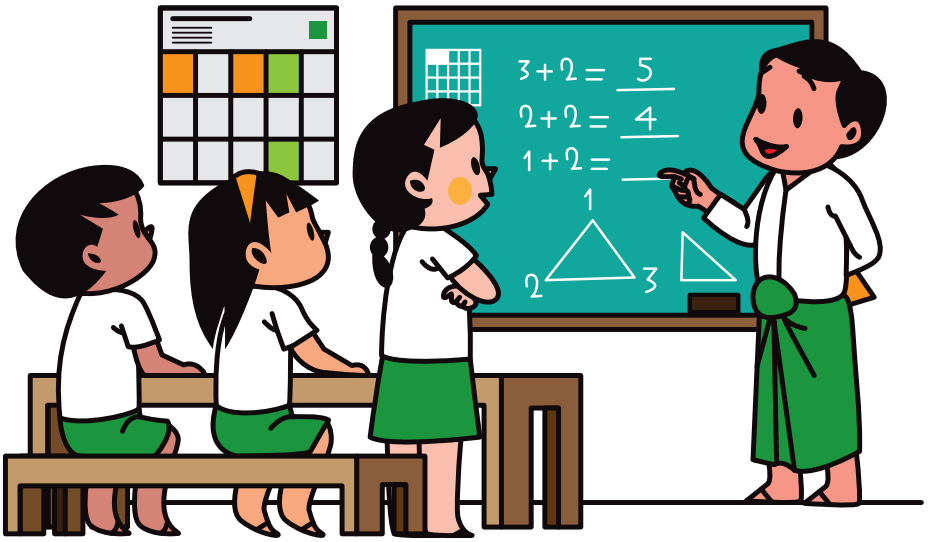


Figure 8.3. Formative assessment occurs continuously in the classroom

According to the *National Assessment Policy for Basic Education*, teachers will assess formatively through **classroom-level assessment.**

93 National Council for Curriculum & Assessment, 2015, p. 22.

This assessment largely comprises:

- teacher *observation and questioning*;
- students applying their learning, including in *student-centred tasks*, such as group work, discussion, debate, projects; and
- students reviewing and *assessing their own work*.

Formative assessment: Teacher questioning

Teacher questioning was explored in Unit 3. You learnt how questioning can develop and assess students' higher-order thinking. You framed questions which were:

- close-ended and open-ended in nature; and
- aligned with different cognitive processes, beginning with recall and working up to analysis, synthesis and creation, as per the revised cognitive taxonomy.

You learnt that wait-time is a valuable technique in terms of providing thinking time for students and, as such, enhancing the quality of student responses.

Formative assessment: Teacher observation

Teacher observations may be spontaneous (i.e., happening any time a teacher and student interact) or planned. Observations usually happen over a short period of time. Subsequent observations can allow for ***on-going monitoring***. Observations describe student learning in context and can support ***differentiated planning***.

Observations

Observations may focus on a student, group of students, or the whole class. For instance, a teacher may observe:

- how a student with learning difficulties undertakes a particular task;
- how students in a group communicate or collaborate with each other; or
- how a class of students transfer knowledge and skills across subject areas.

Figure 8.4. Teacher observing how a student communicates with peers

Teacher observations are more effective when they are focussed on set criteria. They may be recorded in a checklist (see sample ***assessment record*** in Table 8.2) or compiled as written notes (see sample ***student profile*** in Table 8.3).

Table 8.2. Sample assessment record[94]

Student name		B1	B2	B3	B4	B5	B6	B7	B8	B9	Comments
1	Ma Ni Ni	***	**	**	**	**	***	**	**	*	
2	Mg Htay Win										
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
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Observation: Area of assessment	
B1: Takes a leading role in group or class work	B6: Asks questions for clarification
B2: Works collaboratively and inclusively	B7: Using problem-solving strategies in the classroom environment
B3: Contributes ideas in group work	B8: Engaged in learning activity until completed
B4: Listens and pays attention to others	B9: Manages time on project work
B5: Follows teacher instructions	
Beyond expectations * Meeting expectations ** Below expectations ***	

94 Adapted from Myanmar Monastic Education Development Group (n.d.).

Figure 8.5. Teacher observation checklist to support focussed observation

Learning activity 2. Designing a teacher observation checklist

The purpose of this activity is to design a simple teacher observation checklist for assessment of skills for a prescribed Grade 6 lesson. You will design a simple teacher observation checklist based on the Grade 6 Life Skills lesson outlined in Box 8.1. Ensure that you target specific skills in your checklist. You can model your response on the checklist format in Table 8.2 or design your own format.

Box 8.1. Grade 6 Life Skills lesson details from Teacher Guide

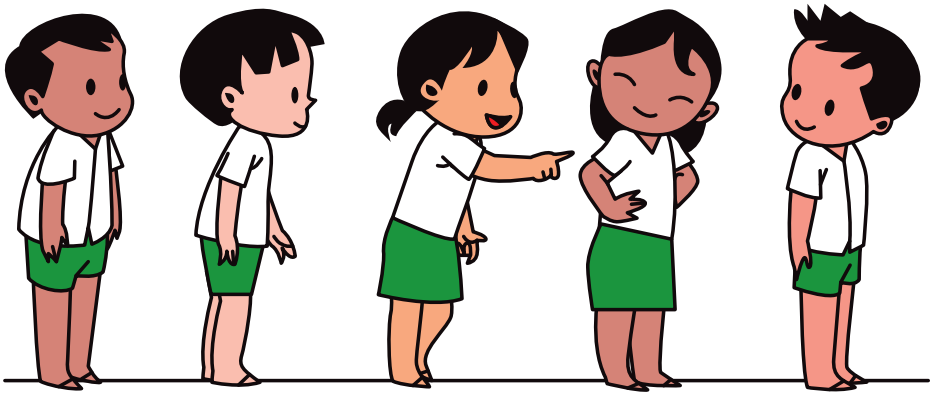
Grade 6 Life Skills

Lesson objective: To learn and apply the steps in problem solving

Class organisation: Students form groups

Teacher poses problem scenario for students:

> I will place an object in front of the first student of the line. When the game starts, the first student picks up the object and passes it to the members of the group from one end of the line to the other, without dropping the object. Each member of the group must participate. However, you must not touch the object with your hands.



Lesson procedure:

1. Allow time for each group to think and discuss how its members will pass the object from one person to the next.
2. After discussion has finished, ask each group what strategy it will use and why the group thinks that this strategy will be effective.
3. When all the groups have presented, allow the groups to try out their strategies simultaneously. Inform the groups that if the object is dropped while passing it from one group member to another, the group must sit down and observe the other groups.
4. Ask all students to sit down and reflect:
   - What were the possible solutions to solving this problem?
   - What do you think were the strengths and weaknesses of the technique your group used?
   - Which technique of passing the object was the best or most effective? Why?
5. Ask student teachers to share their reflections.
6. Direct student to steps in the problem-solving process - in textbook.

Homework activity. Reviewing a student profile

The purpose of this homework activity is to read about and review a student profile.

Teacher observation and questioning are assessment tools that can inform a **student profile**. A student profile provides a framework against which to record evidence of a student's progress in learning. Table 8.3 presents a profile of a student's progress towards independent reading.

Read the profile and answer the following questions:

1. What are the sources of evidence that are drawn upon in this profile?
2. Why is it important to draw upon multiple sources of evidence in assessing student learning and progress?

Table 8.3. Sample student profile

Student: *Ma Sandi*	**Milestone towards independent reading →**			
Assessment Tools	Interests and awareness	Recognition of print symbols	Understanding concepts of print	Developing a cueing system
Teacher Observation	Asks for poems and stories to be read Chooses books to read Seeks out words from dictionary, books, cards Acts outs characters/ events from stories	Consistently reads familiar words and symbols Chooses familiar words on cards among other words	Starts at the front of the book Holds the book correctly Turns one page at a time Points to correct words when reading Responds appropriately to punctuation	Self corrects when reading Uses pictures as cues for meaning Takes risks and re-reads text
Teacher Questioning	When asked: Shows features of a book Retells stories Expresses opinions of stories		When asked: Explains that text goes from left to right Points to upper- and lower-case letters and words	Uses to predict words: Context Knowledge of language structure Knowledge of sound/ symbol relationships
Teacher Tests				Supplies appropriate words in spaces

Formative assessment: Students applying their learning, including in student-centred tasks

Formative assessment can be also undertaken through teachers reviewing students' performance on ***tasks.*** Tasks may include, for example: an oral presentation in Myanmar; a written paragraph in English; a labelled diagram or research project in Science; a timeline in History; and a model in Geography. Note that culminating projects can also serve summative assessment purposes.

As you learnt in Units 3 and 4, students would be provided with: a). the success criteria for these tasks in advance; and b). feedback and differentiated support at various stages of their work. Recall that constructive feedback supports a student to answer two questions:

1. *How am I going?* (What progress has been made toward the goals?)
2. *Where to next?* (What activities need to be undertaken to make further progress?)

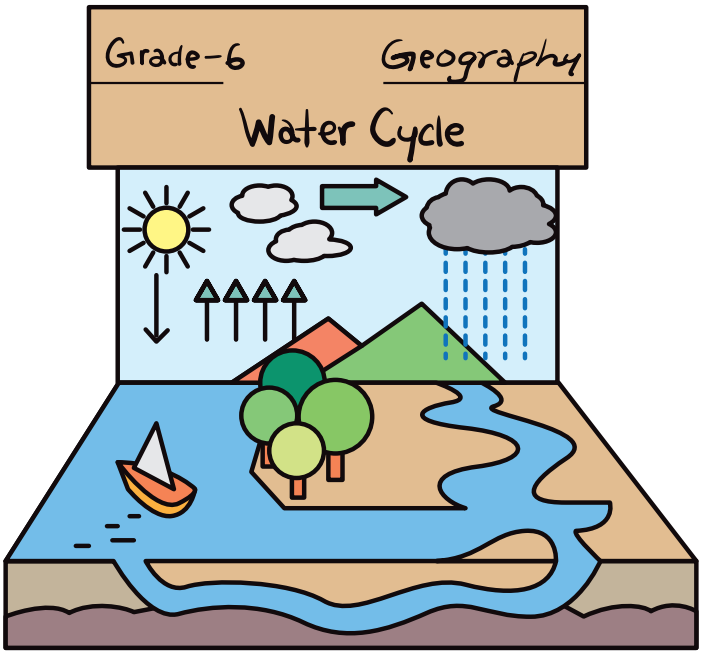


Figure 8.6. A group model of the water cycle in middle school Geography

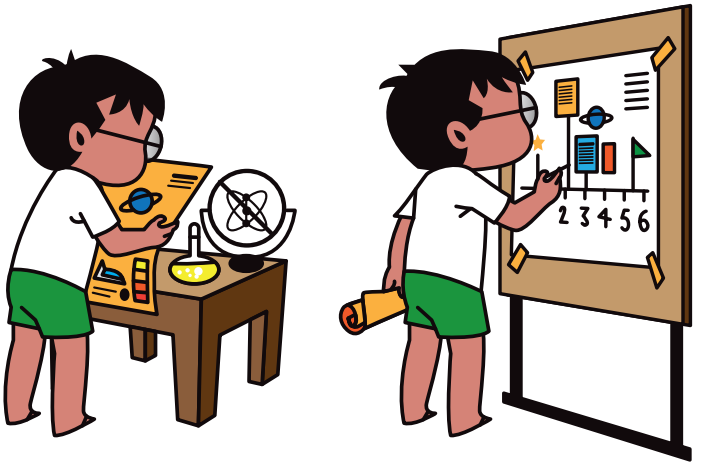


Figure 8.7. Student's Science project report and History timeline

Learning activity 3. Reviewing a peer-assessment example

The purpose of this activity is to review an example of peer-assessment.

In Science, students are required to *draw and label the parts of an insect.* At the beginning of the task, students are given a checklist, which presents the ***success criteria*** (Table 8.4). Upon completion, they are provided with an exemplar (Figure 8.8).

Students exchange their work (Figure 8.9) with a peer; and use the checklist and exemplar to provide feedback. They then reflect on the strengths and limitations of this peer-assessment example.

Table 8.4. Checklist for formative task

Learning outcome: Draw and label the parts of an insect			
Success criteria	Yes	No	If no, provide feedback
Antennae, head, thorax, abdomen, and legs are drawn correctly (see exemplar)			
All body parts are labelled correctly			
All labels are spelt correctly			
Arrows link all labels to body parts			
A figure title is at the bottom			

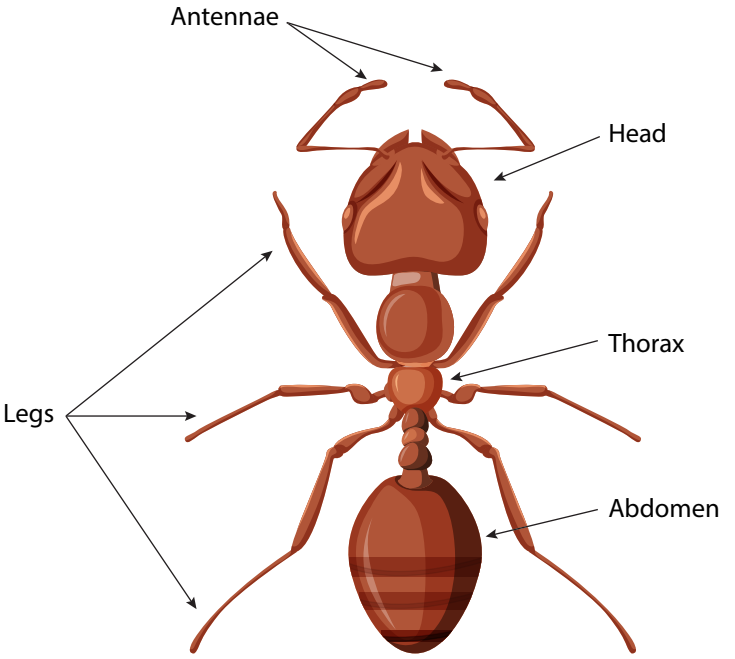


Figure 8.8. Exemplar for formative task

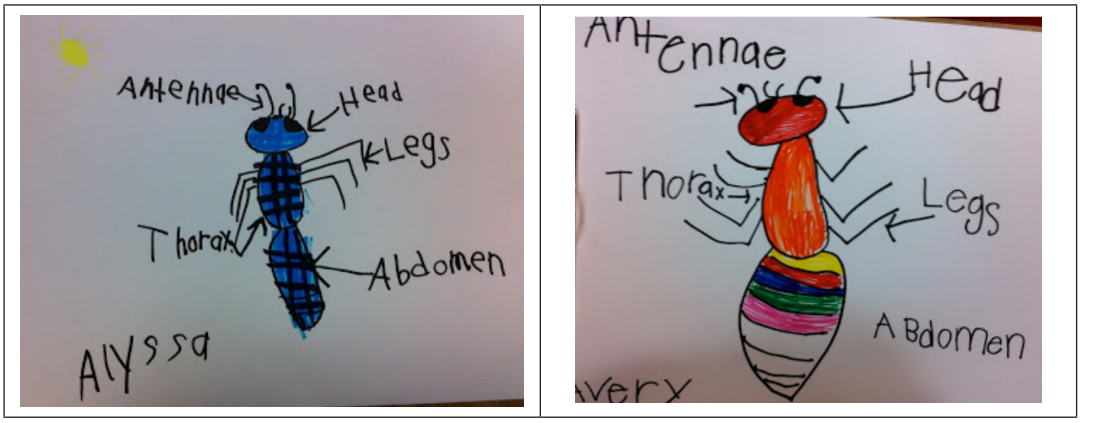


Figure 8.9. Peers exchange work

Formative assessment: Students engaging in peer and self-assessment

In order to develop into autonomous and lifelong learners, it is important for students to be able to assess the quality of their peers' and their own work. Their evaluative capacity needs to be *built over time*.

According to Sadler, an internationally recognised assessment scholar, students must learn to know what high-quality work is, be able to compare their work against that standard, and then have the strategies to bring their work closer to that standard.[95]

In many taxonomies, peer assessment and self-assessment are identified as **assessment *as* learning**. Box 8.2 provides a contemporary perspective on assessment as learning.[96]

Box 8.2. Assessment as learning

Assessment as learning occurs when students are their own assessors.

Students monitor their own learning, ask questions, and use a range of strategies to decide what they know and can do, and how to use assessment information for new learning.

Assessment as learning:

- involves teachers and students creating learning goals to encourage growth and development;
- encourages students to take responsibility for their own learning;
- requires students to ask questions about their learning;
- encourages peer assessment, self-assessment, and reflection; and
- provides ways for students to use formal and informal feedback and peer and self-assessment to help them understand the next steps in learning.[97]

Figure 8.10. Students use feedback and peer and self-assessment to understand next steps

95 Sadler, 1989.
96 New South Wales Education Standards Authority (NESA), 2019.
97 NESA, 2019.

Learning activity 4. Generating success criteria for a self-assessment instrument

The purpose of this activity is for you to generate a simple self-assessment instrument for an oral presentation task.

As you learnt in Unit 3, students need to be scaffolded to successfully engage in peer and self-assessment processes.

Teachers need to clearly outline the learning outcomes and success criteria for students and provide them with examples of high-quality work, as well as peer and self-assessment instruments, such as checklists and simple rubrics.

Recall the self-assessment instrument for student participation in class discussions, which was presented in Unit 3 (Figure 8.11). There are seven success criteria, with three standards: 'almost always'; 'sometimes' and 'still learning' (with provision for 'not relevant' if that was the case).

Student self-assessment instrument for class discussions

Success criteria	Almost always	Sometimes	Still learning	Not relevant
I listened carefully to what others said				
I took an active part and contributed my fair share without dominating				
I was able to build on other people's ideas				
I gave good reasons for my opinions				
I handled different points of view well				
I showed respect for others				
I drew others into the discussion				

Figure 8.11. Self-assessment instrument for participating in class discussions

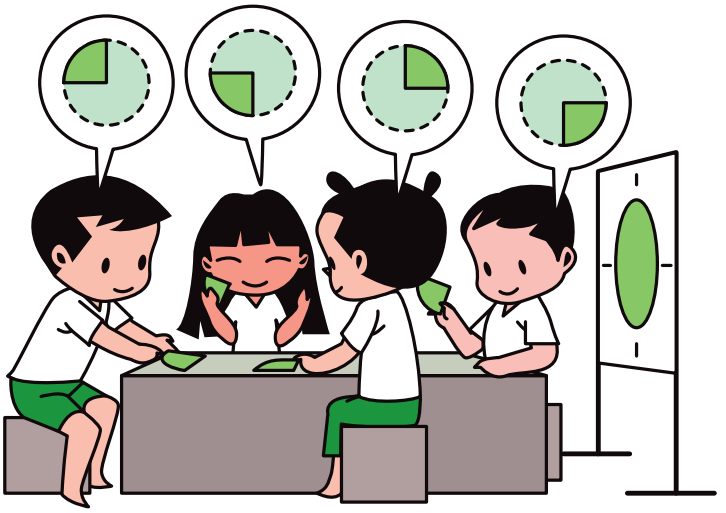


Figure 8.12. "I was able to build on other people's ideas"

In this activity, you are required to generate a *very simple* self-assessment instrument for an oral presentation task – the type of instrument that would build students' confidence in engaging in self-assessment.

Create ***success criteria*** to complete the self-assessment instrument in Table 8.5. Use simple language and first person (e.g., 'I plan a beginning, middle and end').

Draw a ***simple icon/ picture*** for each success criterion.

Table 8.5. Self-assessment instrument for oral presentations[98]

Success criteria	Self assessment		
I plan a beginning, middle and end. 	Almost always	Sometimes	Still learning
			
2.	Almost always	Sometimes	Still learning
			
3.	Almost always	Sometimes	Still learning
			
4.	Almost always	Sometimes	Still learning
			
5.	Almost always	Sometimes	Still learning
			

Learning activity 5. Reflecting on guidance on formative assessment for teachers

The purpose of this activity is to assess your understanding of key assessment concepts up to this point in the learning, and for you to be aware of guidance provided to teachers, regarding formative or classroom-level assessment in the new Basic Education Curriculum.

Part A

Read Box 8.3 which presents guidance relating to formative or classroom-level assessment, as outlined in the Teacher Guide of the new Basic Education Curriculum. Answer the following questions:

98 Buck Institute for Education, 2013.

1. How does this excerpt reflect emphases on diagnostic assessment?
2. How does this excerpt reflect emphases on teachers using formative assessment tools?
3. What is one advantage and one disadvantage of the recommended technique regarding using a sample of 10 books/students to assess class performance or prior knowledge?

Part B

Note that the Teacher Guide states that "Teachers will need to determine how best they can record this evidence from the students' learning, so they will be able to adjust their teaching to improve the quality of learning". You are encouraged to pursue a conversation with your mentor teacher on practicum regarding how they ***record evidence of student learning.***

Box 8.3. Guidance provided to teachers in the Teacher Guide

Formative assessment:

The intention of formative assessment is to inform the teacher about a student's learning progress by providing evidence, so the teacher can help the student improve their learning. Teachers will need to determine how best they can record this evidence from the students' learning so they will be able to adjust their teaching to improve the quality of learning.

Observation:

Observe the students directly and record observations (including behaviour in group work) in preparation for practical or performance activities. Also observe one or more of the 5 Cs (i.e. Collaboration, Communication, Critical thinking and problem solving; Creativity and innovation).

Questioning:

The teacher asks the students questions to determine the level of understanding (Bloom's taxonomy) and adjusts their teaching as a result. This may happen at any time in the lesson, as well in the Review and Assessment, for the final stage of a lesson or series of lessons.

Student learning journal:

The teacher asks students to write answers to open-ended questions (e.g. *What I have learnt? What I still need to learn?*) in their exercise books as part of the review at the end of the lesson. At the beginning of the next lesson, a similar task is used to determine prior knowledge by asking students to write what they know about today's lesson objective.

The teacher uses a sample of maybe 10 books/students to assess the overall class performance or prior knowledge and adjust teaching accordingly.

Figure 8.13. Student learning journal

Summative assessment: Examinations

Assessment can also be undertaken formally via an examination, under conditions that specify:

- the duration of the examination;
- what materials students can have access to; and
- the level of supervision that is required.

In supporting students to pass formal examinations, it is important that they are familiar with the format and timing of examinations and the types of questions that they will be required to respond to. For instance, Box 8.4 presents an example of review questions on Angkor city art and architecture, taken from the new Grade 6 History Curriculum Teacher Guide.

Table 8.6 provides types of written examination questions and examples:

- True/false statements
- Fill in the blanks
- Multiple choice questions

- Make a list
- Classify items
- Short-answer questions
- Order sentences
- Extended answer questions.

Box 8.4. Example of review based on Grade 6 History from Teacher Guide

Lesson objective

To learn about the development of art and architecture at the Angkor Archaeological Park.

Review questions

Fill in the blanks:

1. During the era of Jayavarman VII, _____ city was built.
2. One can guess the high standard of Khmer's art and architecture by looking at_____ statue.

Choose the correct word:

3. One can learn about the Khmer people's _____ by studying accessories on statues/paintings in Angkor's temple complexes.

    - Lifestyle
    - Education
    - Dressing

4. At the foot of the Bayon statue, _____ can be seen.

    - Woodcarvings
    - Illustrations
    - Paintings

True or False:

5. The Khmer city thrived during the era of King Suryavarman II.

6. During the era of King Jayavarman VII, diplomatic ties were formed between China and Khmer.

7. Angkor city was built during the dynasty of King Jayavarman.

Extended questions (answer in about 10 sentences):

8. Describe the art and architecture of Angkor Wat.

9. Discuss how the Angkor Archaeological Park cultural development still impacts on Cambodia today.

***Source*:** https://pixabay.com/photos/ancient-angkor-angkor-wat-temples-3773933/

Table 8.6. Types of written examination questions and examples (completed)

<table>
<tr><th>Types of questions</th><th>Examples</th></tr>
<tr><td>True/false statements</td><td colspan="2">Say whether the following statements are true or false by writing T or F beside the statements:

• Water flows from a lower place to a higher place.
• Light travels in a straight line.</td></tr>
<tr><td>Fill in the blanks</td><td colspan="2">Fill in the blanks with correct answers:

• The sun rises in the _____.
• A _____ is a series of great sea waves caused by an underwater earthquake, landslide, or volcanic eruption.</td></tr>
<tr><td>Multiple choice questions</td><td>Which of the following was the capital of King Anawrahta?

a) Bago
b) Sagaing
c) Bagan
d) Mandalay</td><td>Which virus can cause AIDS?

a) Coronavirus
b) SARS
c) HIV
d) Flu virus</td></tr>
<tr><td>Make a list</td><td colspan="2">• List the five food groups.
• List renewable energy sources.</td></tr>
<tr><td>Classify items</td><td colspan="2">Classify the following materials by filling in the table:

copper, wood, lead, diamond, tin, ceramic, nickel, chalk, zinc, cloth, plastic

<table><tr><th>Metals</th><th>Non-metals</th></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>Short-answer questions</td><td colspan="2">Write one or two sentences in response to the following questions:

• What is the difference between an ocean and a river?
• What is the climate of this region?</td></tr>
<tr><td>Order sentences</td><td colspan="2">Put the following sentences in the correct order:

• After one week, the white roots come out.
• On the first day, there is no change.
• I sow the onion in the sand box and water it every day.
• Within three weeks, it becomes an onion plant.
• Two weeks later, green shoots appear.</td></tr>
<tr><td>Extended answer questions</td><td colspan="2">Write one or two paragraphs in response to the following questions:

• What factors impact on whether parents send children to school?
• Give reasons why the treaty of Yan-ta-po is recognised as unfair.[99]</td></tr>
</table>

99 Table information adapted from Monastic Education Development Group.

Learning activity 6. Writing examination questions

The purpose of this learning activity is to practise writing different types of examination questions. Write one example for each type of question.

Reflect on whether the question type allows for the assessment of higher-order thinking.

Table 8.7. Types of written examination questions and examples

Types of questions	Examples
True/false statements	*Say whether the following statement is true or false by writing T or F beside the statement:*
Fill in the blanks	*Fill in the blanks with correct answers:*
Multiple choice questions	
Make a list	
Classify items	*Categorise the following materials by filling in the table:* <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>
Short-answer questions	*Write one or two sentences in response to the following question:*
Order sentences	*Put the following sentences in the correct order:*
Extended answer questions	*Write one or two paragraphs in response to the following question:*

8.1.2. Assessment principles

Expected learning outcomes

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

- Outline the principles of high-quality assessment design;
- Describe the characteristics of authentic assessment;
- Outline the steps in planning for authentic tasks in the context of a unit of work; and
- Explain the principle of constructive alignment.

Principles of Assessment

The National Assessment Policy for Basic Education outlines 13 Basic Principles of Assessment. Box 8.5 presents 11 of these principles.

Box 8.5. Basic principles of assessment in National Assessment Policy

- Each curriculum learning area and grade level should include a balanced combination of *formative* and *summative* assessments. *Diagnostic* assessment may be used to assess prior learning and misconceptions.
- Assessment should be built into curriculum design and should relate directly to the *curriculum aims* and *learning outcomes*. Assessment tasks should primarily reflect the nature of the discipline or subject.
- Assessment should also ensure that students have opportunities to demonstrate their individual skills and capabilities using a *variety* of assessment tools and instruments.
- Formative assessment should first and foremost be utilised to motivate, create learning opportunities, and provide *constructive ongoing feedback* (to both students and teachers).
- Summative assessment for the purpose of grading and as a quality assurance mechanism is undertaken less frequently than formative assessment and the results should be used by the teacher to improve teaching.
- Assessment tasks and associated criteria should be *valid*: i.e., they should effectively measure student attainment of the intended learning outcomes at the appropriate level.
- Assessment should be based on *clear and consistent* processes and be subject to quality assurance.
- Assessment should be *inclusive and equitable* as far as possible without compromising academic standards, i.e., it should ensure that tasks and procedures do not disadvantage any group or individual, including due to gender, ethnic group, disability, socio-economic status, or other circumstances.
- Assessment processes should include *timely feedback* to students and/or parents that promotes learning and facilitates improvement as an *integral* part of teaching and learning.
- The amount of assessed work should be *manageable* for both students and their teachers without overloading staff or students.
- Assessments, including tests and exams, are not to be used as a pass/fail mechanism, but rather to be used to better facilitate students' learning and to grade students' achievement.

Learning activity 1. Comparing frameworks relating to principles of assessment

The purpose of this activity is to review the principles of assessment outlined in the Basic Education Curriculum. You will review the principles set out in Myanmar's National Assessment Policy in terms of alignment with the principles of high-quality assessment design:[100]

1. **Integral:** Assessment is part of the entire learning process. It does not just occur at the end of learning.
2. **Valid:** Assessment measures what it was intended to measure (i.e. it focuses on the targeted knowledge and skills in the learning outcomes).
3. **Transparent**: Success criteria and assessment processes are made clear to students.
4. **Inclusive**: A variety of assessment tools are used, and all students are provided with opportunities to demonstrate their knowledge and skills.
5. **Authentic:** Assessment tasks are meaningful and relate to the real world.
6. **Efficient:** Assessment are manageable for students (regarding task requirements and due dates) and teachers (regarding supporting students and the marking load).
7. **Reliable:** Assessment marking is fair. Teachers use success criteria to assess each student's work and engage in moderation processes.

Are these principles reflected in Myanmar's *National Assessment Policy for Basic Education*?

100 Based on Brown & Race, 2013.

Figure 8.14. Authentic assessment tasks related to the real world

Authentic assessment tasks

Authentic assessment tasks are rich tasks that relate to the world beyond the classroom.

Internationally, there is emphasis on authentic assessment. As you have learnt throughout many of the units, current educational goals have shifted focus from the acquisition of knowledge to shaping competent students, who can apply knowledge and skills in different contexts.[101]

Given the focus on application, authentic assessment tasks are said to be **performance-based**.

Recall in Unit 2, the hypothetical sustainable garden project, enacted through an action learning model. Learning methods include research into sustainable gardens, whole class discussions, action planning, guest visits (e.g., from the principal, who provides feedback on the action plan; and from parents, who support the planning, building, and planting of the garden), co-operative garden tasks, and reflective journal writing.

101 Gulikers, Bastiaens, & Kirschner, 2004.

Figure 8.15. Authentic assessment tasks in a sustainable garden project

The tasks that may be assessed throughout such a project may be, for instance:

Box 8.6. Assessing authentic assessment

- Group research report
- Group action plan, and
- Individual reflections on learnings.

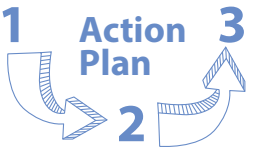


Table 8.8 presents characteristics of authentic assessment tasks, which have been identified in the educational research literature.

Table 8.8. Characteristics of authentic assessment[102]

Authentic assessment	Yes	No
1. Performance-based, motivating, challenging but achievable	□	□
2. Activities relate to the real world	□	□
3. Involves multiple steps and a range of tasks	□	□
4. Integrated with core learning activities	□	□
5. Requires students to be creators of knowledge	□	□

102 Ashford-Rowe, Herrington, & Brown, 2014; Gulikers et al., 2004; Herrington & Herrington, 2006.

Authentic assessment	Yes	No
6. Develops critical and creative thinking and metacognitive skills	□	□
7. Requires significant student time and effort in collaboration with others	□	□
8. Incorporates self or peer assessment and/or feedback from real audiences	□	□
9. Stimulates a wide range of responses from students/groups	□	□

Figure 8.16. Authentic assessment involves multiple steps and a range of tasks

Learning activity 2. Scoping authentic learning and assessment experiences

The purpose of this activity is to review a learning and teaching scenario from the perspective of authenticity, and apply understandings to scope authentic learning and assessment experiences.

The hypothetical sustainable garden project, with a focus on an action plan, is similar to the real Grade 7 Endangered Species Project, which you looked at in Unit 6 in the context of integrated curriculum design.

Instead of an action plan, the Endangered Species Project involved a recovery plan for an endangered animal. In fact, the Project involved multiple phases and tasks, which unfolded over eight weeks:

- *Phase 1. Student Research and Paper*: Students conduct *individual* research on a particular animal, choosing from a list of 25 endangered species.
- *Phase 2. Developing a Recovery Plan*: Students work in *small groups* to develop a recovery plan for their endangered animal.
- *Phase 3. Presentations to the Board of# Directors.* The project culminates with a 15-minute group presentation of the recovery plan to a hypothetical zoo "Board of Directors", made up of zoo professionals and teachers.

Part A

Reflect on these tasks in terms of the characteristics outlined in Table 8.8.

Are the Endangered Species Project tasks authentic? You may wish to record your responses in Table 8.8. For instance: *Yes,* the Endangered Species Project *'involves multiple steps and a range of tasks'* (i.e., Characteristic #3).

Figure 8.17. Recovery plan for an endangered animal

Part B

Select a subject area from the new Grade 6 Curriculum and an appropriate focus (i.e., a lesson or lessons, which could be extended into a unit of work with Research, Planning and Presentation phases), and respond to all or some of the questions in each section.

Box 8.7. Scoping authentic learning and assessment experiences

Context Subject area: Unit focus:
Undertake research *What* is the topic or powerful research question? *How* will students undertake the research?
Develop a plan *What* type of plan? *How* will students go about developing it? *How* will students be afforded some level of choice to pursue own interests?
Present the plan *What* authentic audiences will students present the plan to? *How* will they present the plan? *Who* will assess the plan?

Designing assessment at the unit-level: Constructive alignment

In Unit 4, you worked through each of the steps of planning for a *single lesson*. Drake and Reid outline broad steps for planning a unit of work (i.e., a series of lessons).[103]

1. Determine ***unit-level learning outcomes*** (i.e., what knowledge and understandings and skills and dispositions are to be developed and assessed over the unit?)
2. Design the *assessment tasks*, which will determine whether a student has achieved the learning outcomes. In line with good practice, these tasks will include rich ***performance assessment tasks***. Develop clear success criteria and, if possible, a criteria-standards rubric for each task.
3. Create the ***daily teaching and learning activities*** and ***formative assessments*** that scaffold the performance tasks. It is through these activities that students develop the competencies that they apply in the assessment tasks.

In this way, unit-level learning outcomes, assessment tasks, success criteria, and learning and teaching activities are **constructively aligned**.[104]

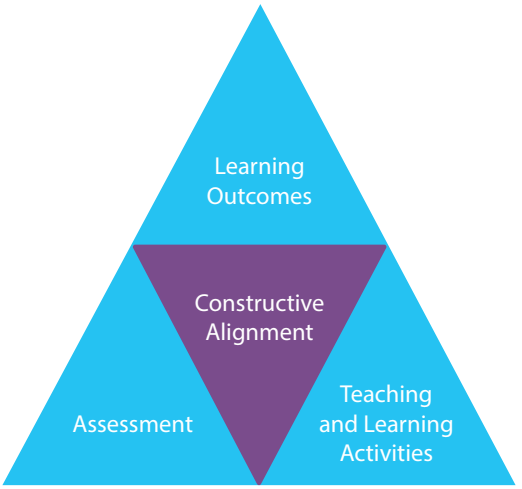


Figure 8.18. Alignment of learning outcomes, assessment, and teaching and learning[105]

103 Drake & Reid, 2018.
104 Biggs, 1996.
105 de Bie & Brown, 2017.

Learning activity 3. Identifying constructive alignment in policy and practice

The purpose of this activity is to identify constructive alignment in policy and practice.

Part A. Policy

Return to the basic principles of assessment in Box 8.5. Identify the principle/s that reflect constructive alignment.

Part B. Practice

Constructive alignment has been introduced here in the context of planning for a unit of work. How does constructive alignment relate to the elements of lesson planning? Review the Year 2 lesson plan template (in Annex 3) and discuss how the template supports constructive alignment.

Box 8.8. Constructive alignment in policy and practice

Part A. Policy
Constructive alignment in National Assessment Policy
The following principles are relevant:

Part B. Practice
Constructive alignment in Year 2 lesson plan template
The Year 2 template supports constructively aligned lessons by:

8.1.3. Assessment 'pillars' and tools

Expected learning outcomes

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

- Outline the four pillars of basic education assessment;
- Discuss the types of tasks that are appropriate for assessing 21st century skills; and
- Explain the importance of using a variety of assessment tools.

Four pillars of basic education assessment

According to the new *National Assessment Policy for Basic Education*, Myanmar's basic education assessment system will comprise of four pillars.

These four pillars are shown in Figure 8.19. The first three pillars are outlined in Table 8.9.[106]

106 Ministry of Education, 2019, p. 25.

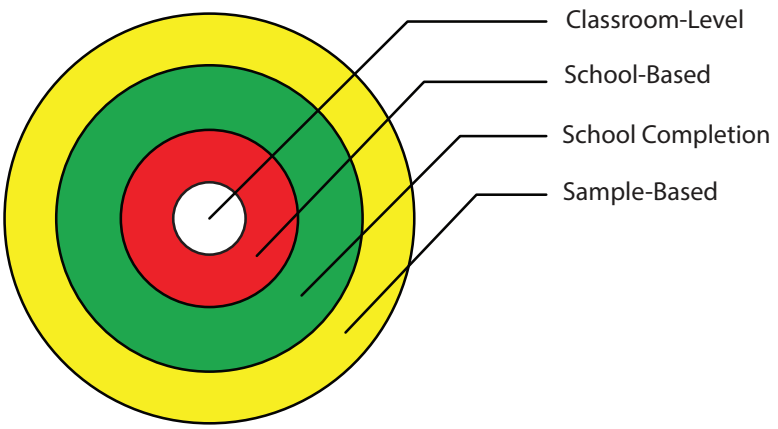


Figure 8.19. Four pillars of basic education assessment[107]

Table 8.9. Pillars of basic education student assessment

	Classroom-level assessment	School-based assessment	School completion
Definition	Formative assessment, undertaken continuously throughout the school year	Formative and summative assessment	Primary, middle and high school completion assessment
Purpose	• To identify opportunities for improving student learning • To respond to students' individual needs in a timely manner	• To measure student achievement at prescribed stages throughout the school year • [For some grades] used as criteria for progression to the next grade	• To assess and certify satisfactory learning achievement at the end of Primary, Middle and High school (i.e., end of Grades 5, 9 and 12)
Tools and instruments	• Teacher observation and questioning • Students applying their learning, including in student-centred tasks, such as group work, discussion, debate, projects • Students reviewing and assessing their own work	[At upper primary and secondary stages] • Formal tests conducted periodically throughout the year and at year-end • Other indicators that describe students' performance in skills, such as teamwork, problem solving and communicating effectively	• Summative assessments and other agreed measures (e.g. project work, presentations) • Certification of satisfactory learning achievement in knowledge, attitudes and skills, including soft skills as prescribed in the Basic Education Curriculum

107 Ministry of Education, 2019, p. 3.

The fourth pillar comprises **sample-based learning assessments,** which are defined as:

> …centrally managed assessments that identify and use a ***nationally or regionally representative sample*** of students of, for example, a particular age or grade or subject to measure the ***health of the education system***.[108]

Sample-based assessments are not concerned with the achievement of individual students. They are used to identify, for example, the need for modification and revision of the existing curriculum, teaching methodology and assessment, and where additional support is required for teachers, schools and townships, districts, and regions.

Examples include Early Grade Reading Assessment [EGRA] and Early Grade Mathematics Assessment [EGMA] and Southeast Asia Primary Learning Metrics [SEA-PLM], as well as sample-based assessment of ***reading and mathematics*** planned at ***middle school level*** (i.e., to assess the proportion of young people at the end of lower secondary education achieving at least a minimum proficiency level in reading and mathematics, by sex).

Learning activity 1. Assessing soft skills across the pillars

The purpose of this activity is for you to understand the emphasis on assessment of 21st century skills (also known as soft skills) across the pillars, and to consider the most effective way to assess these skills.

Soft skills are to be assessed across all three pillars, presented in Table 8.9. *The National Assessment Policy* presents the most complete representation of the soft skills.

108 Ministry of Education, 2019.

Figure 8.20. Soft skills (or 5Cs)[109]

According to the Policy, **classroom-level assessment** shall "promote active learning, including engaging students in discussion and dialogue in the classroom and promoting soft skills".

It can be seen from Table 8.9 that:

- **school-based assessment** includes indicators that describe students' performance in skills, such as teamwork, problem solving and communicating effectively; and
- **school completion** includes certification of satisfactory learning achievement in knowledge, attitudes, and skills, including soft skills.

What types of assessment tasks and approaches to curriculum are likely to provide opportunity to develop and assess soft skills most effectively?

109 Ministry of Education, 2019, p. 14.

- *Types of assessment tasks:* Review the alignment between the characteristics of authentic assessment (Table 8.8) and the soft skills. Make notes in Figure 8.20.
- *Approaches to curriculum:* Consider whether the soft skills are tied to subject areas. Reflect on your learnings regarding integrated curriculum from previous units.

Assessment tools and inclusive assessment

One of the basic principles of assessment in the *National Assessment Policy* is that:

> Assessment should be *inclusive and equitable* as far as possible without compromising academic standards, i.e., tasks and procedures do not disadvantage any group or individual, including due to gender, ethnic group, disability, socio-economic status, or other circumstances.[110]

Assessment should ensure that students have opportunities to demonstrate their individual skills and capabilities using a *variety* of assessment tools and instruments. Table 8.10 presents a range of assessment tools for the middle school.

Table 8.10. Assessment tools

Action plan	Essay	Outline	Report (Research, Field, Experiment)
Audio recording	Experiment	Performance	Set of rules
Article (Book, Media)	Evaluation	Photo	Sculpture
Cartoon	Forecast	Picture	Song
Collage	Game	Play	Speech
Concept map	Glossary	Poem	Story
Conclusion	Graph	Portfolio	Summary
Dramatisation/ role play	Group discussion	Poster	Survey
Debate	Illustration	Presentation	Timeline
Definition	Invention	Project	Test
Diagram	Journal	Puzzle	Video
Editorial	List	Questionnaire	Website
	Model	Recommendation	

110 Ministry of Education, 2019.

Recall in Unit 3, the strategies that can be used to differentiate assessment:

- providing students with a choice in terms of assessment products (e.g., poster or presentation);
- allowing students to propose their own ways in which they would like to demonstrate their learning;
- allowing students to have more time to complete assessment tasks;
- providing students feedback at more frequent milestones; and
- providing levels of support that are responsive to students' needs.

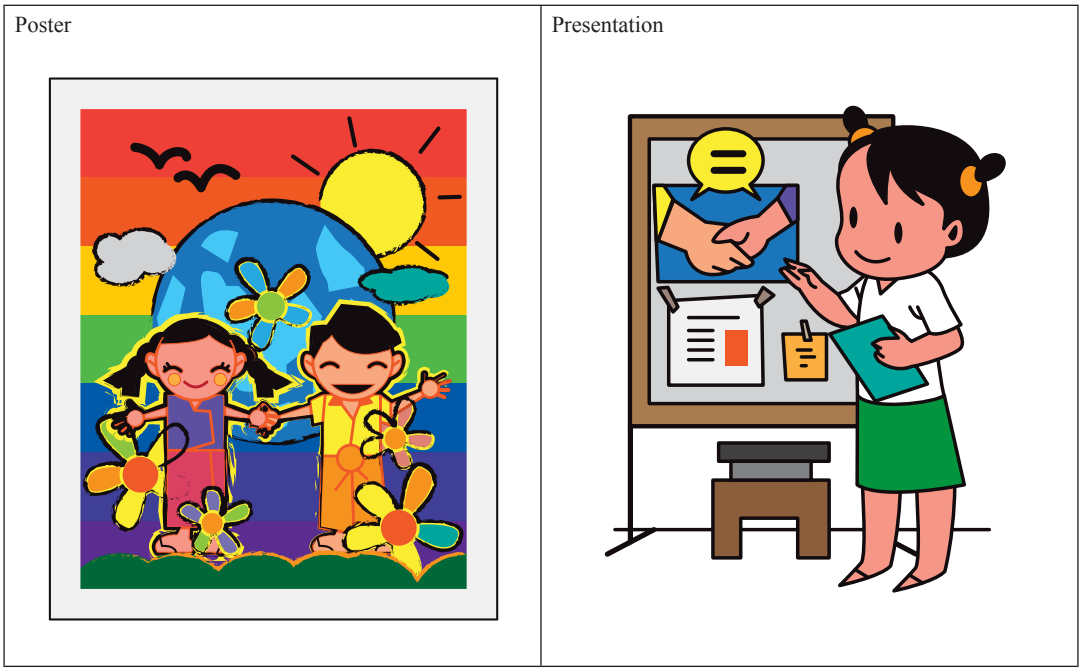


Figure 8.21. Providing students with choice of assessment: poster or presentation

Learning activity 2. Aligning assessment with learning outcomes

The purpose of this activity is to deepen your understanding of assessment design principles.

Part A. Beyond consideration of student differences, draw upon your understanding of constructive alignment, to reflect on why a variety of assessment tools is necessary.

Part B. For each higher-order level of the revised cognitive taxonomy (Analyse, Evaluate and Create), write an aligned learning outcome and select an appropriate assessment tool. You may use Figures 8.22 and 8.23 to support you in this task.

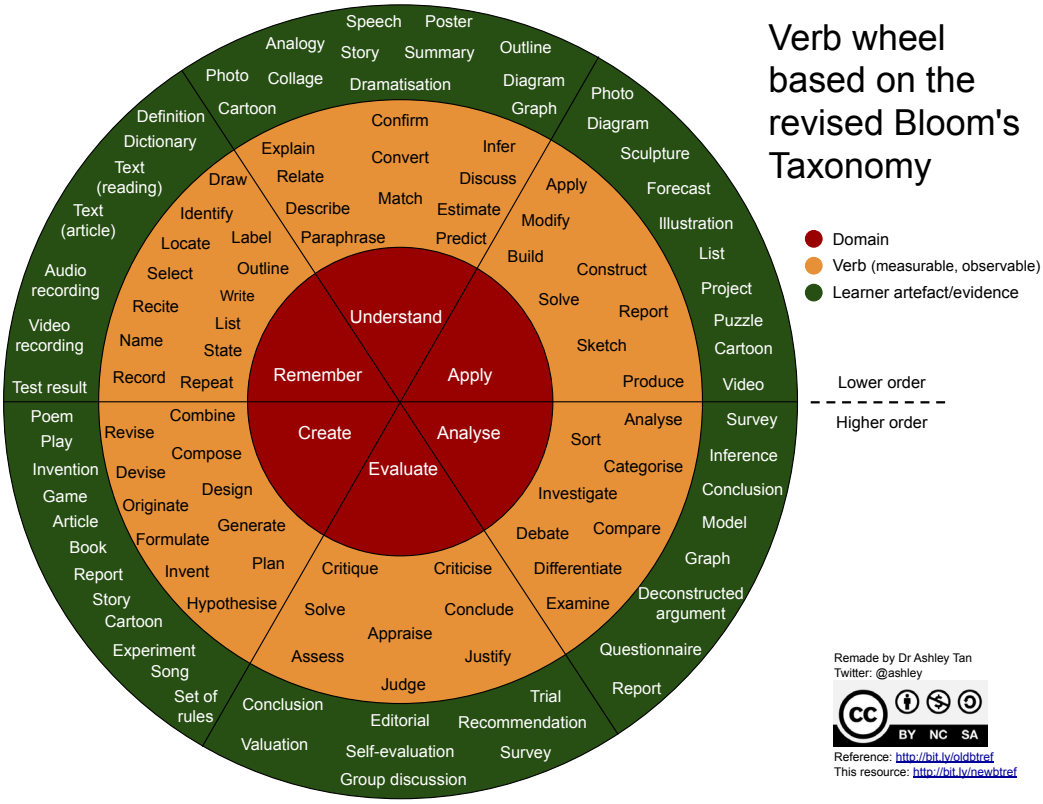


Figure 8.22. Assessment wheel based on the revised Bloom's Taxonomy

In Figure 8.22, the inner circle is made up of cognitive domains or levels of the revised taxonomy: Remember, Understand, Apply, Analyse, Evaluate and Create.

The middle circle is made up of action verbs or cognitive processes, which are associated with each of the broad cognitive domains. For instance:

- *Analyse* domain: *Compare*
- *Evaluate* domain*: Critique*
- *Create* domain*: Design*

These action verbs can be used to frame learning outcomes. For instance:

At the end of the lesson, students will be able to:

- **Compare** factors that affect growth of plants and animals.

The outer circle is made up of assessment tools that are constructively aligned with the cognitive domain and processes (e.g. Analyse: Compare: *Report*).

Examples for each of the higher-order domains are provided:

Analyse/Compare/Report

Domain	Analyse
Action verb	Compare
Learning outcome	Compare factors that affect growth of plants and animals
Assessment tool	Report (in Science)

Evaluate/Critique/Group discussion

Domain	Evaluate
Action verb	Critique
Learning outcome	Critique a proposed new local development
Assessment tool	Group discussion (in Geography)

Create/Design/Game

Domain	Create
Action verb	Design
Learning outcome	Design a board game for the young students in our school
Assessment tool	Game (in Local Curriculum)

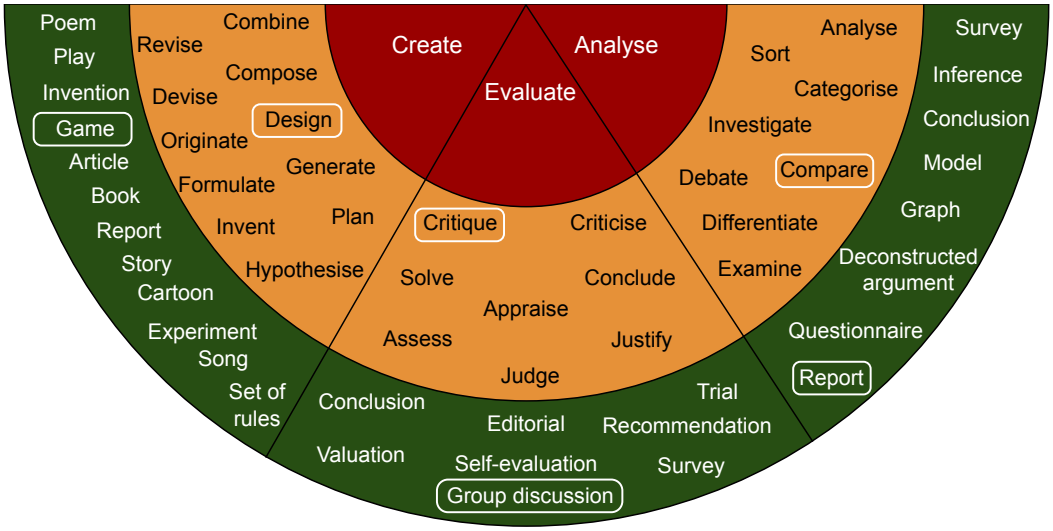


Figure 8.23. Assessment wheel supports understanding of constructive alignment

Recording sheet for learning activity 2

Part A. Beyond consideration of student differences, draw upon your understanding of constructive alignment, to reflect on why a variety of assessment tools is necessary.

Part B. For each higher-order level of the revised cognitive taxonomy (Analyse, Evaluate and Create), write an aligned learning outcome and select an appropriate assessment tool.

Analyse

Domain	Analyse
Action verb	
Learning outcome	
Assessment tool	

Evaluate

Domain	Evaluate
Action verb	
Learning outcome	
Assessment tool	

Create

Domain	Create
Action verb	
Learning outcome	
Assessment tool	

8.1.4. Authentic assessment: Assessment rubrics

Expected learning outcomes

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

- Outline the assessment principles reflected in the use of rubrics;
- Name the elements of an assessment rubric;
- Explain the steps in developing an assessment rubric; and
- Write criteria-standards descriptors for an assessment rubric.

Rationale for using assessment rubrics

Assessment rubrics can be developed to support assessment of rich performance tasks. Recall the definition of assessment from the *National Assessment Policy for Basic Education*:

> …an ongoing process for providing evidence to support decisions regarding *improvements in student learning*. It involves making expectations explicit and public; setting appropriate criteria and high standards for learning quality.[111]

Assessment rubrics provide a set of criteria and articulate the levels of performance for each criterion. They reflect a number of high-quality assessment design principles.

Learning activity 1. Reviewing principles of assessment

The purpose of this activity is to deepen understanding of assessment principles and understand the rationale for using assessment rubrics.

Return to the seven assessment principles, compiled from the work of Brown and Race,[112] in Lesson 8.1.2 learning activity 1. Which principles are reflected in the use of assessment rubrics?

111 Ministry of Education, 2019.

112 Brown & Race, 2013; Brown, 2004-05.

Elements of an assessment rubric

An assessment rubric contains the following elements:

- **Criteria:** Properties or characteristics by which to judge quality.
- **Standards:** Levels of achievement or performance.
- **Descriptors:** Qualities required to demonstrate achievement for levels of performance for each criterion.

Learning activity 2. Naming elements of an assessment rubric

The purpose of this activity is to ensure that you know the elements of an assessment rubric. In Table 8.11, link the following words to the arrows:

- Criteria
- Standards
- Descriptors.

Table 8.11. Elements of an assessment rubric

↓	↓		
	Advanced	**Satisfactory**	**Emerging**
Knowledge and understanding			
Critical thinking skills			
Research skills			
Communication skills			
	↑		

Steps to developing an assessment rubric

Step 1: Develop criteria

Here are some pointers when developing criteria:

- Align criteria with learning outcomes (i.e., constructive alignment);
- Focus on what is most relevant to the learning outcomes;
- Keep criteria to a manageable number (e.g., 4-5);
- State the criteria as simply and concisely as possible (e.g., knowledge and understanding, communication skills);
- Deal with only one characteristic in each criterion; and
- Do not refer to quality in the criteria – avoid using adjectives (e.g., **sound** knowledge and understanding) and adverbs (e.g., Uses communication skills **effectively**).

Step 2: Identify standards

The standards may be already set in education policy. If standards are not prescribed, then you may set three standards:

- Advanced: Working beyond minimum requirements
- Satisfactory: Working at a level that meets minimum requirements
- Emerging: Working towards minimum requirements

Table 8.12. Standards of an assessment rubric

	Advanced	Satisfactory	Emerging
THREE STANDARDS	Working *beyond* minimum requirements	*Meets* minimum requirements	Working *towards* minimum requirements

	Advanced	Satisfactory	Emerging

Figure 8.24. Advanced standard: Working beyond minimum requirements

Step 3: Develop standards descriptors

Here are some pointers when developing descriptors:

- Pitch descriptors at a reasonable level (i.e., neither so high that no student can succeed nor so low that all students succeed at the highest level);
- Aim to be clear, specific but brief;
- Accept that descriptors will not capture all details;
- Use language that students will understand;
- Ensure that each level of performance is progressively higher or more sophisticated than the previous level;

- Specify qualities that can be demonstrated (e.g., "rephrases problems in own words", "identifies key issues"); and
- Describe what CAN be done at each level, rather than describing deficiencies.

Learning activity 3. Designing a simple rubric for an assessment task

The purpose of this activity is for you to gain experience in developing an assessment rubric.

Write the descriptors for each criterion at the Advanced Standard (i.e., working beyond minimum requirements) in Table 8.13.

Table 8.13. Assessment rubric for a research report

Criteria	Advanced	Satisfactory	Emerging
Knowledge and understanding		Focuses on the relevant aspects of the topic	Focuses on some relevant aspects of the topic but also includes irrelevant information
Critical thinking skills		Describes aspects, with some evidence of analysis	Links some information to present description in parts
Research skills		Draws on reliable information from a limited number of sources	Draws on information that is from one source only and/or is unreliable
Communication skills		Writes clearly in generally complete paragraphs and sentences but with errors in punctuation and spelling	Writes in a way that is not clear; paragraph and sentence structure and/or punctuation and spelling require attention

Rubrics used with other strategies

To ensure that assessment judgements are reliable, it is essential that assessment rubrics are used alongside other strategies, including:

- Providing *exemplars of student work* at different standards:
- "Here is a high-quality response. Now compare this response with one that just meets minimum requirements".

- Participating in *moderation processes.* Teachers from one subject area in a cluster of schools may meet and review students' work to arrive at a shared understanding of standards.

Review questions

1. What is the purpose of diagnostic, formative and summative assessment?
2. How do diagnostic, formative and summative assessment work together? Discuss their timing in the teaching and learning process.
3. What guidance regarding classroom-level assessment is provided in the new National Assessment Policy and Teacher Guides for the new Grade 6 Curriculum?
4. Why is it important to draw upon multiple sources of evidence in assessing student learning and progress?
5. What are principles of high-quality assessment design?
6. What are the characteristics of authentic assessment?
7. What is constructive alignment? What elements need to be constructively aligned to maximise student learning?
8. What are the four pillars of basic education assessment?
9. What types of tasks and approaches to curriculum are appropriate in terms of developing and assessing soft skills?
10. Why is it important to use a variety of assessment tools?
11. What assessment principles are reflected in the use of rubrics?
12. What are the elements of an assessment rubric?
13. What are the steps in developing an assessment rubric?

8.2. Educational Assessment and Data

Assessment is the key element in understanding what students know and can do.

The information that a teacher gathers from assessment informs how they plan for learning and teaching. It also enables teachers to predict the students' zones of proximal development so that learning opportunities can be designed in a way that students can engage with the content.

However, for teachers to use assessment to guide their planning for learning and teaching, they need to be able to trust that the data they collect reflects accurately what the students know and can do.

In this sub-unit, we discuss the meaning of validity and reliability, and how they relate to classroom assessment.

You will then focus on writing tests, beginning with developing questions that are more likely to allow students to demonstrate their knowledge and skills. You will develop skills in designing tests that increase the validity and reliability of the information you gather about student learning.

Finally, you will analyse student data in a way that helps you to assess the reliability and validity of the assessment tool and ask questions that will enable you to interpret student learning.

8.2.1. Assessment data that can inform educational processes

Expected learning outcomes

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

- Discuss the difference between qualitative and quantitative assessment data;
- Discuss different ways that teachers use assessment data;
- Define validity in relation to educational assessment;
- Identify the difference between content validity, construct validity and concurrent validity;
- Define reliability in relation to educational assessment;
- Understand the difference between validity and reliability;
- Identify issues of fairness in relation to assessment; and
- Explain the importance of objectivity in assessment.

Introduction to classroom data

Teachers gather myriad information about students and their learning from assessment data. When this information reflects the students' abilities accurately, teachers can use it to inform their teaching. We call the information that teachers gather about students and their learning, **data.**

This lesson focuses on the foundations of collecting and analysing assessment data. We will build on the knowledge about assessment that you have already developed in Year 1 and Sub-unit 8.1, and we will look at developing tests that can provide accurate and trustworthy information about where students are in their learning.

If assessment tasks and tests are written well and analysed appropriately, the data you gather can provide valuable information about:

- areas of learning that your students have mastered;
- aspects of the content where they have developed misunderstandings;

- content that they have not understood at all or skills they have not developed, yet; and
- the effectiveness of your teaching.

Assessment data

Teachers collect data *from* students and *about* students all the time. They do this by keeping different types of records and gathering information from:

- Classroom observations
- Records of attendance
- Individual education plans
- Tests and projects
- Formative assessments, etc.

There are two general types of data:

1. **Quantitative data** - information in the form of numbers or symbols (e.g. marks for a test or assessment task or symbols that indicate student attendance). We can analyse these data using statistical methods, charts, and graphs.
2. **Qualitative data** - information in the form of words or images (e.g. samples of student writing or an artwork, the feedback we provide to students, notes or observations we make about students and their learning).

Because data can inform our teaching in so many ways, we need to be able to use these data to make *accurate and trustworthy conclusions* about our students and their learning.

This means that teachers need to be able to:

Develop assessment tools that are trustworthy and accurate, so they can…

Collect data that reflect the extent of what the students can do, then…

Analyse the assessment data appropriately, so they can…

Make accurate interpretations about:

- students and their learning; *and*
- the effectiveness of their teaching practice.

Assessment as tools for teachers

As teachers we can use assessment to measure the extent of what a student knows, which means we can predict what they are ready to learn next.

In other words, we can use assessment data to find students' Zones of Proximal Development (ZPDs). Remembering back to Unit 2, the ZPD is the space between what a learner *can do* without assistance, and their *potential development* which is the next level of learning or difficulty.[113] It is in this space that learners benefit most from being supported by others who have more knowledge in the area.

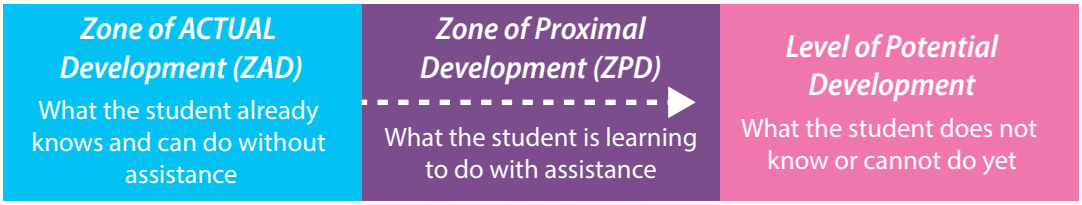


Figure 8.25. The Zone of Proximal Development

113 Vygotsky, 1978.

Good assessment can provide the information teachers need to:

- identify the extent of what a student knows;
- identify the student's ZPD; and
- provide targeted learning opportunities for the student at the right level.

However, to do this, assessments need to provide information that is *accurate*, *trustworthy,* and *usable*.

Teachers need to have accurate information about student learning so they can:

- Understand students and their needs better
- Find out what students are ready to learn
- Plan more effectively for learning and teaching
- Monitor student's learning progress
- Report to stakeholders.

The quality of the assessment tools and the analysis of the assessment data impact on the quality of learning and teaching that can happen in the classroom.

Learning activity 1. Teachers' use of assessment

In this activity, you will work in small groups to develop deeper understanding of the types of data that teachers collect about students and their learning and how that data can be used.

Step 1: List different sources of data that teachers use.

Step 2: Identify whether the data from each source is qualitative, quantitative or both.

Step 3: Identify the main purpose(s) of the source of data (diagnostic, formative or summative).

Step 4: Discuss how the information from this source can be used by teachers to inform teaching and their understanding about the students' needs.

Table 8.14. Sources of data and how data can be used

Source of data	Qualitative	Quantitative	Purpose(s)	How the data can be used
1. Quiz		✓	Diagnostic	To gauge what students know and do not know To make immediate decisions about teaching and learning
2. End of unit test	✓	✓	Summative	Reporting learning progress to parents and the school Informing teaching and learning for the next unit of work
3. Classroom Observations	✓	✓	Formative	Monitoring student learning progress Monitor student learning behaviours Identifying issues that prevent students from accessing learning in the classroom Target student ZPDs as they work
4.				
5.				
6.				
7.				
8.				

Properties of assessment and assessment data

For teachers to be able to use assessment well, it needs to provide accurate and trustworthy information about students and their learning. There are a number of properties that underpin assessment and the way we use it. Good assessment should be:

- Valid (does it assess what it claims to assess?)
- Reliable (are the results consistent, dependable, and able to be replicated?)
- Fair (are all students able to show what they know and can do? Are the mark allocations consistent, inclusive, and equitable?)
- Objective (to what extent is the assessor's personal opinion limited?)
- Feasible (is it manageable in the timeframe and in relation to the resources at hand?).

The importance of validity

In Sub-unit 8.1, we studied the basic principles of assessment in the *National Assessment Policy for Basic Education.* The seventh principle specifically refers to **validity** in assessment: "Assessment tasks and associated criteria should be valid: i.e., they should effectively measure student attainment of the intended learning outcomes at the appropriate level."[114]

For educational assessment to be valid, it must *also* encompass other elements that underpin the National Assessment Policy.

By observing the Basic Principles of Assessment in the National Assessment Policy and the principles of high-quality assessment we see that a valid assessment:

- is balanced and used in the way it has been intended to be used, for example, using formative, summative and diagnostic assessment appropriately (see Principle 1, Principle 4 and Principle 5);
- directly relates to the curriculum and is an integral part of the curriculum (see Principle 2);

114 Department of Myanmar Examinations, 2019.

- provides opportunity for all students to demonstrate their skills and capabilities (see Principle 3);
- is trustworthy and reliable so teachers can give constructive feedback (Principle 4) and grade accurately (see Principle 5);
- is inclusive (See Principle 6 and Principle 9);
- is transparent i.e., clear and consistent (see Principle 8);
- is fair for all students (see Principle 9);
- provides timely feedback that promotes learning (see Principle 10);
- manageable and efficient (see Principle 11);
- is designed by competent, well-informed educators (see Principle 12); and
- is used to facilitate student learning and grade achievement (see Principle 13).

In other words, validity is central to good educational assessment.

Unpacking validity

In Year 1, we defined validity as whether the test measures the skills and knowledge that it is intended to measure.[115] We now expand on this definition, looking at how validity impacts on how we can *use* assessment.

Validity is all about *the accuracy of the conclusions and interpretations* we make from the data we gather.[116]

Validity is:

- How ***accurately*** teachers can make meaning from the assessment data they gather; and
- How well teachers can ***justify*** and ***defend*** their interpretations about a student's learning progress.

115 Department of Myanmar Examinations, 2019.

116 Dirksen, 2013. Messick, 1995.

To ensure valid outcomes, we need to be mindful of validity throughout *all stages* of the assessment process:

Stage 1: Design and write an assessment tool

Stage 2: Implement the assessment task

Stage 3: Analyse the assessment data

Stage 4: Interpret our analysis of the data

Stage 5: Use of the interpretations (informing planning teaching and reporting).

Learning activity 2. Validity and educational assessment

The 'Why' challenge

The purpose of this activity is to help you to understand why validity is vital to assessment, how this links to the Basic Principles of Assessment, and ultimately, why it is important in education. In pairs, you will be given one principle to interrogate using the "Why" challenge. The aim is to unpack the reasons why each of the Basic Principles of Assessment is necessary for education.

Begin with the principle you will interrogate. You may need to break the principle into a couple of parts. For example, if you are focusing on Principle 1, one person would begin by saying:

- 'Each curriculum learning area and grade level should include a balanced combination of formative and summative assessments.'

The other person will respond with:

- *'Why*?'

In your pairs, you will then drill down into the ideas and unpack the logic that underpins your principle. Record your responses. For example:

- "Because formative assessment is important to support learning, while summative assessment is needed to assess the extent to which the student has learnt."
- *"Why?"*
- "Because, formative assessment enables the teacher to gauge how the student is learning as they progress through the content, but summative assessment is the end point."
- *"Why?"*
- "Because teachers need to work within the students' ZPD."
- "*Why?*"
- "Because the ZPD is the point at which a student is ready to learn."
- *"Why?"*
- "Because it is just above their current level of knowledge, so it's not too hard for them to learn, and it's not too easy."
- "*Why?"*
- "Because…"

When you and your partner have reached the point where you can no longer respond, look at your line of reasoning. You may find that there are a number of different lines of reasoning, which you can explore individually. Summarise your conclusions to answer the question: Why is your principle foundational to education?

When you have finished, share your findings with the class.

The 13 basic principles of assessment

1. Each curriculum learning area and grade level should include a balanced combination of formative and summative assessments. Diagnostic assessment may be used to assess prior learning and misconceptions.
2. Assessment should be built into curriculum design and should relate directly to the curriculum aims and learning outcomes. Assessment tasks should primarily reflect the nature of the discipline or subject. Consistent with the Basic Education Curriculum Framework (BECF), assessment will span the entire curriculum.

3. Assessment should also ensure that students have opportunities to demonstrate their individual skills and capabilities using a variety of assessment tools and instruments.
4. Formative assessment should first and foremost be utilised as a tool to motivate, create learning opportunities, and provide constructive ongoing feedback (to both students and teachers).
5. Summative assessment for the purpose of grading and as a quality assurance mechanism is undertaken less frequently than formative assessment and the results should be used by the teacher to improve teaching.
6. Assessment should include all basic education schools and students under the Ministry of Education (MoE), as well as others including monastic schools and government recognised private schools using the basic education curriculum.
7. Assessment tasks and associated criteria should be valid: i.e. they should effectively measure student attainment of the intended learning outcomes at the appropriate level.
8. Assessment should be based on clear and consistent processes and be subject to quality assurance of assessment.
9. Assessment should be inclusive and equitable as far as possible without compromising academic standards, i.e., 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.
10. Assessment processes should include timely feedback to students and/or parents that promotes learning and facilitates improvement as an integral part of teaching and learning (particularly in the case of formative assessment tasks), and where appropriate, also for summative tasks.
11. The amount of assessed work should be manageable for both students and their teachers without overloading staff or students.
12. Continuous professional development policy and strategy should enable all those involved in student assessment to become competent to undertake their roles and responsibilities. This will include implementation of the NAP in teacher education.

Assessments, including tests and exams, are not to be used as a pass/fail mechanism, but rather to be used to better facilitate students' learning and to grade students' achievement.

Types of validity in classroom assessment

There are many different types of validity. Each type of validity helps us to focus on different aspects of assessment to ensure that we are assessing and interpreting the student skills and knowledge accurately. In Year 1, we defined three types of validity: *content validity*, *construct validity and criterion-related validity*. Now, we examine these more closely to understand how they impact on our ability to accurately assess and analyse students' knowledge and skills.

Content validity

Content validity is about *what* you are testing.

- The assessment tool must include all the different aspects of the content that you intend to assess.
- The ways in which the topic or content is covered in the assessment must be fair.[117]
- Assessment should cover the *defined content* (this means it must come from the learning objectives for the unit, and link directly back to the National Curriculum).

Example: Grade 6 Mathematics fractions

To ensure content validity for a fractions test, we need to ask the following:

- What does the National Curriculum expect students *to know* about fractions at the Grade 6 level? What are the operations they expected to be able *to do* with fractions at the Grade 6 level?
- What are the *learning objectives* for the fractions Unit? Do the students know these learning objectives?
- Have the students been taught the content that will be tested? (is it fair?)
- Are all aspects of fractions that we have covered in class included in the test? Or has something been left out? (e.g., types of fractions and different operations with fractions)
- Can *all* students demonstrate their level of knowledge about fractions? (do we cover all ability levels represented in the class?)

117 Cohen, Manion & Morrison, 2007.

Construct validity

Construct validity is about *how well* your test or assessment tool is able to measure the content and ideas that you are assessing. *Are we actually measuring what we think we are measuring?*

This is about structure and design.

- Are the *types* of questions appropriate to measure the knowledge and skills you are testing?
- How well can students demonstrate what they know and can do using the questions and methods used to assess them?
- Does the marking scheme reflect accurately and fairly the level and complexity of skills that are being assessed?
- Does the assessment enable you to differentiate between the different levels of ability within the class?

Example: Grade 6 Mathematics fractions (continued)

Using the example of the Grade 6 fractions test, some questions we might ask as we check the construct validity might include:

- What is an appropriate way to assess students' knowledge and skill in fractions?
- What weighting needs to be placed on each aspect of fractions that will be assessed?
- Are we actually testing fractions, or is there some other clue or element that leads the students to give a particular answer – either correct or incorrect?
- How will the assessment tool enable you to ascertain the different levels of ability within the class?

Inappropriate methods of assessment reduce the construct validity. For example, asking students to create an artistic masterpiece to demonstrate their understanding of fractions will probably:

- ***NOT*** enable students to demonstrate the extent of their knowledge and skills relating to fractions

- ***NOT*** enable the teacher to interpret accurately the full range of what students know about fractions and what they can do.

In other words, we would not be testing what we say we are testing. When we write a test or assessment tool, we need to ask:

How can we enable students to demonstrate what they know and can do in the clearest way possible?

Criterion-related validity

Criterion-related validity is particularly important when we look at large-scale national testing, but also important to keep in mind when we assess in the classroom. Criterion-related validity looks at how well a test aligns with a different test that assesses similar skills and knowledge in the same domains or areas. This involves two sub-types of validity, **predictive validity,** and **concurrent validity**.

Predictive validity is about how strongly the results of a test are related to the results from a *different test at a future date*[118] that is designed to assess the same skills or knowledge. This is particularly important for large scale testing.

Example: Narrative writing tests:

Test 1 is taken by students when they are in Grade 5.

Test 2 is taken by the same students when they are in Grade 8.

Test 1 has predictive validity if it successfully predicts the student's relative performance for *Test 2*. If the results are strongly related (e.g. students who perform well in the first test also perform well in the second test), *and* we are confident that we are testing the same underlying skills (but at different levels of difficulty or sophistication) we may say that the predictive validity is strong.

118 Cohen, Manion & Morrison, 2007.

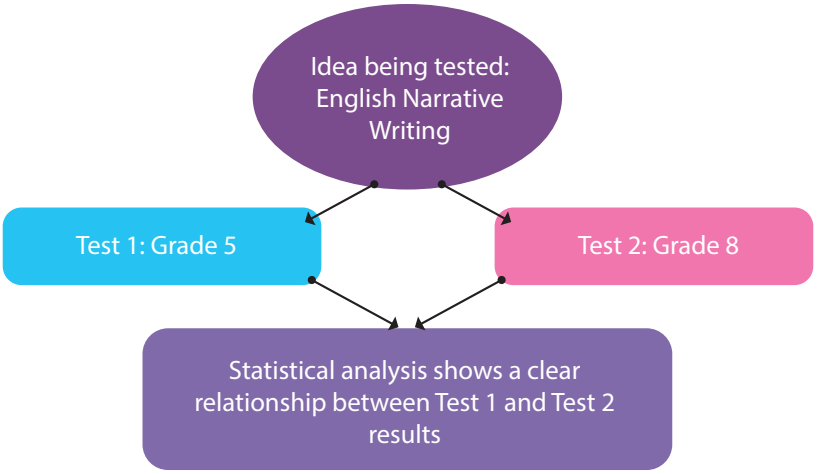


Figure 8.26. Example of predictive validity in educational testing

Concurrent validity refers to how strongly the results of two tests or assessments that assess the same things and are taken at a similar point in time align.[119]

We might test concurrent validity if we are trialling a new assessment task, and we might compare the students' results in the new test with another assessment task that has been used before and known to be valid and reliable. Classroom teachers may also check concurrent validity in less formal ways in the classroom.

Example: Narrative writing assessment, Grade 6

The teacher uses several different assessments during the Narrative Writing Unit to see how they align:

- A formal essay – a short story writing test assessed using a criteria-standards rubric (which has always been used)
- Classroom observations of students as they write (using the same criteria as the formal essay writing task to structure the observations)
- A student journal, where they record their ideas and practise their narrative writing skills.

119 Cohen, Manion & Morrison, 2007.

When the teacher looks at the results from each of these three types of assessment, the results all agree (i.e., they all confirm the same conclusions about your students' abilities in narrative writing). In this case, there is high concurrent validity.

If there are a lot of differences between the results from each of these assessments (low concurrent validity), further investigation would be needed to figure out why the results do not agree.

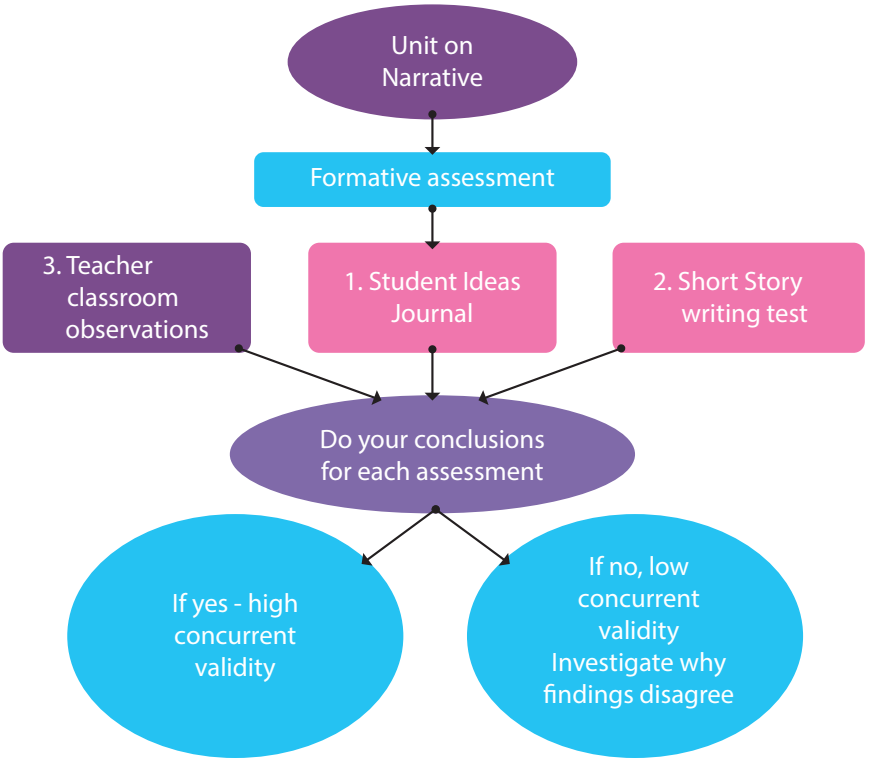


Figure 8.27. Example of concurrent validity in educational assessment

Learning activity 3. What types of validity are important for different contexts?

The purpose of this activity is to understand the importance of different forms of validity in assessment for different contexts and uses. Below are three short scenarios that refer to different assessments that have very different uses. Your task is to consider each example and identify the types of validity that are crucial to making

the assessment data useful. Discuss each scenario in small groups and report your findings back to the class.

Scenario 1. Classroom formative assessment

Your students are part way through a unit about the Geography of Myanmar. Some students seem to already have more knowledge than you had expected, so you write a short quiz to gauge what they already know and what they are ready to begin learning in relation to the content.

Consider the following:

- What types of validity will be important for this assessment task?
- Why are these types of validity important?
- How will you determine whether these forms of validity are met (what questions will you need to ask)?

Scenario 2. Classroom summative assessment

The next summative assessment task for English is to write (in English) a short recipe explaining how to make their favourite food. The students will need to show their knowledge about the structure of a recipe, imperative verbs, and food-related vocabulary. The English teacher has asked you to read the task and provide feedback about the task.

Consider the following:

- What types of validity will be important for this assessment task?
- Why are these types of validity important?
- How will you determine whether these forms of validity are met (what questions will you need to ask)?

Scenario 3. Formal large-scale assessment

As an assessment expert, you have been asked to review the validity of a new test that has been developed to indicate the general achievement levels of *all* Year 8 students

in Myanmar. The purpose of this test is to compare the student's general achievement with their overall achievement in their examinations. The test is expected to be predictive of the students' overall achievement and will be used when calculating their final grades. This test will be taken before the students' final examinations in Middle school.

Consider the following:

- What types of validity will be important for this assessment task?
- Why are these types of validity important?
- How will you determine whether these forms of validity are met (what questions will you need to ask)?

Reliability in classroom assessment

Another important property of assessment is **reliability**. *Reliability* refers to:

- How much we can *depend* on the data we have gathered about students and their learning;
- How *consistent* and *trustworthy* the information that we gather is; and
- Whether we can *reproduce* the results.[120]

When teachers assess, we need to be able *to trust that the data we collect from students reflects what they know and can do*. Teachers should ask questions such as:

- Do the students really know the answers, or are they able to make lucky guesses?[121]
- Are the results consistent, or do they contradict other data we have gathered?
- If we gave the students another assessment task that assesses the same thing, would we get the same results?
- If two assessors grade the same test, will they reach the same conclusions?
- Are there other factors (not related to the assessment task) that impact on the results?
- Are there other factors (not related to the student's ability level) that impact on how well they achieve in the assessment task?

120 Cohen, Manion and Morrison, 2007. Dirksen, 2013.
121 Heritage, 2013.

- Does the assessment task reflect accurately the extent of what each student knows and can do? (e.g., is it too hard or too easy?)

When we can trust that the data from the test reflect what students know and can do, we can draw more meaningful conclusions about the students' learning and teaching needs. We can then use that information to teach according to the students' needs.

For example, if students sit a *diagnostic* test (see Lesson 8.1.1) at the beginning of a Science unit about simple machines, we assess them according to:

- What they need to know already so that they can understand and develop the new skills in the content that will be taught. (Do any students need additional support? Are there areas of knowledge and skill that you might need to revise with the students before proceeding with the new information?)
- The extent of the students' current knowledge of the topic. (Do any students need extension?)

After we analyse the results from the diagnostic test, we use the information from the test to design activities and content that target their ZPDs.

If the information that we gather is not accurate and trustworthy, we may not target our teaching to the right levels of difficulty to enable students to progress in their learning (it might be too easy or too hard).

Types of reliability in assessment

Just like there are different types of validity, there are also different aspects of reliability:

1. *Stability over time* (e.g., if a test is given at the start of a unit of work and then at the end, you would expect the results to be consistent, with the second assessment yielding consistently better results).
2. *Consistency across different classes or groups* (e.g., if you use the same summative test for all Grade 8 students, are the results consistent across classes? Do they enable you to identify levels of student ability consistently?).
3. *Consistency within the test or assessment task* (e.g., if you assess an idea several times within a test, are the results from each of those related questions

consistent? If a student gets a more difficult question correct, but easier questions about the same topic or idea incorrect, this may indicate issues of reliability).

4. Equivalence between assessors (different assessors come to the same conclusions).
5. *Equivalence between assessment instruments* (this is usually relevant to large scale tests, for example, national testing – each year there needs to be equivalence between tests to ensure the test for Grade 5 yields similar results from year-to-year, even though each test will vary slightly).

Comparing reliability and validity

Sometimes reliability and validity can seem quite similar, so the following illustration may help you to understand the difference between them.

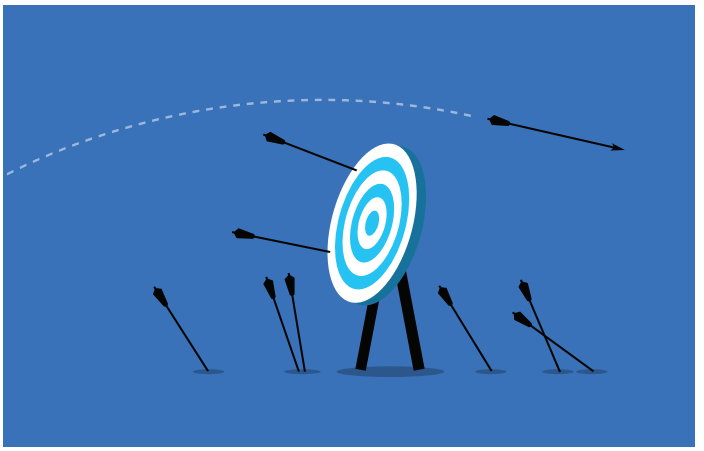


Figure 8.28. Unreliable and invalid

If you design an assessment task that is both invalid and unreliable, the students' responses will be inconsistent and inaccurate. We will *not* be able to draw accurate conclusions about their learning.

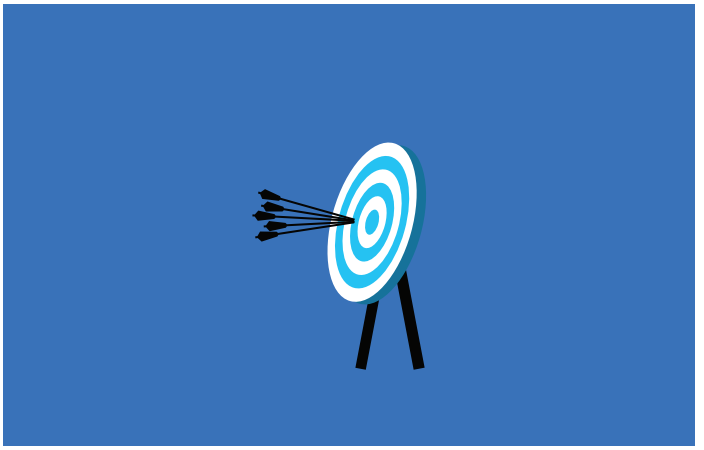


Figure 8.29. Reliable but invalid

Sometimes we can design an assessment tool that produces consistent results, but these results do not tell us what we need to know about the students' learning in the area we are assessing. While the results might be reliable, they are not valid (we are not measuring what we think we are measuring).

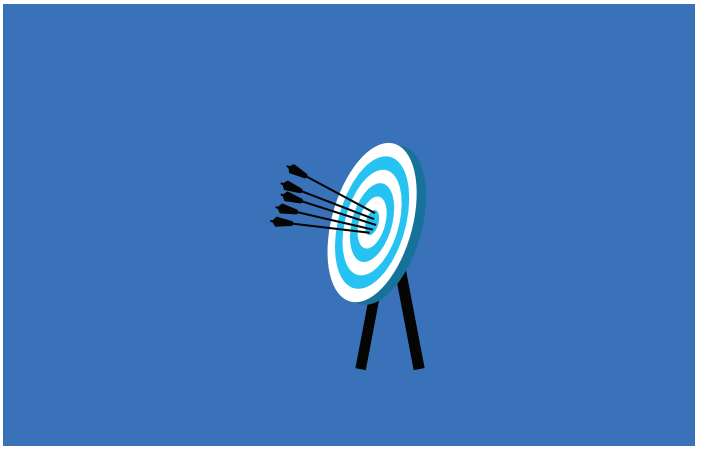


Figure 8.30. Reliable and valid

If the assessment task is both valid and reliable, we will have both consistency *and* accuracy. We will be able to trust that the data indicate accurately how students are progressing within the content area we have tested.

Remember: A test can be reliable but not valid, BUT A valid test MUST ALSO be reliable.

Learning activity 4. Bringing together reliability and validity in assessment

The purposeof this activity is to record purpose, instructions, examples. In small groups, think about a process you might go through to check validity and reliability of an assessment task at different points in the assessment process.

- Stage 1: Design and write an assessment tool
- Stage 2: Implement the assessment task
- Stage 3: Analyse the assessment data
- Stage 4: Interpret our analysis of the data
- Stage 5: Use interpretations (informing planning teaching and reporting).

Develop a flowchart that you can use to evaluate validity and reliability at each of the five stages of the assessment process. Each group will have a different stage to focus on. You may use the principles of assessment to guide the steps you write in the flowchart.

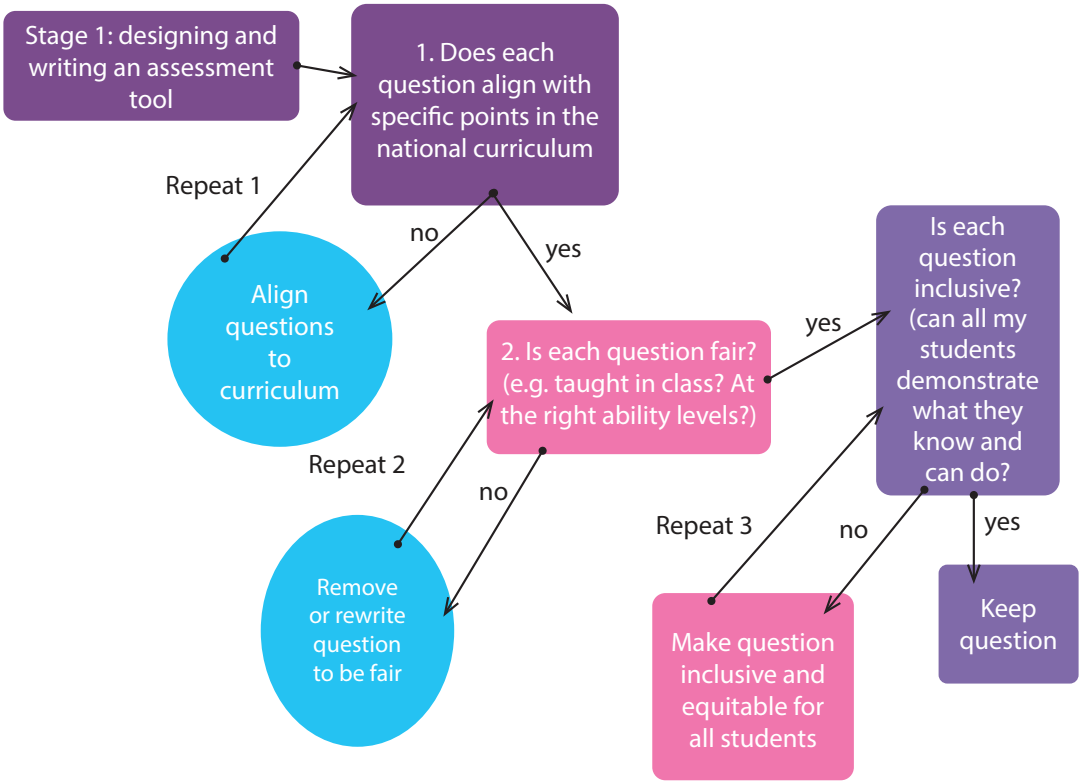


Figure 8.31. Example of flow chart to evaluate validity and reliability

8.2.2. Designing test questions

Expected learning outcomes

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

- Explain the difference between restricted response (close-ended) and constructed response (open-ended) questions;
- Describe different types of restricted response questions and why teachers might choose to use them;
- Discuss when constructed response questions are appropriate to use; and
- Identify strategies teachers can use to make constructed response questions fair and more objective.

Writing tests

In this section, we will focus on writing tests that enable us to gather reliable and valid data about our students' learning. Tests are a traditional form of assessment that are commonly used in the classroom and for large-scale assessments. They are often a time-efficient way to assess a broad range of knowledge and skill.

When we design a test, it is important to gain a deep understanding of the students' knowledge. To do this, we use different types of questions to gather different types of information about their learning. It is important to carefully select the type of questions that will assess a specific skill or area of knowledge best.

There are two general categories of question types used in tests:

- **Restricted response questions:** Students are either required to write a single word or phrase response or select the correct response from a list of options.
- **Constructed response questions:** Students are expected to answer a question by constructing their own response.

Table 8.15. Comparison between restricted response and constructed response questions

	Restricted response questions (close-ended questions)	Constructed response (Open-ended questions)
Description	Questions that require students to select the correct response from a list of possible answers OR write a single word or phrase to complete an idea.	Questions that require students to interpret the ideas and information that is needed and communicate their knowledge by constructing a response.
Examples of types of questions	True/false Matching Fill in the blanks Multiple Choice Questions (MCQs) Labeling a diagram	Short Answer Essay (extended response) Drawing a diagram
General Benefits	Objective (does not involve assessor's judgement) Easy to mark Easy to analyse Enables testing of a wide range of content	Assess high order thinking skills Allows students to explain thinking Requires students to integrate skills and communicate ideas Students are less likely to be able to earn marks by guessing
General Limitations	Students are not able to explain their reasoning. Usually cannot test high order thinking Can be difficult to write well (students may recognise the correct response due to other cues in the question). Students may be able to guess the correct answers Students cannot show their depth of knowledge in a subject or topic	Assessor's judgement is needed which can impact on reliability Student responses are less predictable More complex marking Some students with learning difficulties may be disadvantaged

Learning activity 1. Unpacking skills required for different types of test questions

This activity focuses on making informed decisions about the types of questions you might use to test different ideas and levels of thinking (e.g., lower or higher order thinking). In the table below is a list of concepts. Individually, you will decide whether it would be more appropriate to test these concepts using restricted (or close-ended) questions or constructed (open-ended) questions. State your reasons why you have chosen this form of question to test the idea.

In small groups, discuss your responses.

- Do you all agree?
- Are there points where you disagree?
- As a team, choose the approach for each topic.

Table 8.16. Deciding whether to use restricted or constructed response questions

Concepts to be tested	Restricted or constructed response?	Reasons for your choices
Example: Reporting on a science experiment	Constructed response	We would need to assess the students' knowledge of a science report structure. We would also need to assess their observations and interpretations of what they observe. This means that we need to assess skills and higher order thinking.
Science: Identifying the parts of a plant cell		
Mathematics: Demonstrating how to balance an equation		
English: Identifying English vocabulary (translating from English to Myanmar)		
Myanmar: Explaining the meaning of traditional folk tales and fables		
Myanmar: Reading comprehension		

Developing restricted response questions for tests

In this section, we build on your prior knowledge to develop test questions to maximise validity and reliability. We will focus on common restricted response questions that require students to:

- differentiate between accurate or inaccurate statements (True or False)
- identify matching items (Matching items)
- provide or select a specific word or phrase that completes an idea (Fill in the blank)
- select a response from a list of possible choices (Multiple choice questions).

Each of these question types restricts how the students respond to the question.

These questions tend to be more objective because the answers are either correct or incorrect and there is very little need for the assessor to use their own judgement to determine the score. However, they need to be written well to *avoid*:

- confusing students, who know the correct answer, with irrelevant or overly complex language, grammar, or ideas
- providing clues that enable students, who do not know the answer, to guess correctly.

Structure of restricted response questions

Restricted response questions usually have the following properties:

- A question **stem** (which contains the information and instructions that students need to answer the question)
- The **answer** (correct response(s))
- **Distractors** (possible response(s) that are not the correct answer).

Figure 8.32. Structure of restricted response questions

Sometimes a restricted question (or set of questions) will be linked to a stimulus. A stimulus is a chunk of information that may be presented as a text, picture, diagram, map (etc.). The restricted response questions are then based on the analysis of the stimulus.

Before writing any restricted response questions, it is important to remember the purpose is to gather information about your students that will inform your understanding of what they know and can do. This means that you should *not* write 'trick' questions. You also should not test opinions because students will not have a chance to explain their reasons behind their responses.

Deciding on a marking scheme for restricted response questions is relatively simple, as there is only one correct response. Students are either correct (1 mark) or incorrect (0 marks). Keeping the marking scheme simple enables us to analyse the data simply and clearly (as we will see in Lesson 8.2.4) and reduces the need for the assessor to make judgements about how many marks to award, which then increases the reliability of the scoring.

Learning activity 2. Identifying parts of restricted response questions

The purpose of this activity is encourage student teachers to understand what the features of restricted response questions might look like in a test. Study the following image[122] and answer the questions below:

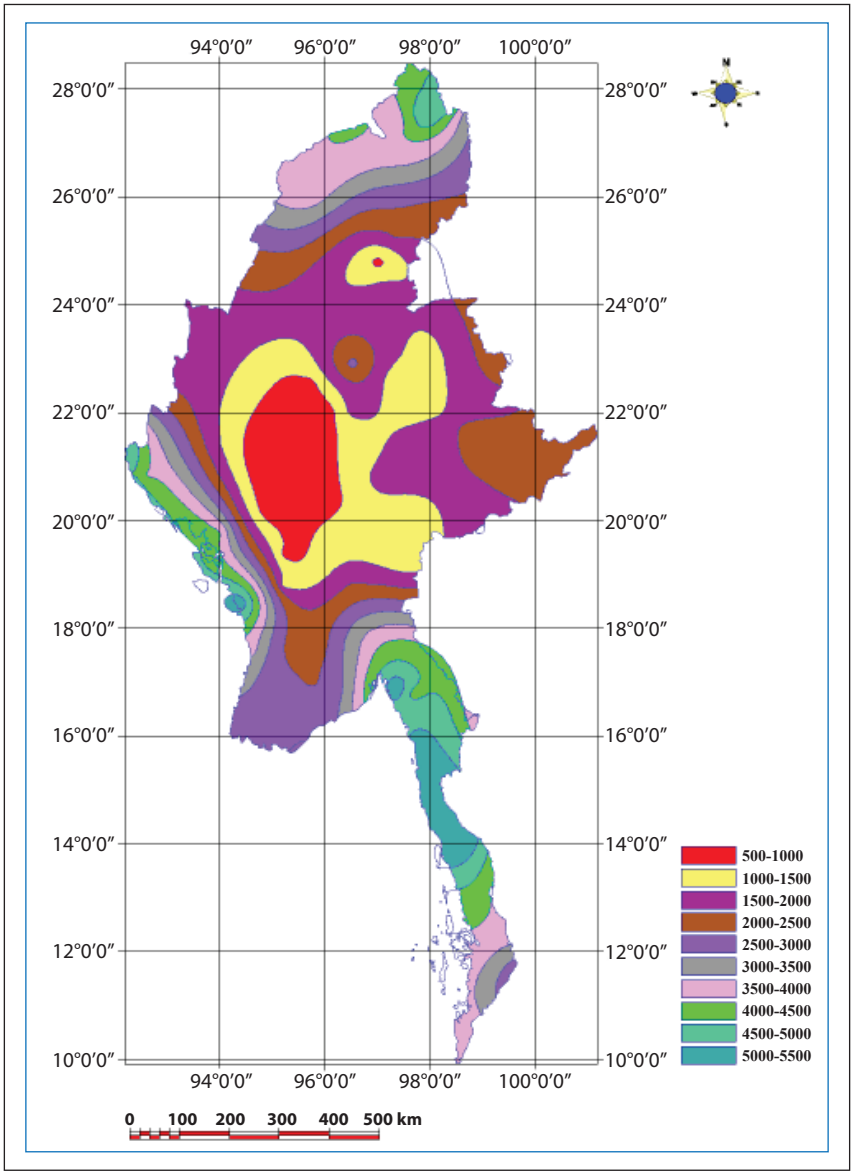


Figure 8.33. Average annual rainfall across Myanmar

122 Regional Integrated Multi-Hazard Early Warning System (RIMES), n.d. p.3.

1. The red area on the map indicates high rainfall. True/False?
2. Fill in the blanks in the following text-box, using these words: ocean, mountain, monsoons, rainfall, dry, 5500ml, 25000ml, 500ml.

The _____ in Myanmar varies greatly across the country from _____ per year in the centre to _____ per year in some coastal areas. Myanmar's weather is influenced by the _____ although the central area of Myanmar is _____ because of the_____.

3. The area with the highest rainfall sits between 14° and 16° _____.

    a) Longitude
    b) Fahrenheit
    c) Latitude
    d) Celsius

How do students need to interact with the stimulus to answer the questions? What type of information do the question stems contain? How are the possible responses structured?

Designing restricted response questions

When we write tests, we need to make informed decisions about the types of questions that will give us the most valid and reliable information about student learning. In this section, we will look closely at four types of restricted response questions:

- True/False
- Matching
- Fill in the blanks
- Multiple choice questions.

For each type of question, we will look at some of the benefits and limitations so that you can make an informed choice about the type of question that would test a particular idea the best.

1. True/False questions require students to identify whether a statement is true or not. They can be used to check students' understanding of facts, ideas, and concepts and whether they hold misconceptions about content.

Questions should be written so that a person who knows the content will recognise the answer obviously.

For example:

Identify whether each statement is true or false by circling the correct answer:

Fresh water is a necessary ingredient to sustain human life	True	False
The chemical name for water is oxygen dioxide	True	False
Clouds are made of water vapour	True	False
Precipitation is water (frozen or liquid) that forms in the atmosphere and falls to the Earth	True	False
The driest area of Myanmar is the far north	True	False

Benefits of True/False questions:

- You can test a lot of content quickly and efficiently (they are often quick for students to answer).
- They are easy and objective to mark.

Limitations:

- There is a 50/50 chance that someone who does not know the content can guess the correct answer (guessing can impact on the reliability of the data).
- You need to have a large number of questions to achieve consistency in the results (because of the high chance of guessing).
- They usually only test low order thinking (e.g., remember and understand levels in Bloom's Taxonomy).
- The statements need to be absolutely true or false, so they cannot be used for all subjects and topics, particularly when there are differences of opinion or "grey areas".

- There is often a lot of reading required to answer these questions, so students with reading or language difficulties may be disadvantaged – particularly if the grammar is complex.
- Questions that are false do not necessarily test that the student knows the *correct* answer.

Tips for writing:

- Make sure the question is clearly either true or false.
- Test facts, not opinions.
- Make sure that the language used to write the questions is clear and pitched at the right level for the students to understand.
- Include enough questions to ensure that you can identify the students' level of understanding clearly (making sure the student's responses are not just a lucky guess).

2. Matching questions assess students' knowledge about objects, facts or ideas that are related to each other (e.g., words and definitions; cause and effect; things that belong together). The ideas are usually structured as two lists or columns, where one list contains information that will match with information in the other column. For example:

Match the measure with the appropriate items:

Measures	Items
A packet of	Apples
A bar of	Bananas
A bottle of	Chocolate
A sack of	Oil
A loaf of	Biscuits
	Rice

Benefits of matching questions:

- They can test quite a lot of content in one question.
- Quite easy to develop, because of the simplicity of the structure.

- Helpful for students with reading difficulties or whose first language is not the language of instruction. This is because the reading load is often (but not always) low.
- There is only one correct answer for each pair, which means that it is objective to mark.

Limitations:

- Matching questions are not always appropriate for every subject or topic.
- They tend to assess low order thinking skills (i.e., *remember* and *understand* levels in Bloom's taxonomy).
- It can be difficult to think of matches that have more than one likely option where students who know the correct answer will be able to recognise it, but students who do not know the correct answer cannot make a correct selection by deduction.
- These questions can only test limited types of content, where there are pairs of information.
- One error can lead to multiple errors.

Tips for writing:

- Do not have the same number of possible selections as there are items to match. This way it is harder for a student to guess the correct answer by elimination.
- Try to have more than one plausible option (but only one correct option) for each item students need to match. This way, students who know the answer will select it, while those who are unsure are less likely to guess the correct response.
- Don't have too many extra possible (but incorrect) matches, because it can be confusing for students.

3. **Fill in the blank** questions are presented as text with words or phrases that have been taken out. The student is required to interpret the context of the passage of writing and respond by completing the text using the correct word or phrase.

Sometimes the words or phrases that are missing are provided as a list from which the students can select the correct response, but sometimes students are required to know what the correct response should be. For example:

Study the map and fill in the blanks:

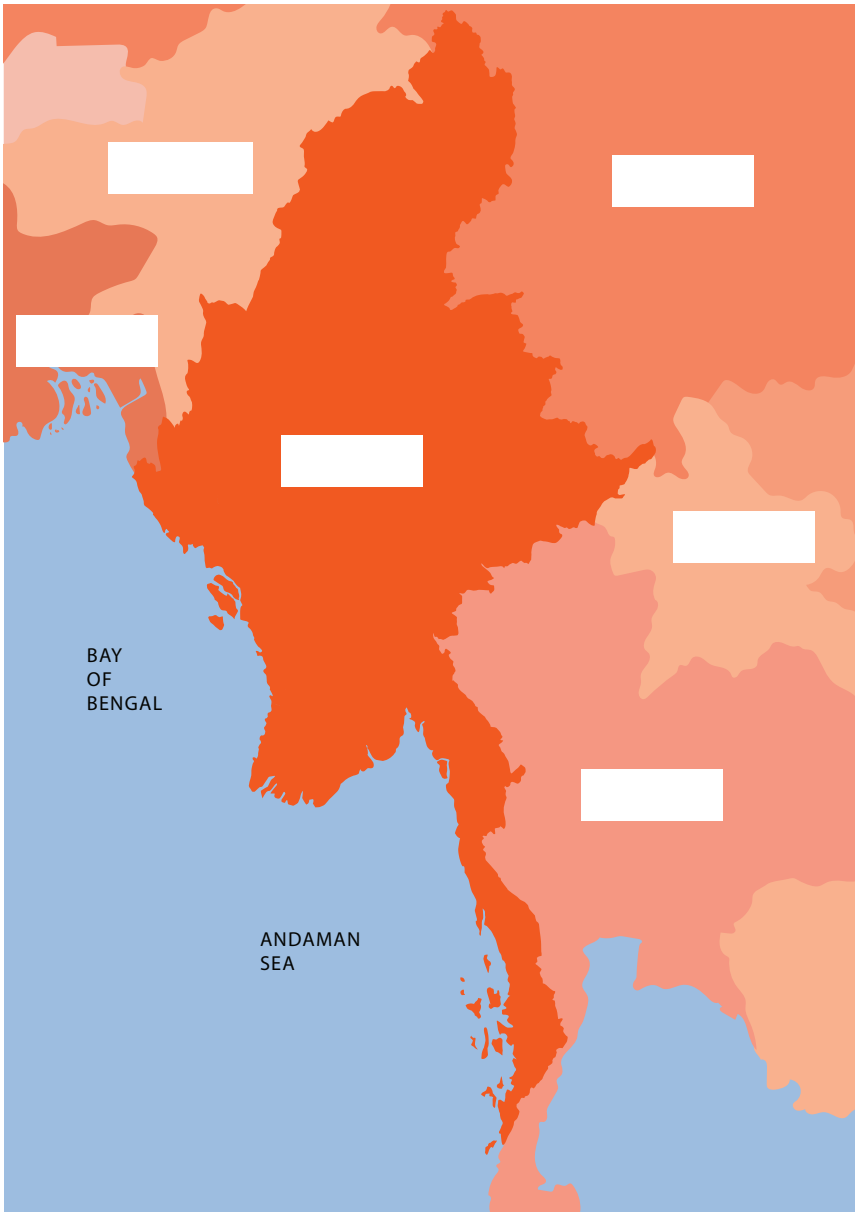


Figure 8.34. Fill in the country names

Myanmar shares its border with _____ other countries. _____ of these countries share long borders with Myanmar, while _____ other countries share smaller sections of Myanmar's borders.

The following countries share their borders with Myanmar: _____ sits to the north and north east, _____ is in the south east, and _____ is north west of Myanmar. _____ sits to the west and _____ is in the east.

Choices:

Two	Three	Four	Five	Six	
Bangladesh	China	Laos	India	Thailand	Vietnam

Benefits of fill in the blank questions:

- They can be useful for testing subject specific vocabulary and facts.
- Students can show their knowledge without having to construct the answer themselves.

Limitations:

- Too many distractors can be confusing.
- Sometimes responses may be guessed through deduction or other clues within the text.
- It can be difficult to know what skills you are assessing. For example, are you assessing reading comprehension or knowledge of the information?
- They can take a long time for students to complete because they need to interpret the context and decide which response fits best.
- Students are not able to explain their choice of response.
- They usually cannot assess high order thinking.
- There may be issues with marking if there is no list of possible responses to select from.

Tips for writing:

- Provide lists with one or more options than the number of blanks that need to be filled (although do not provide too many additional options, as this could be confusing to students who know the answers).
- Ensure that there are no grammatical or contextual clues that give away the answers.

4. Multiple choice questions (MCQ) are common in professionally designed and diagnostic tests, but they can be difficult to design well.[123]

Many teachers use them in classroom assessment as well. This is because they are easy to mark, and they also have potential to assess some higher order thinking. When designed well, MCQs can help teachers to identify a range of common misconceptions that students might have in relation to particular parts of the content.

Multiple choice questions have a clear "stimulus" or question. This might include a piece of text, a picture or diagram, an equation or graph that students need to analyse and interpret. The students are given a range of possible responses from which they can select their answers (one of which is the correct answer).

Example 1:

Calculate and simplify the answer to the following question: $\frac{4}{6} \div \frac{2}{5} = \square$

a) $\frac{2}{15}$

b) $1\frac{2}{3}$

c) $\frac{2}{30}$

d) $\frac{5}{3}$

Example 2:

[The stimulus for this question is short version of the tale *How the Coconut Came to Myanmar*, which would be provided for students to read, followed by the questions].

123 Iasonas & Athanasou, 2009.

In the folk tale, *How the Coconut Came to Myanmar*, the mischief-maker was executed because he would never be _____.

a) a rich subject
b) a useful subject
c) **a good subject**
d) a happy subject

Benefits of MCQs:

- MCQs are quick to mark.
- There is one clear correct response.
- They can be easily analysed.
- They can help to differentiate between different misconceptions among the students when the distractors are well written.
- If the questions are well written, the chances of guessing the correct answer is low.
- It is possible to use them for higher-order thinking, such as analysis and evaluation (although these can be difficult to write well).

Limitations of MCQs

- Students are not able to explain why they selected a particular answer – this may be an issue for testing higher-order thinking.
- Some questions may include a lot of reading (particularly if the distractors are long), which can disadvantage some students, particularly those with learning difficulties.
- They should never test the student's opinion.
- They can be very difficult to write well, because each distractor should be plausible even though it is incorrect.
- Authors need to have a deep understanding of the content matter and common misunderstandings that occur.
- They are often time consuming to write.
- It can be hard to tell the difference between whether a student selected the incorrect answer because they have misunderstood an idea or if they just guessed the wrong answer.

Tips for writing an MCQ stem:

- Only include relevant information that students need in order to answer the question (irrelevant or too much information can confuse students who know the correct answer. This reduces the validity and reliability of the response)
- Write the stem using positive language where possible. Negatives can confuse students or may be missed by students when they read it.
- Make sure that the language is straightforward and unambiguous.

Tips for writing MCQ distractors and correct responses:

- Make sure that there is only ONE clear, correct answer.
- Make sure that the distractors are plausible (preferably demonstrating common misconceptions the students might have).
- Keep the distractors a similar length to the correct response.
- Make sure the difficulty of the language is similar across all possible responses.
- Make sure there are no grammatical cues that will give away the correct answer to a student who doesn't know the information being tested.
- There should be about 4 response options (1 correct answer and 3 distractors).

    - Too few options – correct guesses are more likely.
    - Too many options - can be confusing for the student AND may not provide useful information about what students know (it's hard to write plausible incorrect responses).

- Try not to use options, such as "I don't know", "All of the above" or "None of the above" because these responses:

    - Usually do not provide specific information about what students know.
    - Are often the selection of choice for students who are unsure about the answer.

Learning activity 3. Writing restricted response questions

The purpose of this activity is to provide opportunity for you to develop restricted response questions appropriate to the content you are assessing, keeping their benefits and limitations in mind.

For this activity, you will be working in groups of four or five.

With reference to the integrated unit about the *sustainable garden project* (see Lesson 8.1.2), your group will unpack different subject areas, topics, and skills that are involved in this unit of work.

For example, to complete a project involving a sustainable garden, students may need to develop knowledge about measurement (Maths), plants (Science), and climate and terrain suitable for growing different types of plants (Geography), etc. They will also need to demonstrate reading comprehension skills, scientific writing, life-skills, etc.

After unpacking the subjects, topics, knowledge, and skills required for a sustainable garden unit, you and your group will decide which subject area and topic you would like to focus on. Now, you will write restricted questions for a test within that subject area and topic to find out what your students know and can do.

Each person in the group will focus on *one type* of the restricted response questions that have discussed (if you have five people in your group, you may have two people working on one type of question). Keeping the benefits, limitations, and tips for writing in mind, create two to three restricted response questions for an end of unit test. The person who is creating true/false questions, may need to write more (remembering that it is easier for the students to guess the correct answer).

As a group, check the quality of each question. What needs to be altered or changed to make each question more reliable and valid? As whole class, discuss the challenges teachers face when they write restricted response questions. Keep your questions because you will continue to work in your groups over the next three periods.

Constructed response questions

Open-ended, constructed response questions can be very valuable in:

- Checking or confirming the validity and reliability of the restricted response questions
- Allowing students to explain their reasoning behind their answers
- Enabling students to demonstrate their depth of understanding of the content.

Constructed response questions usually take the form of short answer and extended response questions. They enable students to demonstrate their knowledge and skills differently from restricted response questions and they have a different purpose. Short answer and extended response questions allow students to show greater depth in their understanding and to explain and justify their reasoning about a topic. This enables teachers to assess higher order thinking (remember Bloom's Taxonomy in Lesson 8.1.3).

However, there is much more room for variation in relation to the students' responses, which can impact on the reliability and validity of the assessment.

This is because there is more reliance on the judgement of the assessors. The marking scheme also tends to be more complex. In this lesson, we will discuss ways to develop short-answer questions and extended response questions to maximise validity and reliability.

1. **Short-answer questions** require students to interpret the information that they need to present, construct the response, and communicate their knowledge. This means that:

    - There will be more variation in student responses than for restricted select-response questions.
    - Questions may have partial credit, which means that there may be a range of marks that are allocated to the question:

        - full credit (where is when a student earns all marks for the question);
        - no credit (where the response is incorrect and no marks are awarded); and
        - partial credit (where the student has provided a part of the answer, but has not answered fully, so they receive a portion of the marks available).

This poses issues in relation to validity and reliability because teachers need to use their judgement to determine the extent to which the question has been answered and then decide how many marks to allocate to the response.

We design **answer keys** to limit the need for individual assessor judgement and ensure that the question is being marked in the same way by all assessors. The answer key provides the possible correct responses to the question along with the mark allocations. For example, consider the following short answer question and its answer key:

Explain the difference between heat and temperature. (4 marks)

_____

_____

_____

_____

_____

_____

Answer key:

- Heat is the energy of a material [definition – 1 mark].
- Heat is measured in joules [unit of measurement – 1 mark].
- Temperature is the average kinetic energy of the particles in the material [definition *must* specify kinetic energy – 1 mark].
- Temperature is measured in degrees Celsius, Fahrenheit, or Kelvin. [Students only need to identify ONE unit of measurement – 1 mark].

Tips for writing short-answer questions:

- The question should have clear parameters (not too open-ended).
- The range of correct responses needs to be articulated in the answer key along with the allocation of marks.

- Awarding partial credit must be consistent.
- Create a clear answer key that articulates.

    - The full correct response and any variations
    - Where and how partial credit is awarded (e.g., acceptable variations on an answer)
    - Allocation of marks.

2. **Extended response questions** require students to interpret the skills and knowledge that they need to demonstrate and then they construct a detailed response. These are usually in the form of an essay. Like short-answer questions, extended response questions have potential to assess higher order thinking skills. In addition, they can also examine understanding of text structure and organisation and flow of thought.

For example, an extended response prompt may be:

Critically evaluate the following proverb "Bad children? Blame the parents."[124]

Issues with extended response questions include:

- A much greater reliance on the judgement of the assessor than for other question types, because of the complexity and open nature of these types of questions;
- Prone to issues of validity and reliability, because of the variation in possible student responses combined with the level of judgement required from the assessors; and
- Fairness may be an issue, particularly for students with learning difficulties or other additional needs that impact on their ability to construct a response and communicate it.

Tips to increase validity and reliability:

- Marking rubrics should be clear and articulate all the criteria against which the students' responses will be measured (see the section on assessment rubrics in Lesson 8.1.4);

124 Myanmar Guide and Reviews 2019.

- Ensure that students know and understand the criteria that their work will be measured against;
- Teachers should use the same marking rubrics and the same marking scheme; and
- There should be moderation of results – if there is more than one assessor, they should compare and align the ways in which they judge the quality of the work.

Learning activity 4. Developing constructed response questions

The purpose of this activity is to provide opportunity for you to develop constructed response questions appropriate to the content you are assessing.

In the group that you worked in for learning activity 3, continue to write questions for the test on sustainability.

In your groups, work as pairs (or a group of three if there are five people in your group) to develop constructed response questions to add to your test. As a group, you will critique and edit the questions.

- Pair 1 will develop two to three short answer questions with answer keys.
- Pair 2 will develop an extended response question with rubrics (see section on assessment rubrics in Lesson 8.1.4).

Keep the importance of validity and reliability in mind as you develop the questions.

When you have developed your questions, review, edit, and critique them as a group.

As whole class, discuss the challenges teachers face when they write constructed response questions. Keep your questions from learning activity 3 and learning activity 4 because you will continue to work in your groups over the next two periods.

8.2.3. Designing a whole test – putting it together

Expected learning outcomes

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

- Discuss how teachers can identify the skills and knowledge that they need to include in a test;
- Discuss why using different types of questions in a test can enable students to show what they know and can do;
- Discuss the purpose of a table of specifications and identify the steps used to design a table of specifications for a test;
- Identify test questions with different levels of difficulty; and
- Work as a team to create a test.

The process of designing a test

In Year 1, and as you have worked through this unit, you have encountered a few strategies teachers can use to improve the validity and reliability of a test. You also discussed the difference between extended response questions and restricted response questions. As we develop tests, it is important to remember that we need to be able to trust the data we collect from students, so the test design must enable students to demonstrate the extent of their knowledge.

This means that the testing tool needs to be able to gather valid and reliable data that we can analyse. With trustworthy and accurate data we can determine a student's ZPD, and use this information to inform learning and teaching decisions.

We may also use the results for reporting purposes. The decisions we make, based on the analysis and interpretation of the data, should be accurate, defensible, and justifiable (that is, valid).

The process of designing a test is about balancing a range of elements to ensure that the appropriate breadth of the topics and skills are covered along with assessing the depth of students' knowledge and abilities. We also need to balance the need to assess higher-order thinking skills with a level of subjective judgement by the assessors.

The process of test writing needs to ensure that quality is maintained throughout the testing process. Quality assurance is important, and one way to do this is through panelling. Panelling is a collaborative process to develop and refine test questions and structures.

In Myanmar, it is expected that teams of teachers 'workshop' to develop test questions - as you have been doing over the last two periods. For classroom tests, teachers may panel with each other to ensure that the quality of the test is high.

Each year, there are also school-level, regional-level, and national-level panelling workshops (depending on the level of testing that is being developed). This panelling is conducted in cooperation with the Department of Myanmar Examination (DME). Panelling should occur at different stages throughout the test writing process to edit and check the quality of questions, marking schemes, and the overall quality of the assessment.

Developing a test

Step 1: Designing the test – we can build a **table of specifications**[125] to guide our process

- What is the purpose of the test? How will the results be used?
- What topics or information need to be tested (breadth)?
- How deeply do we need to test each topic (depth)?
- What elements, information or skills within each topic do we need to test to gain a good understanding of the students' level of learning?
- What question types will enable the students to show their knowledge and/or skills best?

Step 2: Writing the test

- Follow the table of specifications as you write the test. If you are working with a team of teachers, allocate different topics or questions to different teachers to write.
- Write more questions than needed so you can select the best ones.
- Ensure that you have a range of ways in which students can demonstrate their knowledge and skills.

125 Lamprianou & Athanasou, 2009.

- Check key content and skills in different ways to ensure that you can cross-check the students' responses and see if they are consistent.
- Think about the test structure (e.g., ordering the difficulty of the questions, positioning different question types, etc. How will students engage in the questions best? What structure will give them the best opportunity to show what they can do?

Step 3: Reviewing and editing the test

It is important to work with others to review the test:

- Select the final questions that you will use.
- Check structure to ensure that students can access the questions easily.
- Create a marking guide with correct responses, short answer responses, rubrics, and systems for scoring.

Step 4: Trial the test

- Often in teaching, we run out of time to trial assessments, however, this is an important step in finding out whether there are any issues or difficulties that have not been picked up by the test writing team.
- Check that the marking guide works.

Step 5: Do a final edit and revision of the test before it is administered.

Learning activity 1. Working as a team to develop a test

The purpose of this activity is to enable student teachers to begin to engage with a formal test writing process.

For this activity, you will continue to work in your group of four to five people.

In the last two periods, you decided on the subject area you would focus on for writing test questions for the integrated unit on sustainable gardening (see Lesson 8.2.2). Now you will design the test, using the questions you have developed and writing more questions if they are needed.

As a group, discuss the following questions:

- What is the purpose of the test? How will the results be used?
- What topics or information (within your subject area) need to be tested (breadth)?
- How deeply do you need to test each topic (depth)? (Consider also how you might include high order thinking.)
- What elements, information or skills within each topic do you need to test to gain a good understanding of the students' level of learning?
- What question types will enable the students to show their knowledge and/or skills best in your subject area?

When you have decided the breadth and depth required for the test, think about how many periods or lessons may have been dedicated to teaching the knowledge and skills you will test.

Next, you will develop a hypothetical table of specifications for your test.

Designing a table of specifications

In this section, we will focus on designing assessment by constructing a table of specifications, which is a blueprint, or plan, that guides the design of the assessment tool to increase the validity of the test.[126]

We design a table of specifications before writing a test to ensure that we have covered all the aspects of the test that are needed. In this way, the test is balanced (i.e. it does not under-assess one aspect, and over-assess another). As we work through the process of designing a table of specifications, we will use the example of the integrated unit of work that you looked at in Sub-unit 8.1. This unit of work focussed on sustainability and the students built a garden. Let us say that as part of this unit, the students studied:

- Ratios
- Perimeter
- Area
- Volume.

126 Lamprianou & Athanasou, 2009.

They needed to calculate the sizes, shapes and volumes of the garden beds and other features in the garden. They also needed to calculate how much soil and fertiliser would be needed.

Write a table of specifications:

Step 1. What learning outcomes are you going to assess?

Align the learning outcomes (LOs) that you have worked towards during class instruction with the National Curriculum. These outcomes must be assessed in your test.

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

- LO 1: Model relationships between quantities using ratios
- LO 2: Calculate the perimeter of common and composite 2D shapes
- LO 3: Calculate areas of common and composite 2D shapes
- LO 4: Calculate the volume of prisms, cones, and pyramids

Table 8.17. Designing a table of specifications – identify the learning outcomes

Content	Learning Outcomes				Time	Weighting
	LO1	LO2	LO3	LO4		

Step 2. What are the topics you will assess?

The number of outcomes and topics that you specify will depend on the purpose of the test. For example, if you are writing a test to see how students have understood the content so far, there are likely to be fewer learning outcomes, but an end-of-unit test should include the main learning outcomes that need to be tested for that unit. If you are writing an exam, there may be even more learning outcomes.

For example:

- Topic 1 - ratios
- Topic 2 - perimeter of 2D shapes
- Topic 3 - area of 2D shapes
- Topic 4 - volume.

Table 8.18. Designing a table of specifications – identifying topics, step one

Content	Learning Outcomes				Time	Weighting
	LO1	LO2	LO3	LO4		
Topic 1						
Topic 2						
Topic 3						
Topic 4						

Step 3. How much time and emphasis were spent teaching each topic (e.g., how many periods did you spend teaching it)?

The time spent in class on each topic can indicate the level of complexity and emphasis that is placed on that aspect of study, and how important it is for future so it can be used to determine the *weighting* of each topic in the test. The marks and types of questions will be based on the weighting.

For example:

- Topic 1 – ratios = 5 periods
- Topic 2 – perimeter of 2D shapes = 6 periods
- Topic 3 – area of 2D shapes = 6 periods
- Topic 4 – volume = 3 periods.

Table 8.19a. Designing a table of specifications – identifying time for topics

Content	Learning Outcomes				Time	Weighting
	LO1	LO2	LO3	LO4		
Topic 1	5	-	-	-	5 periods	
Topic 2	-	6	-	-	6 periods	
Topic 3	-	-	6	-	6 periods	
Topic 4	-	-	-	3	3 periods	

**A topic may cover more than one LO.*

Step 4. Calculate the weighting for each topic

Next, we need to see what weighting each topic needs to be have. The more emphasis that has been placed on a particular topic, the more weight it should have within the test. To calculate the weighting:

$$\frac{Number\ of\ periods\ spent\ on\ topic}{Total\ periods\ for\ the\ unit} \times 100 = \%\ weighting$$

Note that the weighting determines the percentage of marks that will be allocated to each topic:

Table 8.19b. Designing a table of specifications – identifying time for topics with %

Content	Learning Outcomes				Time	Weighting
	LO1	LO2	LO3	LO4		
Topic 1	5	-	-	-	5 periods	25%
Topic 2	-	6	-	-	6 periods	30%
Topic 3	-	-	6	-	6 periods	30%
Topic 4	-	-	-	3	3 periods	15%
					20 periods	100%

Step 5a. What levels of difficulty will you need to test?

Use Bloom's Taxonomy to guide the levels of difficulty. When we design a test, we need to be able to differentiate between the different levels of ability student have within the class. This enables teachers to plan for learning and teaching that meets a range of different student ZPDs within the class. It also helps in reporting student progress more accurately.

Think about:

- The ability levels in your class (what are the lowest and highest proficiency levels?)
- The level of difficulty outlined in the National Curriculum at the Grade level you are testing.

Step 5b: What types of questions are appropriate to test the skills and knowledge (restricted versus unrestricted question types)?

As we have already discussed, different types of questions will help you to assess different levels of knowledge and skills.

Table 8.20. Designing a table of specifications, allocating levels of difficulty within the test

	Restricted/closed questions			**TOTAL marks**	**Unrestricted/open questions**				**TOTAL marks**	
Content	Remember	Understand	Apply		Remember	Understand	Apply	Above Apply (analyse, evaluate, create		Weighting
TOPIC 1	2	3	2	7	-	-	4	2	6	25%
TOPIC 2	2	3	2	7	-	2	4	2	8	30%
TOPIC 3	2	3	2	7	-	2	4	2	8	30%
TOPIC 4	1	2	2	5	-	-	2	-	2	15%
				26					24	

Note that the total marks for this test is 50. Essentially, it does not matter how many marks the test is worth (some tests need more questions, with more marks, while others need less). The main thing to remember is that the spread of the questions and marks roughly represents the importance and emphasis of the topics and learning outcomes that are being assessed.

Even though this process is designed to increase the validity of the test, there will always be an element of subjectivity in relation to the choices we make as we develop the test. We try to minimise subjectivity in test writing by collaborating with others to prepare a table of specifications and write the test. It is important to remember that at the classroom level, this is not always an exact science.

Learning activity 2. Creating a table of specifications

The purpose of this activity is to provide you with experience in designing a table of specifications for a test.

Again, you will work in the same groups. Using the restricted response and constructed response questions you have developed in Lesson 8.2.2, and your group's discussion about setting up the test, create a table of specifications for your test. Follow the steps outlined in this section.

Discussion:

- What are the benefits of developing a table of specifications for tests?
- What challenges did your group face as you developed the table of specifications?
- How did you overcome these challenges?
- What challenges might you face in schools as you develop tests?

8.2.4. Analysing test data

Expected learning outcomes

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

- Identify how difficult test questions are by analysing student responses;
- Discuss how teachers use test data to plan for student learning and to report learning progress; and
- Identify patterns of reliability and validity from assessment data.

Analysing restricted response questions

Until now, we have focussed on developing tests, keeping validity and reliability in mind. Now, we will discuss how teachers can analyse test data to understand more fully the needs of individual students, small groups of students and the class.

Often when teachers analyse student work, there is a focus on class averages, total scores and the spread of scores across the cohort of students. Some of these statistics were discussed in Year 1.

However, at the classroom level, these statistics only provide us with limited information about student learning. In this lesson, we will look at a strategy to analyse student data to check:

- The rough level of reliability and validity of the test (and determine if some questions need to be revised)
- The relative difficulty of test questions in relation to your students
- Aspects of learning that students have mastered
- Aspects of learning that students have found challenging
- Aspects of learning that particular groups of students have found challenging.

We will begin by creating a chart to analyse the restricted response questions. These charts can be created in spreadsheet programmes such as Excel, but they can also be constructed by hand relatively easily if necessary.

Because restricted response questions have one correct response, the students either answer correctly (1 mark) or incorrectly (0 mark), we can record this data directly into the chart. Note that these charts are often easier to analyse and interpret when you focus on questions that test similar underlying ideas and skills.

Step 1: Set up the chart with the students' names in the left column and the question numbers across the top. If you are creating the chart by hand, you may wish to order the students from the highest score at the top, to the lowest score at the bottom to begin with.

Table 8.21. Creating a chart to analyse test data

Answers									Total
Names	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	8 marks
Student 1									
Student 2									
Student 3									
Student 4									
Student 5									
Student 6									
Student 7									
Student 8									
Student 9									

Step 2: Enter each student's results for each question – '1' if they answered correctly or '0' if they answered incorrectly. You can colour either the '1' or '0' score to make it easier to analyse the patterns.

Add the total score for each student and record it in the right-hand column. Order the students from the highest score at the top to the lowest score at the bottom (the purpose of this is to analyse the different learning needs of the students more easily). If you are using Excel, do a 'data sort' (highlighting the rows with the students' names and scores, sort using the "Total" column). Make sure that the student names still align with the correct data when the sort is completed.

Table 8.22. Creating a chart to analyse test data – entering the data and sorting by total marks

Answers									Total
Names	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	8 marks
Student 1	1	1	1	1	1	1	1	1	8
Student 2	1	1	1	1	0	1	1	1	7
Student 3	1	1	1	0	0	1	1	1	6
Student 4	1	1	1	0	0	1	0	1	5
Student 5	1	1	1	0	0	0	1	1	5
Student 6	1	0	1	1	0	1	0	1	5
Student 7	1	1	1	0	0	1	0	0	4
Student 8	1	0	1	1	0	1	0	0	4
Student 9	1	0	0	1	1	0	0	0	3

Step 3: Calculate the total number of correct responses for each question and record the total number of correct responses at the bottom of each column.

Order the questions from the easiest at the left (the highest number of correct responses) to the hardest at the right (the least number of correct responses). If you are doing this using Excel, you can do a data sort (highlighting the question columns and sorting by the "Total" row. If you are doing this by hand, you may wish to cut the columns and rearrange them in order, then stick them back together.

Make sure that the students' results remain correctly in line. You will notice that the questions are most likely no longer in order.

Table 8.23. Creating a chart to analyse test data – sorting the questions by order of difficulty

Answers									Total
Names	Q1	Q3	Q6	Q2	Q8	Q4	Q7	Q5	8 marks
Student 1	1	1	1	1	1	1	1	1	8
Student 2	1	1	1	1	1	1	1	0	7
Student 3	1	1	1	1	1	0	1	0	6
Student 4	1	1	1	1	1	0	0	0	5
Student 5	1	1	0	1	1	0	1	0	5
Student 6	1	1	1	0	1	1	0	0	5
Student 7	1	1	1	1	0	0	0	0	4
Student 8	1	1	1	0	0	1	0	0	4
Student 9	1	0	0	0	0	1	0	1	3
Total	9	8	7	6	6	5	4	2	

Step 4: Analysing the data: When the data are sorted in this way, we can start to find patterns. Let us start by looking at the consistency of the data as a whole and for individual questions.

We should see two rough triangles forming on the page, with more 0s towards the bottom right and 1s towards the top left (see Table 8.23). You will notice an area of overlap between the 0s and 1s (a speckled area). This area of overlap can tell us roughly how reliable and valid our data are. The wider this overlap is and the less defined these two triangles are, the *less* reliable the data is likely to be. However, we must expect some overlap between 1s and 0s because our students are not likely to answer each question in a uniform way.

We also want to check questions where the patterns are not consistent, e.g., Q4. In Q4, we see that the two top students answered correctly, as did the lowest achievers. However, the students in the middle answered incorrectly. This may indicate an issue with the question itself, and it should be investigated further.

Table 8.24. Analysing test data – checking reliability of the questions

Answers									Total
Names	Q1	Q3	Q6	Q2	Q8	Q4	Q7	Q5	8 marks
Student 1	1	1	1	1	1	1	1	1	8
Student 2	1	1	1	1	1	1	1	0	7
Student 3	1	1	1	1	1	0	1	0	6
Student 4	1	1	1	1	1	0	0	0	5
Student 5	1	1	0	1	1	0	1	0	5
Student 6	1	1	1	0	1	1	0	0	5
Student 7	1	1	1	1	0	0	0	0	4
Student 8	1	1	1	0	0	1	0	0	4
Student 9	1	0	0	0	0	1	0	1	3
Total	9	8	7	6	6	5	4	2	

Step 5: To understand more about learning needs within the class, we also need to analyse the consistency of the data for each student. In particular, Students 5, 6 and 9 have patterns that are not as consistent as the rest. There are unusual gaps between the correct and incorrect responses.

Table 8.25. Analysing test data – checking reliability of student achievement

Answers									Total
Names	Q1	Q3	Q6	Q2	Q8	Q4	Q7	Q5	8 marks
Student 1	1	1	1	1	1	1	1	1	8
Student 2	1	1	1	1	1	1	1	0	7
Student 3	1	1	1	1	1	0	1	0	6
Student 4	1	1	1	1	1	0	0	0	5
Student 5	1	1	0	1	1	0	1	0	5
Student 6	1	1	1	0	1	1	0	0	5
Student 7	1	1	1	1	0	0	0	0	4
Student 8	1	1	1	0	0	1	0	0	4
Student 9	1	0	0	0	0	1	0	1	3
Total	9	8	7	6	6	5	4	2	

For example, Student 5 answered Q6 incorrectly even though most students found it relatively easy. Likewise, student 6 answered Q2 incorrectly, but went on to respond correctly to some more difficult questions. In cases like these, teachers need to investigate further by asking questions:

- Were the responses accidentally incorrect?
- Are there issues of fairness or bias in the question that means that it was harder for some students to understand than for others?
- Are there gaps or misconceptions in the students' learning?

Student 9 achieved the lowest mark, however, they responded correctly to two relatively difficult questions. Again, we need to question the data:

- Were these correct responses lucky guesses?
- Are there issues of fairness and bias in some of the easier questions that makes it difficult for this student to respond correctly?
- Do they have "spikes" of knowledge or ability in certain areas that were tested?

To answer these questions, we need to look more closely at the questions, as well as the students' responses.

Multiple choice questions (MCQs) can usually provide this information.

Analysing MCQs

When we analyse MCQs, we can record the incorrect responses that students make.

When the MCQs have been well designed to find student misunderstanding, this can show clearer patterns that may give us more clues about their levels of learning. For example:

Table 8.26. Analysing MCQ test data

Answers	C	A	B	D	B	A	A	C	Total
Names	Q1	Q3	Q6	Q2	Q8	Q4	Q7	Q5	8 marks
Student 1	1	1	1	1	1	1	1	1	8
Student 2	1	1	1	1	1	1	1	A	7
Student 3	1	1	1	1	1	C	1	A	6
Student 4	1	1	1	1	1	B	C	A	5
Student 5	1	1	A	1	1	B	1	B	5
Student 6	1	1	1	C	1	1	C	B	5
Student 7	1	1	1	1	A	B	C	B	4
Student 8	1	1	1	A	D	1	D	A	4
Student 9	1	C	C	C	C	1	B	1	3
Total	**9**	**8**	**7**	**6**	**6**	**5**	**4**	**2**	

Let's look more closely at the response patterns for Student 9:

Table 8.27. Analysing individual student data

Answers	C	A	B	D	B	A	A	C	Total
Names	**Q1**	**Q3**	**Q6**	**Q2**	**Q8**	**Q4**	**Q7**	**Q5**	**8 marks**
Student 9	1	C	C	C	C	1	B	1	3

Like the rest of the class, Student 9 answered the first question correctly. However, the following four responses are incorrectly answered as C. We also notice that the hardest question (Q5) is answered correctly, but the correct response is 'C'. These inconsistencies mean that we need to ask questions:

- Is the student responding with "C" to each question they do not know?
- If this is the case, was their response for Q5 a lucky guess?
- Interestingly, the student responded correctly to Q4 (and the answer was not C, so it does not fit the student's pattern for an accidental guess). We would need to go back to the question to determine the topic it was about and the skills that they students needed to answer the question. We may then check the student's understanding of those skills in class.

With well-written MCQs, we can also look at response patterns across the class, because these can tell us areas that groups of students may misunderstand. Let us take a closer look at the data:

Table 8.28. Analysing small group data

Answers	C	A	B	D	B	A	A	C	Total
Names	Q1	Q3	Q6	Q2	Q8	Q4	Q7	Q5	8 marks
Student 1	1	1	1	1	1	1	1	1	**8**
Student 2	1	1	1	1	1	1	1	A	**7**
Student 3	1	1	1	1	1	C	1	A	**6**
Student 4	1	1	1	1	1	B	C	A	**5**
Student 5	1	1	A	1	1	B	1	B	**5**
Student 6	1	1	1	C	1	1	C	B	**5**
Student 7	1	1	1	1	A	B	C	B	**4**
Student 8	1	1	1	A	D	1	D	A	**4**
Student 9	1	C	C	C	C	1	B	1	**3**
Total	**9**	**8**	**7**	**6**	**6**	**5**	4	2	

For Q4, Q7 and Q5, several students made the same incorrect responses. Interestingly, students who achieved at a similar level of proficiency, tended to give similar answers. If the distractors in the MCQs are designed to pick up common mistakes, it is likely that particular groups of students have made this error. This provides teachers the information they can use to plan for future teaching and revision.

Learning activity 1. Analysing and interpreting single-score data

The purpose of this activity is to interact with a small set of data. Now it is time for you to practise these skills. Below is a small set of data with student responses for a multiple-choice question quiz about plants.

The data have already been sorted from:

- The highest student score (at the top) to the lowest student score (at the bottom), and the question with the most correct responses (on the left) to the least correct responses (on the right).

In small groups, analyse the data chart (Table 8.29) and discuss the questions.

Table 8.29. Chart of student data – sorted

	Conditions required for plants to survive	Characteristics of Plants	Differences between fruits and vegetables	Classification of plants	Categorising plants according to features	Plant respiration	Photosynthesis	Plant cell structure	
	Q5	Q6	Q8	Q4	Q2	Q1	Q3	Q7	**TOTAL**
Student 3	1	1	1	1	1	1	1	C	**7**
Student 2	1	1	1	C	1	1	1	B	**6**
Student 10	1	1	1	1	B	1	B	1	**6**
Student 6	1	1	1	1	1	A	D	C	**5**
Student 9	1	1	1	B	1	A	1	C	**5**
Student 4	1	1	1	B	1	B	A	A	**4**
Student 8	1	1	C	1	B	D	B	C	**3**
Student 11	1	D	1	1	B	A	D	B	**3**
Student 1	1	1	A	D	A	B	B	B	**2**
Student 5	1	D	D	1	A	A	A	C	**2**
Student 7	B	1	A	B	B	D	B	B	**1**
TOTAL	**10**	**9**	**7**	**6**	**5**	**3**	**3**	**1**	

1. Validity and reliability of the test:

    - Look at the overlap between the 0s (or letters) and 1s. Is there a lot of overlap or is the overlap very small? What might this tell you about the validity and reliability of the test?
    - Is there a question with inconsistent results? If you were the teacher, what might this mean in relation to the reliability of the question? What might you do with the question?

2. Checking question difficulty:

    - Which question topics were the easiest for students to answer? Which topics did the students find most difficult?

3. Checking student achievement:
    - Are there questions that several students answered with the same incorrect answer? What might this mean?
    - Are there individual students who have not performed consistently? Looking closely at the individual's data. What questions might the teacher need to investigate to understand the student's performance more clearly?
4. Discussion:
    - What information can these charts provide about student learning?
    - What are the limitations of these charts (what cannot they tell you)?

Analysing and interpreting partial credit data

Teachers can also analyse partial credit questions (including rubrics) in a similar way to the restricted response question that were analysed in the previous section. However, the data sorting is a little more complex.

This will be illustrated using the short-answer question from Lesson 8.2.2: *Explain the difference between heat and temperature (4 marks)*

Remember that the answer key specified four elements that needed to be addressed in the question (therefore, we gave it 4 marks)

Answer key:

- Heat is the *energy* of a material [definition – 1 mark].
- Heat is measured in *joules* [unit of measurement - 1 mark].
- Temperature is the *average kinetic energy* of the particles in the material [definition *must* specify kinetic energy – 1 mark].
- Temperature is measured in degrees *Celsius, Fahrenheit or Kelvin*. [Students only need to identify ONE unit of measurement - 1 mark].

To illustrate, here are nine students and their total scores for the short answer question. The students are arranged from the highest score to the lowest score for this question.

Table 8.30. Example of student scores for a short-answer question

	Marks
Names	**Q1**
Student 1	4
Student 2	4
Student 3	3
Student 4	3
Student 5	2
Student 6	2
Student 7	2
Student 8	2
Student 9	1
Student 10	1

The score itself does not tell us what the students knew.

So, we can break down the scores further into each element that was required to achieve a mark:

Table 8.31. Breaking down scores for partial credit questions

Answers	Q1	Heat definition	Heat Unit of measurement	Temperature definition	Temperature Unit of measurement
Names	Total				
Student 1	4	1	1	1	1
Student 2	4	1	1	1	1
Student 3	3	1	1	0	1
Student 4	3	1	1	0	1
Student 5	2	1	0	0	1
Student 6	2	1	0	0	1
Student 7	2	1	0	0	1
Student 8	2	0	1	0	1
Student 9	1	0	0	0	1
Student 10	0	0	0	0	0

Now, we will organise these elements from the most commonly answered to the least answered:

Table 8.32. Sorting partial credit data by difficulty

Answers	Q1	Temperature Unit of measurement	Heat definition	Heat Unit of measurement	Temperature definition
Names	Total				
Student 1	4	1	1	1	1
Student 2	4	1	1	1	1
Student 3	3	1	1	1	0
Student 4	3	1	1	1	0
Student 5	2	1	1	0	0
Student 6	2	1	1	0	0
Student 7	2	1	1	0	0
Student 8	2	1	0	1	0
Student 9	1	1	0	0	0
Student 10	0	0	0	0	0

We can now see that:

- All but one student could identify at least one unit of measurement for temperature (although we do not know which unit they identified)
- One student could identify measurements for both heat and temperature, but did not define them correctly
- Seven students recalled the fact that heat is energy
- About half the students were able to recall that heat is measured in joules
- Two students knew that temperature is the average kinetic energy of particles in a material.

Teachers also need to think about of the implications of the results.

The teacher may ask question such as:

- Does this information accurately represent what the students know and can do? (Is it valid? How do we know?)
- Does the wording of the question give all students a fair and equitable chance of showing what they know? If not, how might the question be changed to be more fair next time?
- What does this information tell the teacher about the students? Are there any surprises with students who have achieved unexpected results?
- How can the information be used to inform teaching and learning?

Reflecting on validity and reliability throughout the assessment process

Classroom assessment has the potential to provide powerful information to teachers about the learning needs of their students.

Over the course of this sub-unit, we have:

- defined validity and reliability and discussed their importance in assessment of student learning;
- examined types of test questions: their uses, their limitations, and ways to increase validity and reliability;
- explored the test writing process and developed a table of specifications to maximise content and construct validity; and

- analysed student data to check:
  - the reliability and validity of the test through the consistency of student responses (remembering that a test cannot be valid unless it is also reliable); and
  - patterns in student responses that may indicate their learning needs.

Learning activity 2. Reflection on assessment and its uses

The purpose of this activity is to encourage students to reflect on what they have learnt throughout Sub-unit 8.2.

Reflect on what you *thought* you knew about the following concepts *before studying this sub-unit:*

- Reliability and validity
- Writing test questions
- Designing a test
- Analysing test results.

Now, reflect on what you have learnt in Sub-unit 8.2. Consider how you have grown.

Write your responses using the format: *I used to think …., but now I know…*

For example:

- I used to think that validity was not important in classroom assessment, but now I know that it is crucial for understanding my students' learning.
- I used to think that reliability and validity were independent of each other, but now I know that a test cannot be valid unless it is also reliable.

Take your time to reflect on different things that you have learnt and record your responses.

Part 2: Small group discussion

In small groups, share your learning journey with each other. How are your learning journeys similar? How are they different? What aspects of assessment would you like to learn more about?

Review questions

1. Why are validity and reliability so important when teachers assess students?
2. When a teacher designs questions for a test, what strategies might they use to ensure that it is testing what the teacher thinks it is testing?
3. When designing a test, what strategies can the teacher use to increase the validity and reliability of the data they collect?
4. What strategies can teachers use to analyse student achievement in a test to understand learning needs better?
5. What simple strategy can teachers use to check validity and reliability in student test data?

Unit Summary

Key messages

Developing Understanding of Assessment

- According to Myanmar's new *National Assessment Policy for Basic Education*, assessment is defined as an ongoing process of providing evidence to support decisions regarding improvements in student learning.
- Diagnostic, formative and summative assessment serve different purposes and occur at different stages of the learning experience.
- Diagnostic assessment provides teachers with information about students' prior knowledge and misconceptions before the beginning of a learning experience.
- The purpose of formative assessment is to provide ongoing feedback that can be used by teachers and students to improve student learning (i.e. assessment *for* learning).
- Formative assessment occurs continuously in a classroom, through informal methods such as teacher questioning and observation, and review of student work within the context of learning.
- A student profile can be compiled with data from multiple assessment tools to provide a comprehensive assessment of student learning and progress.
- Formative assessment also involves students monitoring the quality of their own work and reflecting on their learning (i.e. assessment *as* learning).
- Students need to be supported to successfully engage in self-assessment and peer assessment.
- Assessment can also be undertaken formally via an examination under specified conditions.
- The research literature identifies high-quality assessment design principles, which are reflected in Myanmar's *National Assessment Policy for Basic Education.*
- High quality assessment is integral to the learning, valid, transparent, inclusive, authentic, efficient and reliable.
- Authentic assessment involves students in performance-based activities connected to the real world. Such tasks typically involve multiple steps and

significant time and effort in collaboration with others. The sustainable garden action plan and the endangered species recovery plan are examples of authentic assessment.

- In planning a unit of work, teachers determine unit-level learning outcomes; design rich performance assessment tasks; and the daily teaching and learning activities and formative assessments that scaffold the performance tasks.
- Learning outcomes, assessment tasks, success criteria, and learning and teaching activities need to be constructively aligned at the level of the lesson and unit.
- The four pillars of basic education student assessment are: classroom-level assessment (i.e. formative assessment); school-based assessment (i.e. formative and summative); school completion assessment (i.e. summative); and sample-based learning assessments.
- Assessment should ensure that students have opportunities to demonstrate their individual skills and capabilities using a variety of assessment tools and instruments.
- Assessment tools also need to be varied to address diverse learning outcomes.
- Assessment rubrics support assessment of performance tasks.

Educational Assessment and Data

- Teachers collect different types of data that they use to understand their students and their needs.
- The data teachers use to understand their students' learning needs must be valid and reliable.
- Validity is all about the accuracy of the conclusions and interpretations teachers can make about students based on the data they have used.
- There are different types of validity that teachers need to address when assessing students. The main forms are content validity, construct validity, and criterion validity.
- Reliability refers the dependability, consistency and reproducibility of data.
- If an assessment is valid, it MUST also be reliable.
- Validity and reliability should be considered at every stage of the assessment process.
- Tests often use restricted response questions (sometimes called closed response) and constructed response questions (sometimes referred to as open questions).

- All types of test questions have benefits and limitations. Teachers should use a variety of question types to balance the different benefits and limitations to gain the best understanding of student learning that they can.
- Tests should be designed to accurately reflect what the students have learnt. To do this, we can develop a table of specifications to ensure a level of content and construct validity.
- Collaborating with colleagues to design, administer and mark tests can improve the quality of the test, as well as the data teachers can gather from the test.
- We can analyse student test data by looking for patterns in the students' responses.
- Teachers need to question the data they analyse. There may be a number of reasons why a student answers in a particular way. These reasons may include issues with the test, the student's level of knowledge or other unrelated factors that impact on the student's performance on the day.

Unit reflection

Developing Understanding of Assessment: Reflective activity

In this unit, you undertook a number of tasks, including:

- Designing a teacher observation checklist
- Generating the success criteria for a student self-assessment instrument
- Writing examination questions across a range of types
- Writing descriptors for an assessment rubric.

Review these artefacts. Identify the most compelling artefact/s in terms of providing evidence of *achievement* of TCSF minimum requirements at a *developing* level (i.e. at a second-year level). Annotate these artefacts and include them in your TCSF portfolio.

Developing Statistical Knowledge relating to Educational Tests and Measurement: Reflective activity

1. Why are validity and reliability so important when teachers assess students?
   Responses may include: They enable teachers to report accurately, plan more effectively, understand their students' learning needs better.

2. When a teacher designs questions for a test, what strategies might they use to ensure that it is testing what the teacher thinks it is testing?
   Responses may include: Choosing restricted and constructed response questions appropriately for different purposes; writing restricted response questions so that the distractors are plausible; ensuring that there is only one correct answer for restricted response questions; writing a clear marking guide or assessment rubrics for constructed response questions; writing clear instructions, etc.

3. When designing a test, what strategies can the teacher use to increase the validity and reliability of the data they collect?
   Responses may include: Creating a table of specifications; panelling the test; piloting the test, etc.

4. What strategies can teachers use to analyse student achievement in a test to understand learning needs better?
   Responses may include: Using a chart to see patterns in student achievement; analysing patterns in group responses to different questions; checking other sources of data to see if they match the observations from the test about student achievement, etc.

5. What simple strategy can teachers use to check validity and reliability in student test data?
   Responses may include: Creating a chart to see how consistently the students answered the questions, checking the patterns of responses to see if there are any questions that do not have consistent patterns of responses.

Further reading

8.1. Developing Understanding of Assessment

Anker-Hansen, J. & Andrée, M. (2019). Using and rejecting peer feedback in the science classroom: A study of students' negotiations on how to use peer feedback when designing experiments. *Research in Science and Technological Education, 37*(3). Retrieved from https://www.tandfonline.com/doi/full/10.1080/02635143.2018.1557 628

Ashford-Rowe, K., Herrington, J., & Brown, C. (2014). Establishing the critical elements that determine authentic assessment, *Assessment & Evaluation in Higher Education*, *39*(2), 205-222, DOI: 10.1080/02602938.2013.819566

8.2. Educational Assessment and Data

Griffin , P. (Ed.), (2018). Assessment for teaching (2nd ed.). Melbourne, Australia: Cambridge University Press.

Unit 9

Supportive and Safe Learning Environment

This unit focuses on creating a supportive and inclusive environment for middle school students.

- It highlights the importance of teachers fostering productive relationships with students, parents, and other stakeholders.
- It focuses on inclusive education, conflict resolution and peace education, classroom management principles and practices, and the ethical and safe use of technology in the learning environment.
- It recognises the need for students to feel safe in classrooms and that a safe environment is a pre-requisite to effective learning.

Expected learning outcomes

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

- Outline characteristics of an inclusive school;
- Discuss the importance of teacher beliefs and expectations in terms of student learning;
- Outline strategies to make middle school students feel supported and safe in the classroom;
- Compare the medical and social models of disability;
- Define inclusion, integration, segregation, and exclusion;
- Communicate to stakeholders why removing the barriers to learning is important;
- Explain the difference between intellectual disabilities, learning disorders and learning difficulties;
- Outline broad characteristics of different types of disabilities and the challenges they present for learning and teaching;

- Identify learning activities that will allow for teacher observation to ascertain students' learning needs;
- Identify strategies that support differentiation for students with additional needs;
- Explain the purpose of, and process involved in, developing and monitoring an Individualised Education Plan;
- Explain why middle school students need conflict resolution skills;
- Compare constructive and destructive responses to conflict;
- Outline the five conflict response modes of the Thomas-Kilmann Instrument;
- Discuss methods and techniques for developing conflict resolution skills;
- Outline competencies developed through conflict resolution and peace education;
- Connect conflict resolution and peace education with the Middle School Curriculum;
- Explain the importance of setting classroom procedures, rules, and positive and negative consequences;
- List key considerations in setting procedures, rules and consequences;
- Design procedures, rules and consequences for a middle school classroom;
- Explain the shift in focus from 'behaviour management' to 'creation of supportive and safe learning environments' in professional standards;
- Identify principles and practices associated with effective and inclusive classroom management;
- Role play proactive classroom management techniques;
- Discuss the digital divide and active use of technology in the context of Myanmar; and
- Explain why middle school students need knowledge and skills relating to academic integrity and cyber-safety.

Competencies gained

A1.2 Demonstrate understanding of how different teaching methods can meet students' individual learning needs

A2.2 Demonstrate understanding of appropriate use of Information and Communication Technology (ICT) in teaching and learning

A3.2 Demonstrate respect for the social, linguistic and cultural diversity of the students and their communities

A4.1 Demonstrate understanding of the structure, content and expected learning outcomes of the basic education curriculum

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

B3.2. Demonstrate strategies for managing student behaviour

B4.1. Demonstrate strategies for working together with other teachers, parents, and the local community to improve the learning environment for students

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

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

Key terms

Academic integrity, copyright laws, cyber safety, digital divide, digital literacy, digital use divide, intellectual property, intellectual risk taking, learning difficulty, learning disability, media information literacy, model of disability, online identity, plagiarism, positive consequences, proactive techniques, negative consequences, simulation.

9.1. Creating a Supportive and Safe Learning Environment

In this sub-unit, you will review Myanmar's new School Quality and Assurance Standards Framework (SQASF), with respect to the eight characteristics of an inclusive school. You will examine the role of the teacher in fostering an inclusive classroom. You will reflect upon the needs of middle school students and strategies to ensure that they feel physically, emotionally, and intellectually safe in the classroom.

9.1.1. An inclusive school and classroom

Expected learning outcomes

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

- Outline characteristics of an inclusive school;
- Discuss the importance of teacher beliefs and expectations in terms of student learning; and
- Outline strategies to make middle school students feel supported and safe in the classroom.

Inclusive schools

Students are included when they are present in the classroom, participate in learning, *and* achieve meaningful outcomes.[127] In Unit 3, you reviewed teacher practice with reference to eight characteristics of an inclusive classroom. In this unit, you focus on eight characteristics of an inclusive *school*.

127 IBE–UNESCO, 2016, p. 13.

IBE-UNESCO writes that in a school that is *becoming* inclusive:

1. Everyone feels welcome;
2. Students are equally valued;
3. There are high expectations for all students;
4. Staff and students treat one another with respect;
5. There is a partnership between staff and families;
6. The building is accessible to all students;
7. Senior staff support teachers in ensuring that all students participate and learn; and
8. The school monitors the presence, participation and achievement of all students.[128]

The reference to 'becoming inclusive' points to inclusion as an ongoing process of learning as a school. At no point is a school ever entirely inclusive.

Learning activity 1. Reviewing the SQASF through an inclusion lens

The purpose of this activity is to familiarise yourself with the eight characteristics of an inclusive school.

Review the SQASF dimensions and standards, through the lens of the eight characteristics of an inclusive school. Write the relevant characteristics (C#1, C#2, C3# etc.) next to the standards in Box 9.1.

For instance, C#5 – *There is a partnership between staff and families,* is reflected in several School Quality Assurance Standards (e.g., 3.4, 6.1, 6.2, 6.3), as indicated.

128 IBE–UNESCO, 2016, p. 14.

Box 9.1. SQASF dimensions and standards

Learning and Teaching

1.1 Students have learning opportunities and achieve learning outcomes
1.2 Students actively participate in learning
1.3 Students' learning outcomes are evaluated, used in teaching, and reported to parents
1.4 Teachers are competent and design plans
1.5 Principals, teachers, students and school staff demonstrate inclusive attitudes and behaviours

Professional Development

2.1 Principals, teachers and office staff have basic skills relating to their positions as identified in professional standards
2.2 Principals, teachers, and office staff participate regularly in professional development

Leadership and Management of Principals

3.1 People, including the principal, who are responsible for school leadership and management act responsibly and are accountable
3.2 People, including the principal, who are responsible for school leadership and management, support and delegate duties to teachers, school staff, parents and students
3.3 People, including the principal, who are responsible for school leadership and management, ensure that teacher, staff and students' performance data are monitored, and evaluated, and actions are planned to improve data collection and management
3.4 People, including the principal, who are responsible for school leadership and management, cooperate with parents, community groups, education officers and other schools

Infrastructure and Resources

4.1 School infrastructure, facilities, its environment, and the materials the school uses, are welcoming and keep students and staff safe and healthy
4.2 School infrastructure and resources support effective teaching and student learning

Budget and Financial Management

5.1 School expenditure is transparent and the budget is available for teachers, staff, finance teams and the PTA to view
5.2 School financial management supports student learning and school quality improvement

Parents' and Community Participation

6.1 Parent Teacher Association (PTA) members participate in school improvement planning and activities
6.2 Parents and family members actively support students' learning
6.3 The local community cooperates with the school in emergencies

Figure 9.1. An inclusive school

Inclusive classrooms: Teacher beliefs and values

You have just learnt that in a school that is becoming inclusive: students are equally valued; and there are high expectations for all students. As a teacher, your beliefs and values will impact on all aspects of your professional practice.

Your beliefs and values will be reflected in the curriculum, and expectations that you set for your students, how you communicate with your students, and how you communicate with other people about your students.

Your beliefs about your students and their learning can have the power to either remove barriers to learning or create or reinforce barriers.

Learning activity 2. Undertaking a survey on beliefs about students and learning

The purpose of this activity is for you to explore your beliefs and attitudes towards teaching diverse learners and developing a supportive and safe learning environment for all.

Undertake the survey. Consider carefully to what extent you believe each statement to be true. Discuss with peers and record the diversity of perspectives in terms of each statement.

Table 9.1. Student teacher survey on inclusion

Survey statements	Strongly agree	Agree	Disagree	Strongly disagree
1. All students have value and worth				
2. All students can learn				
3. Diversity is valuable and can enrich the learning of all students in the classroom				
4. All students belong within the classroom learning community				

Inclusive classrooms: Physical, emotional and cognitive safety

In Unit 2, when exploring culturally relevant pedagogy, you learnt about the importance of the teacher building productive relationships in order to promote student learning.

Recall that Indigenous Maori students spoke about the importance of teachers establishing *whanau* – extended ***family-like relationships*** – in the New Zealand project.

Students in non-formal education settings (i.e., literacy programmes) also have communicated the importance of learning environments that *expand their sense of family* and enhance their ***self-esteem***. In supportive and safe environments, students feel that they can take more chances in their learning – that is, they can be *risk takers*.[129]

Intellectual risk taking can be defined as "engaging in adaptive learning behaviours, such as sharing their ideas, asking questions, attempting to do and learn new things, despite the possibility of making mistakes or appearing less competent than others."[130]

Figure 9.2. Intellectual risk-taking

129 Literacy Source, 2018.
130 Pearson, 2011, p. 1.

Learning activity 3. Creating a supportive and safe learning environment

The purpose of this activity is to identify strategies that will allow students to feel physically, emotionally, and cognitively safe in the middle school classroom.

First, read the perspective in Box 9.2 about the needs of the middle school learner.

Box 9.2. Need for physical, emotional, and cognitive safety among middle school students

Middle school is a ***transitional period*** for students. Middle school students find themselves with greater autonomy, mobility, and self-awareness, along with many questions surrounding how to manage these new responsibilities.

Because of this, it is crucial that middle school teachers work to orient students to their learning environments, making students more comfortable in themselves and with each other. Middle school students learn, and contribute to others' learning, best when they do not fear ridicule or under-achieving.

Physical, emotional and cognitive safety are all vital to students in middle school classrooms. A safe environment is widely acknowledged as pre-requisite to effective learning. [131]

1. In what ways are the middle school years a transitional period?
2. Do you agree with the statement that a safe environment is a pre-requisite to effective learning? Provide reasons for your response.
3. Generate a list of strategies that will support middle school students to feel physically, emotionally, and intellectually safe and take positive risks in their learning environment.

Review questions

1. What are the characteristics of an inclusive school?
2. Why are teacher beliefs and expectations important in terms of student learning?
3. What is intellectual risk-taking?
4. How can the teacher create a safe physical, emotional and cognitive environment for their students?

131 CRAMSS, 2015, p. 6.

9.2. Inclusive Education and Students with Intellectual Disabilities, Learning Disorders and Learning Difficulties

In this sub-unit, you will focus on inclusion and what this means for teaching and learning. You will compare two models of disability: The medical model and the social model of disability and consider how the ideas in these models and teacher beliefs can impact on how students learn in the classroom.

You will discuss a range of barriers that prevent students from participating in learning. You will develop strategies to reduce these barriers so that all students have the opportunity to be members of a **learning community**. Finally, you will focus on Individualised Education Plans and how they can support teaching and learning for students with additional needs.

9.2.1. Inclusive education

Expected learning outcomes

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

- Compare the medical and social models of disability;
- Define inclusion, integration, segregation, and exclusion; and
- Communicate to stakeholders why removing the barriers to learning is important.

Definitions

Inclusive education is about ensuring that *all* children are able to have an education, including students with additional needs:

> The concept of inclusion is based on the notion that schools should, without question, provide for the needs of *all* the children in their communities, ***whatever the level*** of their ***ability, disability, educational need*** or other form of diversity.[132]

The Salamanca Statement and Framework for Action on Special Needs Education[133] states that:

> Inclusion and participation are essential to ***human dignity*** and to the enjoyment and exercise of ***human rights***. Within the field of education, this is reflected in the development of ***strategies*** that seek to bring about a genuine ***equalisation of opportunity.***"

Students with **additional needs**,[134] must be able to "…access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live."[135]

Many students face challenges with learning, whether they have a diagnosed disability or there are other issues (such as emotional, psychological, social, or environmental issues), which impact on their ability to learn. It is very important that students with additional needs receive the support they need, in order for them to ***access*** education and become part of the **learning community**.

The challenge for teachers is to create environments where *all* students:

- feel safe (physically, emotionally, and intellectually);
- are valued (regardless of their strengths or limitations); and
- can learn without needing to overcome unnecessary or unfair obstacles.

132 Foreman & Arthur-Kelly, 2017, p. 583.
133 UNESCO, 1994, p.11.
134 Kinsella, 2018.
135 United Nations Convention on the Rights of Persons with Disabilities [CRPD], Article 24.

Why is inclusion important?

Inclusion is important for a number of reasons. It:

- acknowledges that all students can learn and are entitled to an education;
- provides equity and fairness for students, who would otherwise be disadvantaged;
- enables students with disabilities to interact with other students their own age and to be a valued member of the community; and
- gives all students the opportunity to learn about the value of diversity.

Inclusion changes the focus from *difference* (which leads to marginalisation) to valuing diversity (with a focus on *safety* and *belonging*).

Figure 9.3. A valued member of a learning community

Models of disability

The current **model of disability** influences:

- **perceptions** of disabilities, people with disabilities and their families, and their abilities and needs; and

- **policies** concerning people with disabilities and the support provided to people with disabilities. [136]

There are two main models of disability, which offer different perspectives on disability.[137]

The medical model of disability is a traditional model, which defines disability as "an *inability* to perform a normal life activity."[138] In this model, the focus is the student's impairment or disability. The student is perceived as being deficient or lacking – in need of 'fixing' or 'curing', in order to live a 'normal' life.

In a society where the medical model of disability determines policy, people with disabilities are often segregated from their families and community life. The emphasis on 'deficit' has a negative influence on the self-esteem of people with disabilities. This model does not address the barriers to learning that exist in society. [139]

The social model of disability puts forward that environmental, social, and cultural factors can determine the extent of a person's disabilities. Factors that can increase or decrease disability include:

- the attitudes of people around the person with the disability (social factors);
- cultural influences; and
- the physical environment.

Each of these elements can be changed and adjusted, in order to reduce (or even remove) the level of disability experienced by a person. This means it is the responsibility of the community to ensure that barriers are removed (not just the responsibility of the person with the disability).

In a society where the social model of disability determines policy, people with disabilities are perceived as citizens with rights and duties.

Disability is regarded along with other differences (such as gender, ethnicity etc.).

136 Save the Children, 2019.
137 Rees, 2017.
138 Donoghue, 2003, p. 203.
139 Save the Children, 2019.

Learning activity 1. Role-play of models of disability

The purpose of this activity is to have opportunity to reflect on and represent the differences between the medical model and social model of disability through reading and role play.

Your group will be assigned a focus:

Community – Medical model	School – Medical model	Classroom – Medical model
Community – Social model	School – Social model	Classroom – Social model

Discuss what a community, school, or classroom 'looks like' from the perspective of the model that you have been assigned. It may be helpful to consult Table 9.2 to support your discussion.

Table 9.2. Comparison between the medical model and the social model of disability

Medical model of disability	Social model of disability
Disability is an individual problem.	Disability is a product of society and the environment.
Professionals should try to fix or cure disabilities (i.e. people with disabilities = patients).	Changes within society and the environment can increase or decrease the level of disability a person may experience.
Learning is the responsibility of the student.	Society is responsible to help a student to succeed in learning.
The focus is on what a student *can't* do (i.e. deficit perspective).	The focus is on what a student *can* do and how they can develop from that point (i.e. developmental perspective).
Professionals (such as doctors and teachers) know what is best for the student.	The student is central and should have a voice in what happens to them.
Focus is on the disability.	Focus is on strengths and capability.

Reflect on the emphases that you have just learnt about and discussed, through a role play of your assigned focus.

Educational approaches to teaching children with additional needs

When a child is not able to access education, this is referred to as **exclusion**. There are many reasons why some children may not have access to an education. Children may be denied education by others who are in positions of power. There may be

circumstances that prevent them from accessing education, including disability, living remotely, poverty and gender.

No matter what the circumstances are, exclusion is an issue of human rights and social justice. As you learnt in Unit 6, the Universal Declaration of Human Rights states that every human being has the right to education (Article 26).[140]

Figure 9.4. Gender may prevent access to education

There are three main approaches that have been used to provide education for students with disabilities and additional needs.

Segregation happens when students are educated in settings that are different to that of the majority of their peers. Segregation may take the form of special schools that cater to the specific needs of different groups of students. Language schools, schools for gifted students, schools that cater for students with autism, and schools for children with profound learning disabilities or physical disabilities are all examples of segregation.

140 United Nations, 1948.

Integration happens when students with additional needs attend a regular classroom. This approach was introduced because of the belief that students with disabilities should have access to the same resources and opportunities as other students.[141] Schools with a focus on integration may provide special programmes or classes for students with additional needs. The curriculum may be altered to suit students' abilities or needs, and they may be given additional learning support within the class. Often the expectation is that students with additional needs will learn to 'fit in'.[142]

Inclusion is different from the other approaches to special needs education because the focus is on providing a learning environment that removes barriers to learning. It emphasises the importance of meeting the social and academic needs of *all* students. There is recognition that every student is unique with their own strengths and challenges. The focus is on monitoring and supporting students, who are at risk of being excluded, marginalised, or left behind.[143]

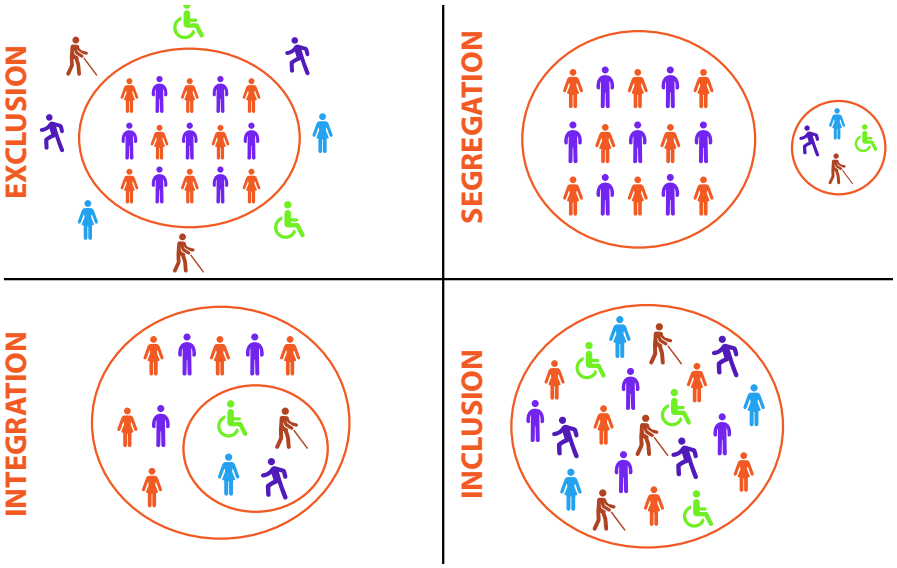


Figure 9.5. Exclusion, segregation, integration, and inclusion

141 Elkins, 1998.
142 UNICEF, 2012.
143 Ainscow, 2005.

Learning activity 2. PMI focusing on different educational approaches

The purpose of this activity is to consider the benefits (*Plus*), challenges (*Minus*) and possibilities and questions (*Interesting*) related to segregation, integration, and inclusion.

Box 9.3. PMI for segregation

In groups, consider the benefits (*Plus*), challenges (*Minus*) and possibilities and questions (*Interesting*), related to each type of educational approach for students with additional needs.

It may be helpful to undertake this activity by thinking about different stakeholder perspectives:

- Student with additional needs
- Students who do not have additional needs
- Teachers
- Parents of students with additional needs
- Wider community

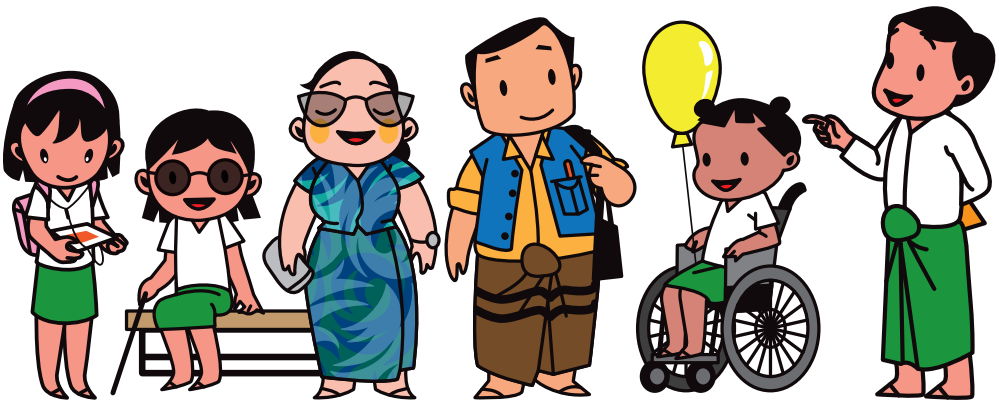


Table 9.3a presents the PMI for *segregation.* Complete the PMI for *integration* (Table 9.3b) and *inclusion* (Table 9.3c).

Table 9.3a. Segregation of students with additional needs

Approach	Plus (benefits)	Minus (challenges)	Interesting (possibilities and questions)
Segregation	• **Students with additional needs** attending special schools may have teachers and other support staff who have specialist training. • **Teachers** do not need to accommodate students who have additional needs. • **Parents of students with additional needs** may feel less worried that their child will be discriminated against at special schools.	• **Students with additional needs:** a) are denied their human right to "inclusive, quality and free" education; b) do not get the opportunity to interact with their peers; and c) are isolated from the general community. • **Students who do not have additional needs** miss out on learning about the importance and value of diversity. They also miss out on learning to interact with people who are different from them. • **Teachers** may not recognise or meet all student needs adequately; there will still be student diversity within the class.	• What attitudes towards diversity are reinforced if students with additional needs are not included with their peers in school communities? • To what extent can students with additional needs live with the same freedoms and opportunities as others if they are segregated?

Table 9.3b. Integration of students with additional needs

Approach	Plus (benefits)	Minus (challenges)	Interesting (possibilities and questions)
Integration			

Table 9.3c. Inclusion of students with additional needs

Approach	Plus (benefits)	Minus (challenges)	Interesting (possibilities and questions)
Inclusion			

Barriers to learning

A **barrier** is something that prevents the student from learning or being a part of the learning community. Aside from **biological impairments**, there are many barriers which prevent students from learning and feeling like they belong in the learning community, including:

- ***Physical:*** *Physical infrastructure and the way the classroom is organised*
- ***Social:*** *e.g., the student has family obligations that leave them little time or energy to study, or they have to travel or walk long distances to attend school*
- ***Economic:*** *Poverty can make education very difficult to access, particularly if students do not have adequate food, shelter, and resources*
- ***Linguistic:*** *The student is not fluent in the language of instruction*
- ***Attitudinal:*** *Beliefs about the student's ability to learn*
- ***Pedagogical*** *e.g., the student cannot understand the content because of the way it has been taught or they are unable to participate in learning activities*
- ***Emotional*** *e.g., the student experiences bullying or has low self-esteem, trauma or anxiety*
- ***Institutional:*** *Policies or rules that prevent inclusion*
- ***Gender:*** *Literacy rates for girls in Myanmar are currently lower than for boys*[144]
- ***Ethnicity:*** *e.g., students who have less access to educational opportunities because they have been displaced or marginalised.*

Your role as a teacher is to enable students to access learning by removing (or reducing) barriers to learning.

144 Kraas et al., 2017

Figure 9.6. Students walk long distances to attend school

Short-term and permanent barriers to learning

The circumstances that make learning more difficult may be *short-term* (e.g., a child is ill for a few days and then recovers). However, if a child has a chronic illness, interruptions to their learning may be ongoing. There may be frequent absences from school, difficulty concentrating when at school, and interruptions to social interactions with their peers.

Likewise, if a student has a disability, there are likely to be *long-term* considerations in order to support their learning. Whether a student experiences short-term or permanent barriers to learning, the teacher needs to make adjustments to enable them to learn.

Addressing barriers to learning for students with additional needs

The signs that a student is experiencing barriers to their learning may include:

- lack of learning progress (or *changes in achievement*);
- behavioural signs (or *changes in behaviour*); and
- communication from the student, or people around them, that they are struggling.

In order to address barriers that students face when they are learning, teachers need to ask:

- Which students are experiencing barriers to learning? What are the barriers? What are the causes of these barriers?
- How do these barriers limit the students' ability to learn? How can these barriers be removed or lessened to enable the students to learn and demonstrate what they know and can do?

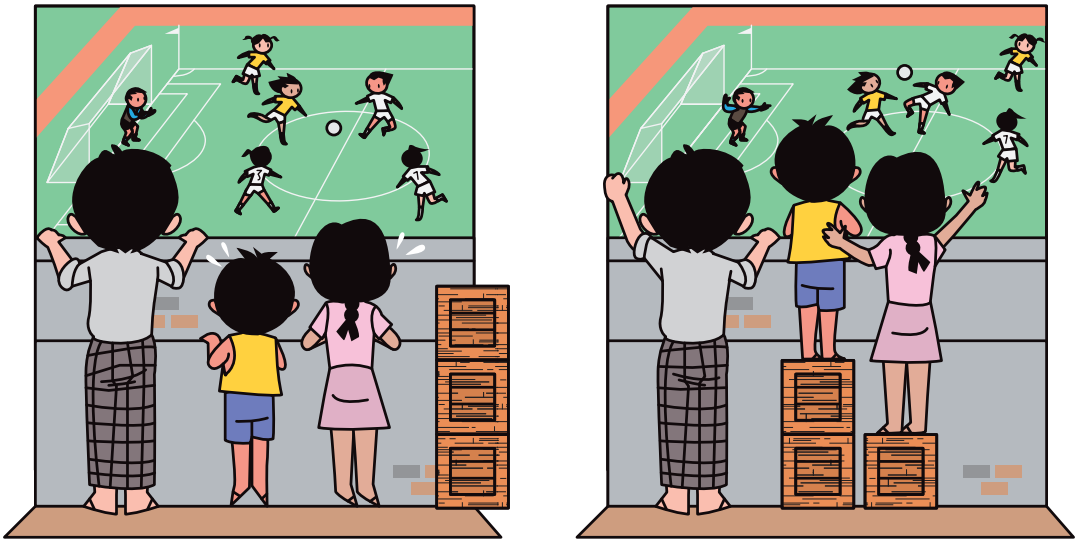


Figure 9.7. Addressing the barriers to learning[145]

Learning activity 3. Think–pair–share about barriers to learning

The purpose of this activity is to reflect on and discuss barriers to learning experienced by Myanmar students.

145 Interaction Institute for Social Change Artist: Angus Maguire.

Think

Choose a barrier to learning in Myanmar that you have seen and/or experienced yourself in the classroom. You may choose a barrier that has been listed in this chapter, or you may identify a different barrier that impacts on the education of children in Myanmar. Record your reflections to the following questions:

- What barrier to learning have you identified that impacts on children in Myanmar?
- From your research, what are some of the reasons why children in Myanmar face this barrier to learning?
- What other barriers arise because of the barrier you have identified?
- In your observations and experiences within classrooms, to what extent was the barrier recognised? Did teachers notice or respond to these barriers?
- How can teachers remove or reduce the barrier that you have identified to improve the learning opportunities for all students?

Record your ideas as you consider these questions.

Pair

Discuss and compare your observations and experiences with the person next to you. From your discussions, consider the following questions:

- How may you, as teachers, identify and address barriers to learning in your own classes?
- What strategies may you use to develop an inclusive learning community within your classes?
- How you may explain to students and parents why it is important to remove barriers to learning?

Share

Share the main points of your discussion with the class.

9.2.2. Students with intellectual disabilities, learning disorders and learning difficulties

Expected learning outcomes

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

- Explain the difference between intellectual disabilities, learning disorders and learning difficulties; and
- Outline broad characteristics of different types of disabilities and the challenges they present for learning and teaching.

Students with special needs

About 15% of the world's population live with some form of disability.[146] Disabilities result from **impairments** that a person might have that impact on their ability to function.

An **impairment** refers to "a problem in body function or structure."[147] It could be physical and/or psychological. An impairment can make ordinary tasks more difficult.

As a teacher, it is important to understand your role in supporting students, who have additional challenges with learning. Diagnosing disabilities is ***not*** the teacher's role. Teachers should not label a student or assume that they have a particular disability.

Diagnoses should be made by professionals, who are trained in the appropriate fields, such as psychologists, occupational therapists, speech pathologists and specialist doctors. If you have concerns about a student's learning, you should discuss them with the principal or another appropriate person in your school (e.g., a staff member who coordinates support for students with additional needs).

146 World Health Organisation, 2019.
147 World Health Organisation, 2019b.

Intellectual disabilities, learning disorders and learning difficulties

While not all students with disabilities experience difficulties with learning, some students find that learning at school is particularly challenging.

Table 9.4 defines the key terms for this lesson.

Table 9.4. Defining intellectual disability, learning disorder and learning difficulties

Terminology	Definition
Intellectual disability	Students diagnosed with an **intellectual disability**[148] or a "disorder of intellectual development"[149] experience general difficulties in: • overall cognitive function • developing the skills to function in everyday life. A student who is diagnosed with an intellectual disability will usually have an overall IQ score *below* 70 (whereas the average IQ score for the general population is 100). Intellectual disability has four levels of severity: mild, moderate, severe or profound. Students with an intellectual disability will process the world and their experiences differently from their peers. This means that learning new skills and knowledge may be very challenging for them.
Learning disorder	Students who experience challenges in developing academic skills (particularly literacy and numeracy) may have a diagnosis of "specific **learning disorder**"[150] or "developmental **learning disorder**"[151] This diagnosis includes conditions such as dyslexia and dyscalculia, as well as other conditions that impact on written work. Learning disorders usually become apparent after a student begins school and they can have significant lifelong impact on the student's learning and work opportunities. It is important to note that a learning disorder is NOT the same as an intellectual disability, rather it impacts on specific aspects of the student's learning. In fact, some gifted students can also be diagnosed with a learning disorder.

148 APA, 2013.
149 WHO, 2018.
150 WHO, 2018.
151 WHO, 2018.

Terminology	Definition
Learning difficulty	**Learning difficulties** impact on a student's ability to: • process information that they are presented with in class; and/or • communicate effectively what they know and can do. A student who has a learning difficulty may have an official diagnosis of a specific learning disorder or another developmental disorder that affects their learning and academic achievement, such as attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD) or development coordination disorder (DCD). Sometimes a student may have a number of diagnosed conditions that cause learning difficulties. You may also observe students in your classes who show signs of learning difficulties, *but they do not have a formal diagnosis*. In these cases, it is important for the teacher to observe the difficulties the student is experiencing and provide appropriate support to enable the student to access learning opportunities and show what they know and can do.

Students who are diagnosed with other conditions may also have intellectual disabilities, learning disorders and/or experience other learning difficulties. Some examples of these conditions include:

- *Physical Disabilities*: Cerebral palsy, spina bifida and other mobility difficulties
- *Neurodevelopmental conditions*: Autism spectrum disorders (ASD) and attention-deficit/ hyperactivity disorder (ADHD) (note that some forms of intellectual disabilities are also classified as neurodevelopmental)
- *Medical Conditions*: Epilepsy, some congenital heart diseases, some blood disorders
- *Syndromes:* Down syndrome, fragile X syndrome.

Figure 9.8. Student with dyslexia

It is essential to remember that each student is unique. As teachers, it is important to understand their individual needs. It is very important to recognise that:

- Students without any diagnosis may still experience learning difficulties.
- Students may have several disabilities and learning disorders which impact on their ability to learn.

Learning activity 1. Peer teaching through jigsaw

The purpose of this activity is for you to become familiar with common learning disorders, learning disabilities, and additional needs.

In your expert groups, take notes according to the themes in Table 9.5.

Table 9.5. Characteristics, impacts and strategies

Jigsaw Group	Main characteristics	Impacts on students' learning	Strategies to support students' learning

Jigsaw Group	Main characteristics	Impacts on students' learning	Strategies to support students' learning

Jigsaw group 1: Neurodevelopmental disorders

Neurodevelopmental disorders include conditions such as autism spectrum disorders (ASD), attention-deficit/hyperactivity disorder (ADHD), communication disorders, and specific learning disorder. Neurodevelopmental disorders are conditions that appear as a child's brain develops. They can become more apparent as the child grows and can affect "personal, social, academic or occupational functioning." [152]

Students with developmental disorders may experience many barriers within the classroom and need support to help them to access learning. Each neurodevelopmental disorder will impact on a student's ability to learn in different ways.

152 American Psychiatric Association, 2013, p. 31.

How may this impact on a student's learning or ability to show what they know and can do?

ADHD affects the student's ability to maintain focus on tasks, so they can be easily distracted. It impacts on their organisation skills so they may:

- often lose things
- struggle to plan effectively
- find it hard to follow instructions and finish their work
- appear overactive and find it hard to wait their turn.

ASD impacts on a student's ability to understand and respond appropriately to social situations. This includes difficulties in understanding different social situations and knowing how to communicate or respond to different situations in a socially acceptable way. This can make it difficult to maintain relationships. They may find some aspects of communication difficult to understand, such as non-verbal cues (such as gestures and facial expressions). They may have repetitive movements or repeat sounds or words. Students with ASD may find it difficult to adjust to changes in routine or changes in expectations. They may have deep interest or focus on particular things.

Specific learning disorders impact on a student's ability to develop their skills in mathematics, reading and/or writing. With mathematics it may impact on their ability to remember number facts, calculate fluently and accurately, and/or understand mathematical reasoning. With reading, accuracy, fluency and comprehension may be impacted. Writing difficulties may impact on spelling, grammar and/or organising and writing texts.

What strategies may teachers use to support student's learning?

Here are some specific strategies that may support students with different neurodevelopmental conditions:

ADHD: Pacing the work is important. Break up work into smaller steps: use checklists, provide opportunity for short bursts of attention on a task followed by a brief "movement" break (some students may need to do so physical activity in order to refocus), help the student to develop strategies for organisation, memory, and attention that work for them. Make sure that there are minimal distractions around

the student's work area. Remember, this is a biological condition, so helping students to develop strategies to manage their learning difficulties is likely to be much more effective than punishment. Students with ASD may need support to understand and respond to social cues, gestures, and facial expressions. They may need support to read other people's emotions and understand their own emotions.

ASD: Students with ASD may need help to understand different social situations and how they should respond. They may need help to understand their own emotions and to read other people's facial expressions to communicate emotion. Student's special interests may be harnessed to help create interest in different learning activities. If there are likely to be changes to the normal routine, it can be helpful to given them early warning and time and strategies to adjust. Even though students with ASD may find it difficult to understand social situations, they may also be misunderstood by others. So, it may also be important for teachers and other students to learn how to understand the student with ASD and how to enable them to become a valued member of the class.

Students with ***Specific Learning Disorders*** can be supported in the classroom, by providing extra time for students to complete their work as well as breaks from a task when needed. Explicit teaching of skills may help a student to access the ideas. Providing multiple ways for students to access learning materials, where appropriate, may help to support the student's ability to access and communicate learning (e.g., a written text may be read aloud by someone else; students may present orally rather than written; using available technology that the student finds helpful, etc).

Jigsaw group 2: Intellectual disabilities

Intellectual disabilities can affect a student's ability to function independently within society and their ability to think and reason. An intellectual disability may be developmental (i.e. the child is born with it) or may have resulted due to injury or accident.

There are two main areas of function that are impacted by intellectual disability:

- *Intellectual function*, which refers to aspects of thinking, such as academic ability, reasoning, and problem solving. This is usually diagnosed through intelligence testing [IQ tests].

- *Adaptive function*, which is their ability to communicate, participate in social situations, and become independent.

How may this impact on a student's learning or ability to show what they know and can do?

Students with intellectual disabilities may have difficulty remembering content, particularly if it is new or complex. They may take longer to process ideas and organise information. Students with intellectual disabilities may also experience difficulties completing tasks independently. They may also experience difficulties understanding social situations and communicating in ways that are socially expected.

What strategies may teachers use to support student's learning?

Students with intellectual disabilities may need concepts to be taught in a very explicit and concrete way. Tasks may need to be adjusted (i.e. making them less complex and more structured) to enable students to access the ideas and communicate their learning. Instructions for tasks should be clear and straightforward.

Teachers may also provide different methods for students to demonstrate what they know and can do. For example, the student may be able to discuss what they have learnt with their teacher.

Students with intellectual disabilities may also require support to understand and respond to social cues within the classroom and in the playground. They may also need support with other aspects of daily living. It may be important to help the other class members to appreciate and include the student as a valued member of the class.

Jigsaw group 3: Physical and sensory disabilities

What are the main characteristics or symptoms of the condition?

A **physical disability** is an impairment in a person's physical body. It is often used to describe conditions that impact on a person's ability to move around or perform different tasks.

Sensory disabilities refer to impairments in a person's senses, such as their ability to see (i.e., *visual impairment*) or hear (i.e., *hearing impairment*).

Figure 9.9. Visually impaired student

How may this impact on a student's learning or ability to show what they know and can do?

If a student has a disability that impacts on their ability to walk or move, this may have implications for access to the classroom and safe movement around the classroom. For some students, their physical impairment may also impact on their ability to write or communicate in different ways. For some students, there may also be frequent or long absences due to medical issues, which can cause them to miss a considerable amount of instruction.

Students with sensory impairments may be present in class but miss information if it is not communicated in a way that they can access (for example, if the teacher requires students to copy notes from the board, a student with vision impairment may not be able to see the content, and may not be able to write it down). Likewise, if a teacher explains a concept orally, a student with hearing impairment may miss vital information.

What strategies may teachers use to support student's learning?

Students who have physical or sensory disabilities may need support with environmental aspects of the classroom. Teachers should ensure that all students can move around the classroom safely and that information is presented in a range of different ways that the student can access (e.g. visually, verbally, and physically).

Jigsaw group 4: Psychological, emotional and behavioural issues

What are the main characteristics or symptoms of the condition?

There are many reasons why a student might behave in challenging ways; have unexpected emotional responses; or experience psychological issues. Sometimes behavioural challenges may be biologically driven (e.g. if a student has ADHD) or they may arise in response to a psychological, social, or environmental trigger or event.

Anxiety can impact negatively on a child's ability to learn. Anxiety and depression often occur together.[153] A student may experience both fear, which is an emotional response to a threat, and anxiety, which is the anticipation or expectation of a threat in the future.

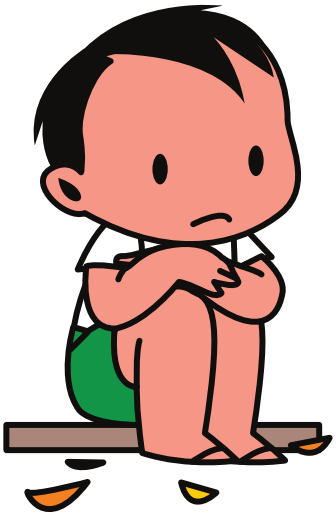


Figure 9.10. A student who has anxiety

153 APA, 2013.

Depression is a characterised by a sense of sadness, emptiness and/or irritability.

Trauma can have a long lasting and significant impact on a person. Children may experience trauma because of events they have experienced where their physical and/or psychological wellbeing have threatened. During these very distressing events a person may feel as if "they would not be able to survive"[154] and they may feel powerless and extremely fearful. A child's *interpretation* of an event can also determine whether they experience trauma. This means that trauma can be very individual and affect children in different ways.

How may this impact on a student's learning or ability to show what they know and can do?

Sometimes, a child may feel anxious about learning or assessment or about social/environmental aspects of the classroom or school. Anxiety can impact on a student's ability to think and function.

Depression can also impact on a student's ability to think and function, as well as their belief in their capabilities and self-worth.

Trauma can cause physical changes in the brain,[155] which can impact on a student's ability to learn and manage their emotions.

What strategies may teachers use to support student's learning?

For all students who have experienced psychological or emotional challenges, maintaining an emotionally and physically safe, calm classroom environment is important in reducing barriers to learning. Providing strategies to help students to regulate emotions may be helpful.

Sometimes teaching and learning content can trigger particular emotional responses for some students, so it is important for the teacher to be aware of this. Developing content that will enable students to develop core skills and knowledge in a safe and beneficial way is important.

154 Silberg, 2013, p. 1.
155 Stien & Kendall, 2004.

Also, it is important that all students feel that they are a valued member of the class.

Jigsaw group 5: Gifted and talented students

What are the main characteristics?

Gifted and talented students have outstanding abilities and can learn particular skills very quickly. Sometimes, their abilities are in specific areas, such as music, or mathematics, or writing, or in a range of different learning areas. Students who are gifted or talented are often very "creative, innovative and motivated thinkers."[156]

While IQ scores are usually part of the process of identifying exceptional students, other factors may be considered, such as the child's developmental history, and how they excel in areas of interest (including areas that are not tested in IQ tests), as well as their motivation and passion for learning.

How may this impact on a student's learning or ability to show what they know and can do?

Sometimes students who are gifted may also have specific learning disorders (e.g. dyslexia, dysgraphia or dyscalculia), or other neurodevelopmental disorders, (e.g. communication disorders, developmental communication disorder [DCD], autism spectrum disorder [ASD], attention-deficit/hyperactivity disorder [ADHD] etc.), which may make their talents difficult to identify. These students are sometimes referred to as **twice-exceptional**.

What strategies may teachers use to support student's learning?

They may require additional support to either access learning materials (e.g. students who have dyslexia), and/or communicate what they know and can do (e.g. students who have communication disorders or DCD).

156 Mcclain & Pfeiffer, 2012, p. 59.

9.2.3. Differentiation and individualised education plans

Expected learning outcomes

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

- Identify learning activities that will allow for teacher observation to ascertain students' learning needs;
- Identify strategies and resources to support differentiation for students with additional needs; and
- Explain the purpose of and process involved in developing and monitoring an Individualised Education Plan.

The teacher's role

A teacher's role is to educate students and provide them with opportunities to learn. Teachers should observe students in their classes to identify and address barriers to learning. A formal diagnosis of a disability may help you to identify learning needs, however, it is important to remember that all students are unique. It is essential to get to *know students* and to build professional, trusting and safe relationships with them so that you can meet their needs.

Learning activity 1. Outlining a learning activity that will allow observation

The purpose of this activity is to outline a learning activity that will allow for teacher observation of students.

Scenario: Often students will come to class without formal diagnoses or identified additional learning needs. While it is not your role to diagnose students, you should observe their learning behaviours and interactions with other students in order to respond to their learning needs.

It is the start of a school year. You have limited information about your middle school students. Plan a learning activity that will give you the opportunity to observe your students, in order to identify students who may require additional support in their learning. Identify:

1. What is the grade? What is the subject area?
2. What are the skills to be observed (i.e., what information/ evidence are you looking for)?
3. What is the learning activity?
4. What characteristics/behaviours will help you to recognise students who need additional support?

An example has been provided for you in Box 9.4a. Present your response in Box 9.4b.

Box 9.4a. Example of learning activity that provides opportunity for observations

Grade level and subject: Grade 6 Science

Skills to be observed: Teamwork, problem solving, organisational abilities, fine motor coordination, reflection

Learning activity: Each team will need to build a bridge out of paper that can support itself and hold weight.

Resources: Each group will be given an old newspaper and one roll of sticky tape.

Instructions:

Bridge construction: In teams of 3, construct a bridge out of paper and tape. The bridge will need to stand on its own without sagging or falling for at least 30 seconds. We will then try to add weight to the bridges that are still standing after 30 seconds. The team that builds the bridge that holds the most weight wins.

Writing task: Write a short reflection about the bridge challenge.

- What were some positive things you learnt by working in a group?
- What difficulties did you experience in your group?
- What might you do differently the next time you work in a group?

What characteristics/ behaviours will help you to recognise students who need additional support?

- Passive or disengaged: do not contribute ideas
- Dominate the team and do not listen to others
- Lack of focus on the task
- Difficulty in manipulating the materials
- Lack reflective insights; not able to express how they may improve on the experience.

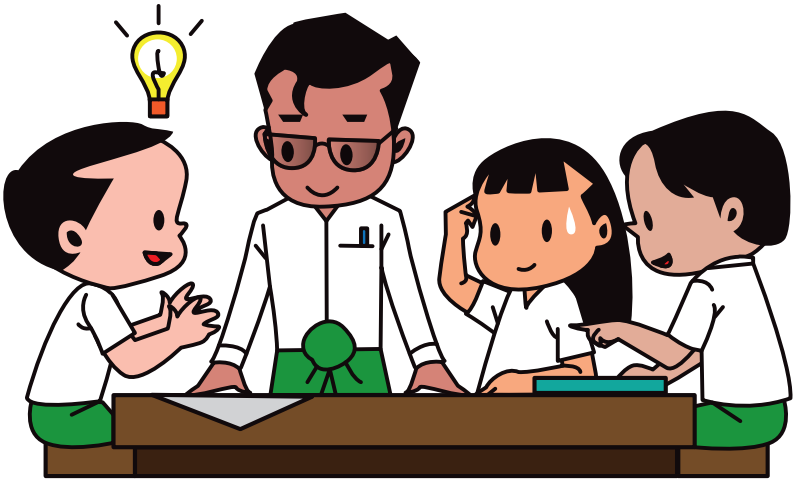


Figure 9.11. Learning activity for teacher to observe teamwork and problem solving

Box 9.4b. Example of learning activity that provides opportunity for observations

Grade level and subject:
Skills to be observed:

Learning activity:
Resources:

Instructions:

What characteristics/ behaviours will help you to recognise students who need additional support?

Planning for differentiation

As you plan to teach students with additional needs it is important to take into consideration:

Pace of learning

- Do you need to alter the pace of learning for some students?
- Some students may take longer to learn the content and complete learning activities (i.e., show what they know and can do).
- Other students may learn much more quickly and need opportunities for extension.

Figure 9.12. Students may need opportunity for extension

Access to resources

- How will you help students to access a range of learning resources?
- Can content be accessed through different media (e.g., students viewing videos or listening to audiotapes of books)?

Environmental and social considerations

- Can all students access every part of the learning environment so they can engage in learning?
- What structures or expectations might you need to put in place to enable all students to feel safe within the learning environment? (i.e., supporting students to work alone, in pairs, or in small groups)
- How may you develop in students an awareness of the needs of others?

Providing opportunities for students to demonstrate what they know and can do in different ways:

- How will you enable students to demonstrate what they have learnt in ways that they can communicate best?
- Will you provide more time or different levels of scaffolding for students to complete activities?
- Will you provide feedback at more frequent milestones?

Figure 9.13. Students propose their own ways in which they demonstrate their learning

Professional communities of learning

Just as it is important for teachers to develop communities of learning amongst the students, it is also important for teachers to be part of wider communities to support student needs:

- A student's learning needs to be supported beyond the classroom (particularly if they have additional needs). This means that there can be some c*onsistency for the student between home, school, and other contexts.*

- Teachers can benefit from collaboration with teaching colleagues and school leaders, other professionals, parents and carers, and community leaders, who know the student in a different way or a different context. Teachers can gain *in-depth understanding of the student and their needs.*
- When teachers collaborate with other people, who work with the student, they have a *wider range of resources* to draw from to support the student's learning. In fact, people within the community can be valuable resources themselves.

Figure 9.14. Professional community discussing the needs of the student

Learning activity 2. Identifying members of a professional community and resources

The purpose of this activity is to identify who may be part of a professional community and what resources may be available to support differentiation in the Myanmar middle school context.

Planning to remove barriers to learning for students with additional needs can require resources and support from within the school and the community. Relevant indicators within the School Quality Assurance Standards Framework are as follows:

- 3.4a. There is cooperation with parents and community groups to develop and implement an effective teaching and learning plan.
- 4.2b. There are adequate learning and teaching aids and resources, and they are utilised effectively to support the teaching and learning activities for *all* students.

Identify:

- Who may be part of a professional community
- What resources may be available to support differentiation in the Myanmar Middle school context.

Individualised Education Plan

What is an IEP and what is its purpose?

An Individualised Education Plan (IEP) is a tool that is developed to support the student with additional needs to access and participate in the mainstream classroom with their peers. It is *not* intended to provide a separate curriculum for the student. The IEP has a number of different purposes:[157]

1. *Educational:* The IEP outlines learning goals and outcomes, which are specific to the student, and provisions to help reduce barriers to learning.
2. *Accountability:* The IEP provides a way to evaluate the effectiveness of the provisions in reducing barriers to learning, and the extent to which the student has achieved the targeted learning goals and outcomes.
3. *Resourcing:* IEPs can be used as evidence that schools need additional funding for particular resources to support students with additional needs. Schools may also use IEPs to allocate finances and distribute resources within the school.

157 Mitchell, Morton & Hornby, 2010; King, Bhroin & Prunty, 2018.

What does an IEP contain?

An IEP contains information about:

- The student, including age, year level and teacher(s)
- The student's disability, medical condition, or additional needs
- The student's strengths
- Main resources or equipment that the student needs to function in the school and classroom environment
- Supports that are available and that can be used in the classroom, in the family and school community
- Overarching goals for: a) learning; b) social development; and c) behavioural development
- Specific learning outcomes and strategies and resources.

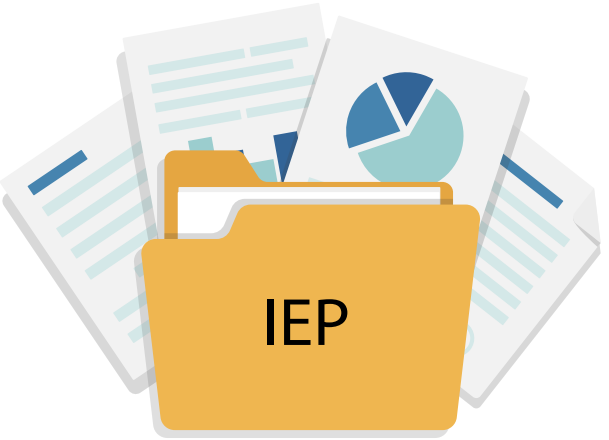


Figure 9.15. IEP for a student with additional needs

How is an IEP developed and monitored?

An IEP is a document that is developed by a group of people who work with the student who has additional needs (i.e., the professional community), including the teacher, other professionals, and the student's parents or carers. The group meets to discuss the needs of the student based on evidence from observation and assessment.

The group sets goals for the student's learning. The student's input can be very important in developing goals.[158] These goals may also focus on helping the student to develop social and life skills. The goals should be:

- achievable (i.e., with support, accommodations, and modifications in place); and
- measurable (i.e., progress needs to be measured against the goals).

Once the plan has been established, the teachers and support people will monitor and record their observations of the student's progress, making note of strategies and resources that work and aspects that need to be revised. New goals may be established, changes to the adjustments and supports may be needed.

Homework activity - Undertaking further research on IEPs

The purpose of this activity is for you to find out more about the use of IEPs in Myanmar.

It may be advisable to undertake this task in groups. Does anyone in your group know a principal or teacher, who can be interviewed by phone? They may work at a public, monastic or private – perhaps international – school. Ask whether any student within their school or classroom has an IEP. If so, find out:

- What information is contained in the IEP?
- What was the process involved in developing the IEP?

If you are unable to interview a principal or teacher, then find out any information you can about the use of IEPs within Myanmar. Where may you source information? Is there a government office that you can contact? Is there a government website that may provide information of this nature?

158 Mitchell, Morton & Hornby, 2010.

Review questions

1. What is inclusion and why is it important in education?
2. Explain how a social model of disability can help to increase the learning opportunities for students with additional needs.
3. What are barriers to learning and how can teachers minimise barriers to learning for students with additional needs?
4. What is the difference between learning disorders and intellectual disabilities?
5. How can teachers gather resources and strategies to support students with additional needs?
6. What is the purpose of an Individualised Education Plan? What information should be recorded in it?

9.3. Conflict Resolution and Peace Education

In this sub-unit, you will explore the nature of conflict in middle school settings and the importance of resolving conflicts early and constructively. You will explore three frameworks for responding to, and resolving, conflict: 1) constructive and destructive responses; 2) five response modes, according to the Thomas-Kilmann Instrument, and the 3) six-step STABEN process. These frameworks can support middle school students develop conflict resolution skills. You will review competencies developed through conflict resolution and peace education and make connections with the Middle School Curriculum.

9.3.1. Responses to conflict

Expected learning outcomes

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

- Explain why middle school students need conflict resolution skills;
- Compare constructive and destructive responses to conflict; and
- Outline the five conflict response modes of the Thomas-Kilmann Instrument.

Resolving conflict in the middle school

Conflict occurs when "two or more values, perspectives or opinions are contradictory in nature or have not yet aligned or been agreed upon."[159] Conflict is a part of life. Every time we interact with someone there is a potential for conflict because people's

159 Nischal, 2014, p. 62.

needs and expectations are not the same.[160] Conflict can arise within ourselves. Broad conflict types are:

- Within people (*intra*personal conflict)
- Between people (*inter*personal conflict)
- Within a group (*intra*group conflict)
- Between groups (*inter*group conflict).

In middle school environments, conflict may involve playground disputes between students, episodes of physical aggression, and emerging social differences between peer groups in values and beliefs.[161]

Conflicts can lead to the end of friendships, bullying, and exclusion.

It is important for middle school students to learn how to resolve conflicts before they escalate. Conflict resolution programmes suggest the need for students to change their mindsets, as presented in Box 9.5. Rather than viewing conflicts negatively, they can be 'navigated' as opportunities for personal growth and relationship building.

Box 9.5. Conflicts as an opportunity for growth

Students should understand conflicts as having ***positive possibilities*** and as a necessary, natural part of life. When handled appropriately, conflicts are opportunities to make something better. They challenge us to learn, grow and create.

Unfortunately, there are largely negative perceptions of conflict because of the poor ways in which people choose to respond to it. It is important that students understand that there are a variety of options when it comes to handling conflict and that their reaction in conflict situations can greatly influence the quality of outcome.[162]

160 Fairfax County Public School, n.d.
161 Davis & McCoy, 2016.
162 *Source:* CRAMSS, 2015.

Figure 9.16. Middle school students constructively responding to conflict

Constructive and Destructive responses to conflict

Students can be supported to reflect on situations of conflict and consider how to best navigate them in order to arrive at positive outcomes. Students have opportunity to see that ***constructive responses*** are likely to lead to learning, problem solving and relationship building, while ***destructive responses*** are likely to lead to an escalation of conflict and negative outcomes.

A simple activity for students to undertake may involve a T-chart where students list both constructive and destructive responses to a conflict scenario. The example in Figure 9.17 focuses on ***interpersonal*** conflict between siblings, prompted by one sibling (Nang) wearing the other's clothing.

Resolving conflict within the family is a point of focus for lessons within the new Grade 6 Morality and Civics Curriculum.

Constructive	Destructive
1 Ask if Nang knows which clothes belong to me.	1 Yell at Nang whenever I see her in my clothes.
2 Nang seems to like my shirts. Offer to show her where I buy my clothes.	2 Wear Nang's clothes without asking, since she wears mine.
3 Explain to her that her wearing of my clothes bothers me. See if she has any solutions.	3 Keep all my clothes dirty so Nang won't want to wear them.

Figure 9.17. Conflict responses T-charts: Interpersonal conflict between siblings[163]

Learning activity 1. Responding constructively to conflict - T-chart

The purpose of this activity is to identify and reflect upon constructive and destructive responses to conflict and the consequences of constructive responses to conflict.

Part A. Construct a T-chart. Select a conflict scenario that a middle school student may find themselves in. Identify both constructive and destructive responses to the conflict.

Part B. Reflect on a past conflict situation in your own life where you responded *constructively*. What was the scenario? What were the outcomes?

Constructive	Destructive

Figure 9.18. Conflict responses T-chart

163 CRAMSS, 2015.

Five conflict response modes

The Thomas-Kilmann Conflict Mode Instrument[164] has wide acceptance internationally as a helpful tool for understanding responses to conflict.[165]

The tool maps five different response modes for handling conflict situations on X and Y axes (see Figure 9.19).

- The Y axis represents the importance of the goal, or satisfying one's own needs.
- The X axis represents the importance of the relationship, or satisfying others' needs.

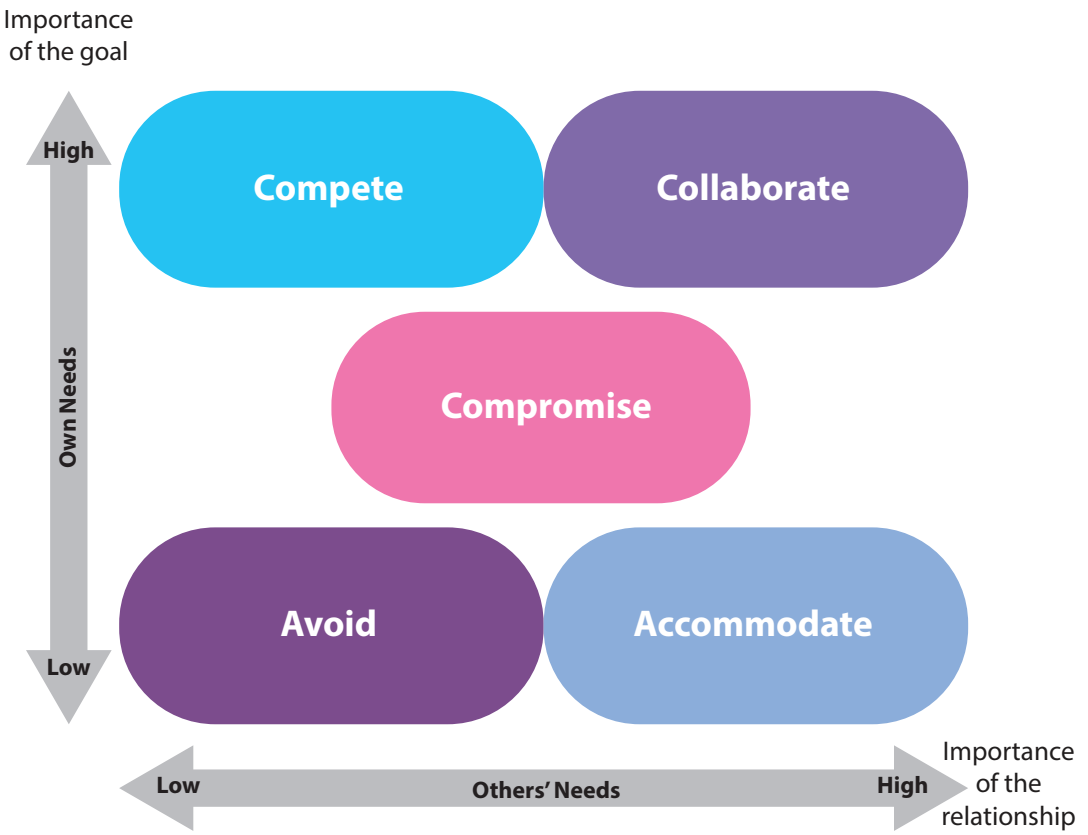


Figure 9.19. Thomas-Kilmann Conflict Instrument

164 Kilmann Diagnostics, 2009-2020.
165 Nischal, 2014.

Table 9.6 provides a brief description of each of the five responses to a conflict scenario (i.e. Compete, Collaborate, Compromise, Avoid and Accommodate) and identifies the extent to which that response is:

- 'Assertive': values the *goal* or one's own needs
- 'Cooperative': values the *relationship* or others' needs.

In 'compromise' mode, a middle ground has been found. However, the solution only *partially* satisfies both people. In 'collaboration' mode, the attempt is to find a creative solution that fully satisfies the concerns of both people.

Table 9.6. Modes for responding to conflict

Response	Description	Assertive	Cooperative
Compete	A person pursues their own concerns at the other person's expense	✓	
Collaborate	A person attempts to work with others to find a solution that *fully* satisfies people's concerns	✓	✓
Compromise	A solution is arrived at that *partially* satisfies both people.	✓	✓
Avoid	A person does not pursue their own concerns nor those of the other person		
Accommodate	A person neglects their own concerns to satisfy the concerns of the other person.		✓

Table 9.7 draws upon a conflict scenario and presents how these five response modes may translate in action (see Annex 4 for other conflict scenarios for middle school students and a middle school activity utilising the five response modes).

Scenario: Whenever you have friends over, your little brother wants to do everything with you. He annoys you by following you around, interrupting when you are talking, and demanding a turn in everything you do. It is very hard to find some privacy with your friends when he is around.

Table 9.7. Response and outcome for each mode

Response	Conflict situation from one's own life experience
Compete: A person pursues their own concerns at the other person's expense	I told my parents that my little brother always annoys me when friends are over.
	What was the outcome? My parents took my brother out shopping with them so that my friends and I could be left in peace. My brother was annoyed at me for having to go shopping with our parents.
Collaborate: A person attempts to work with others to find a solution that fully satisfies both people's concerns	I told my little brother that, after my friends had left, I would spend some time playing with him. However, for that to happen, he had to respect my time with my friends.
	What was the outcome? I played basketball with my little brother after my friends had left. My brother was very happy that I spent time with him. In fact, we now play basketball together more often. He does not tend to annoy my friends and me as much.
Compromise: A solution is arrived at that partially satisfies both people	I told my brother that he could stay for 10 minutes with my friends and me. Then he had to leave.
	What was the outcome? He left us after 10 minutes, however, was not entirely happy about that.
Avoid: A person does not pursue their own concerns nor those of the other person	I stopped playing with my friends because clearly it was not going to work when my brother was at home.
	What was the outcome? My friends left and my brother went into his room.
Accommodate: A person neglects their own concerns to satisfy the concerns of the other person	I told my brother that he could stay with my friends and I for the entire time.
	What was the outcome? My brother was happy. My friends did not seem to enjoy their time as much. I was annoyed with having to put up with the situation.

Learning activity 2. Identifying conflict response modes and outcomes

The purpose of this activity is to build understanding of the different response modes, according to the Thomas-Kilmann Conflict Mode Instrument.

Part A (Individual). Within your group, share responses to:

- Which response mode are you ***most comfortable*** with in situations of conflict (i.e. the mode you most frequently adopt)?
- Which mode are you ***least comfortable*** with in situations of conflict?

Part B (Group). Each group member will select a response mode and draw from their own life experience to provide a scenario wherein they adopted this response mode and outline the outcome/s of responding in this way. Record responses in Table 9.8.

Figure 9.20. Middle school students in 'avoid' mode

Table 9.8. Conflict situation for each response mode

Response	Conflict situation from one's own life experience
Compete A person pursues their own concerns at the other person's expense	
	What was the outcome?
Collaborate A person attempts to work with others to find a solution that fully satisfies both people's concerns	
	What was the outcome?
Compromise A solution is arrived at that partially satisfies both people	
	What was the outcome?
Avoid A person does not pursue their own concerns nor those of the other person	
	What was the outcome?
Accommodate A person neglects their own concerns to satisfy the concerns of the other person	
	What was the outcome?

9.3.2. Conflict resolution and peace education in the curriculum

Expected learning outcomes

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

- Discuss methods and techniques for developing conflict resolution skills;
- Outline competencies developed through conflict resolution and peace education; and
- Connect conflict resolution and peace education with the Middle School Curriculum.

Conflict resolution

An increasing number of education programmes teach specific skills for preventing and resolving conflict. As outlined in the previous lesson, students can learn about different responses to conflict and work towards adopting:

- ***constructive*** responses versus destructive responses to conflict, which can be mapped on to a T-chart (Figure 9.17); or
- a ***mode of collaboration*** where creative solutions are arrived at that satisfies the concerns of the parties involved in the conflict.

Box 9.6. Middle school learning activity involving five response modes

1. Explain and discuss the five conflict response modes with students.
2. Create five sections of the classroom, a section for each response mode.
3. You may tape five signs on the walls or floor or form five desk islands.
4. Divide students evenly into each of the five sections, creating five groups.
5. Read a conflict scenario (see Annex 4) and give students 3-4 minutes to consider these questions:

    - How may someone handle this problem using your section's response mode?
    - What may be the consequences or outcomes of handling it this way?

6. Ask each group to share their answers.
7. Ask each group to rotate to the next section and repeat this process. Continue until every group has responded from every section.
8. Debrief and evaluate the most successful response modes in terms of outcomes.
9. End on take-home messages about the power of collaboration.

Figure 9.21. A middle school student collaborates with peer to find a creative solution

Students can be provided with different models of conflict resolution processes.[166]

The six-step process, in Table 9.9, can be seen to form the groundwork for people, in conflict, to collaborate. It is at the sixth step (i.e., 'Need') where the people begin to develop creative solutions.

166 GTZ & IBE–UNESCO, 2008.

Table 9.9. The STABEN six-step approach to conflict resolution

S	Source	Identify the source of conflict (Who and what?).
T	Time and place	Determine the appropriate time and place to discuss the conflict.
A	Amicable/Friendly	Begin by communicating something positive to the person and maintain a friendly tone throughout the discussion.
B	Behaviour	Make sure to address the behaviour in the conflict and avoid discussing any other behaviours.
E	Emotion	Honestly express your feelings and emotions about what is specifically causing the conflict for you.
N	Need	Begin developing creative solutions so that both parties can be part of the resolution and satisfied with the outcome.

Learning activity 1. Role-playing the STABEN steps

The purpose of this activity is for you to develop understanding of how the STABEN six-step approach may be applied.

Identify a source of conflict or select a conflict scenario in the Annex 4.

Devise a role-play of the meeting comprising the steps: ABEN.

Peace education

Education in conflict prevention and resolution is "gaining increased curriculum space in developed countries, as well as in some *post-conflict societies*, partly in response to school violence."[167]

Conflict resolution education starts with a focus on problems in personal relationships. Over time, it progresses to broader issues of social cohesion, reconciliation, and peace.

Peace education focuses on developing:

- *skills*, such as resolving conflict and preventing violence; and
- *dispositions*, such empathy (i.e., the capacity to understand the feelings of another) and respect for self and others.

167 GTZ & IBE–UNESCO, 2008, p. 30.

Figure 9.22. Peace education in response to school violence and in post-conflict societies

In Year 1 of Education Studies, you learnt that peace education takes a proactive stance, given that:

> …the skills and dispositions necessary to work for complete peace can be learnt. Peacebuilding is a process in which everyone needs to participate. It is not possible to overcome all conflicts, but we can learn to solve conflicts non-violently, value diversity and actively oppose social discrimination and injustice.

You also reviewed a curriculum framework for primary and middle school, presented in Box 9.7, which outlines the competencies developed through conflict resolution and peace education programming.

Box 9.7. Competencies developed through conflict resolution and peace education

Knowledge and understanding:

- Understanding similarities and differences; and exclusion and inclusion
- Understanding that people perceive the world differently
- Understanding human rights.

Skills:

- Having empathy (i.e. understanding others' situations and feelings)
- Active listening
- Better communication (two-way)
- Handling emotions
- Cooperation
- Appropriate assertiveness
- Problem analysis and problem solving
- Negotiation
- Mediation
- Conflict resolution.[168]

Learning activity 2. Linking conflict resolution and peace education to curriculum

The purpose of this activity is to explore curriculum links to conflict prevention and resolution and peace education.

1. Make notes directly into Box 9.7.
2. Review themes explored in the new Grade 6 Morality and Civics Curriculum, relating to conflict prevention and resolution, and peace education. Fill out Table 9.10.

168 GTZ & IBE–UNESCO, 2008, p. 30.

Table 9.10. Grade 6 Morality and Civics Curriculum

Relevant learning objective: To understand valuable Myanmar culture and tradition and practice it at home	Relevant learning objective: To behave in a way that promotes peace at home, school and neighbourhood
Unit: Social etiquette Lesson 1.4 Peaceful family Themes explored:	Unit: Living in harmony Lesson 4.1 Introduction to peace Themes explored:

Discuss in your group, other subject areas that may be appropriate to explore concepts of conflict resolution and peacebuilding processes. For instance, read Box 9.8 to see how peace education may be pursued in the Grade 8 Myanmar Curriculum.

Box 9.8. Links to peace education in Myanmar Curriculum[169]

Grade 8 Myanmar: The Nobel Prize for Peace ***ESD link:*** In learning about the Nobel Prize, we often think of the Nobel laureates as people who have excelled in a specific field of work or study and achieved one of the highest levels of recognition for their efforts. But it is also important to consider the work of many Nobel laureates as contributions to society that has had real impact on people's lives around the world. Advances recognised by the Nobel prizes represent accomplishments that can potentially lead to improvements in society, culture, economy, etc. An example of a Nobel Laureate who contributed to the betterment of society is Malala Yousafzai (Nobel Peace prize winner in 2014) for her work promoting the right to education.	
Handout #81 Malala Yousafzai has also been working to promote children's right to education. She was only 17 years old when she won the Nobel Prize and is the youngest person to get the award. In Pakistan, her father ran a school and promoted education for all. She also spoke out about the importance of education, especially for girls, and even blogged for the BBC. However, a terrorist group called the Taliban tried to assassinate her when she was riding the bus home from school. She survived the attack and continues to fight for girls' education. Today, she lives and continues her work in the UK. In her speech for the Nobel Prize, she said, "This award is not just for me. It is for those forgotten children who want education. It is for those frightened children who want peace. It is for those voiceless children who want change."	

Review questions

1. Why is it important for middle school students to have the skills to resolve conflict?
2. What are the likely differences in terms of outcomes in adopting constructive as opposed to destructive responses?
3. What is the conflict response mode of the Thomas-Kilmann Instrument, which sees the people in conflict develop creative solutions?
4. List some of the competencies that are developed through conflict resolution and peace education.
5. What are possible spaces in the Middle School Curriculum to pursue a conflict resolution and peace education agenda?
6. What other curriculum agendas does conflict resolution and peace education relate to?

169 Adapted from the Grade 8 ESD Teacher Guide (UNESCO, 2017); Image: United Nations..

9.4. Classroom Management

In this sub-unit, you will explore setting up classroom routines and rules in the middle school. You will review principles and practices associated with effective classroom management and have opportunity to role play proactive classroom management techniques.

9.4.1. Establishing classroom procedures and rules

Expected learning outcomes

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

- Explain the importance of setting classroom procedures, rules, and positive and negative consequences;
- List key considerations in setting procedures, rules, and consequences; and
- Design procedures, rules, and consequences for a middle school classroom.

Establishing classroom procedures

For a classroom to run smoothly, the teacher needs to establish a set of classroom procedures. These procedures establish the culture of a classroom.

From the very first day, students must know how they are expected to learn and function in the classroom environment.[170]

It is the responsibility of the teacher to have procedures clearly stated.

170 Monastic Education Development Group. (n.d.).

However, procedures are typically not written down. In Year 1 of Educational Studies, you learnt about a three-step process for *teaching classroom procedures* to students:[171]

	1. ***Explain*** classroom procedures clearly
	2. ***Rehearse*** classroom procedures *until they become routines*
	3. **Reinforce** a correct procedure and **reteach** an incorrect one

Figure 9.23. Teaching classroom procedures

A well-managed classroom has routines relating to:[172]

1. *Administrative duties,* such as taking attendance and giving out notes to take home
2. *Student movement*, such as entering the class, leaving the class, going to the bathroom, and fire drill
3. *Lesson management*, such as how to distribute materials or homework, collect student notebooks or storing unfinished work
4. *Teacher-student and student-student interactions*, such as how to get the teacher's attention when help is needed or how to respond to questions
5. *Housekeeping*, such as cleaning the board, organising desks, watering the plants, or feeding the fish.

171 Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003).
172 Monastic Education Development Group. (n.d.).

Figure 9.24. Routines for lesson management

Learning activity 1. Sharing ideas about middle school classroom procedures

The purpose of this activity is to provide opportunity for you to consider what are appropriate classroom procedures for a middle school setting.

Arrive at group consensus regarding acceptable procedures and routines for the Myanmar middle school, relating to the areas of classroom activity outlined in Box 9.9. Note that your group does not have to answer all of the questions.

Respond to those questions, where group members have good ideas to share from their own school experiences or observations.

Box 9.9. Stimulus questions for middle school classroom procedures

Administrative duties:

- How does the teacher mark attendance?
- How do teachers give out notes to be taken home for parents?

Student movement:

- How do students enter the class? Should they line up first outside?
- When students are late, how do get permission to enter the room?
- In what circumstances can students leave the room? When do they need permission?
- How many students at a time can be attending the bathroom?
- Can students leave their seats to sharpen their pencils?
- Can students leave their seats to put rubbish in the bin?
- When can students leave at the end of the day?

Interactions:

- Do students need to raise their hands for permission to speak or do they simply wait until the speaker has finished?
- How does the teacher signal when they want everyone to respond at once?
- How can students get the teacher's attention when they require assistance?
- Can students ask other students for assistance?

Lesson management:

- How is homework returned?
- How are resource materials distributed?
- What do students do if they have finished a learning activity early?
- How are student notebooks collected for assessment?
- Where do students place unfinished work?

Housekeeping:

- How does the teacher distribute tasks among students, such as cleaning the board, watering the plants, feeding the fish etc.?
- How does the teacher ensure that the class remains tidy?
- What happens if lost items are found?

Figure 9.25. Routines for interactions

Establishing classroom rules

Why are school and classroom rules important?

Rules set boundaries. Boundaries give students a sense of security. It is important to have boundaries. Schools and classrooms must be safe environments where all students can come to learn without fear. Students and parents need to know that the school leadership team and classroom teachers work together to maintain a safe and supportive environment. Rules can only be effective, though, when they are monitored and there are consequences for not obeying them.

How do teachers set rules?

Teachers set rules that are appropriate for their particular contexts. There are no set rules for classrooms. In establishing rules, teachers need to consider what kind of culture they wish to establish in their classrooms and what behaviours will support their students' learning.

There should be about five classroom rules. Rules and consequences can be displayed on a classroom poster. In middle school classes, you can establish the rules and consequences collaboratively with your students.

The Morality and Civics Curriculum provides space for exploration of classroom and school rules.

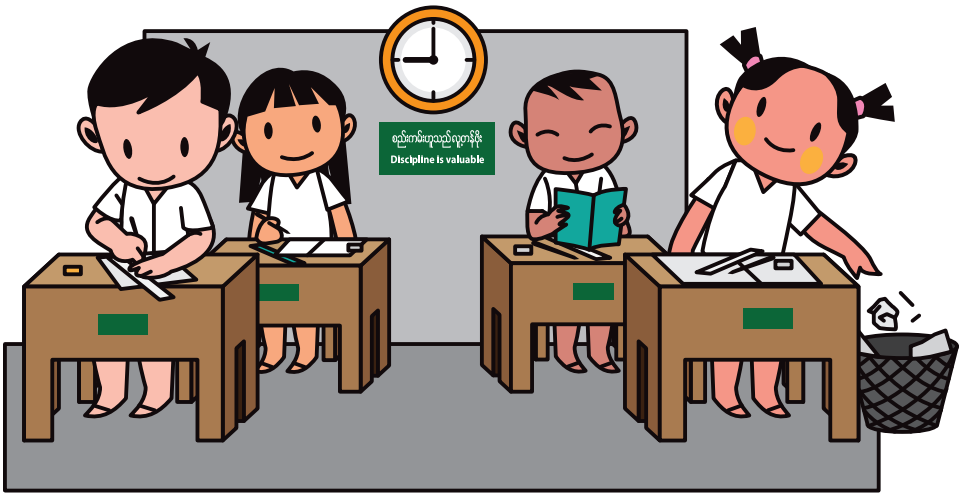


Figure 9.26. Middle school students abiding by classroom rules

What are consequences?

Rules must have consequences. Consequences are not punishments.

- **Positive consequences** or outcomes result if a student obeys the rules.
- **Negative consequences** or outcomes result if a student breaks the rules.

The teacher may take opportunities to positively reinforce the rules, when they see students obey the rules. For example, if there is a class rule, such as "Keep our room clean", the teacher may say, "Yi Yi, I noticed that you put the rubbish in the bin. Thank you".

If a student breaks this rule, the teacher may say, "Nang, I notice that you often just leave your rubbish around. I will ask you to stay with me, in the break, and tidy up the classroom. Thank you".

Students may test the rules to find the limits of acceptable behaviour. Students may break certain rules if they think that nothing will happen to them. If there are no negative consequences for breaking the rules, then other students will also break the rules.

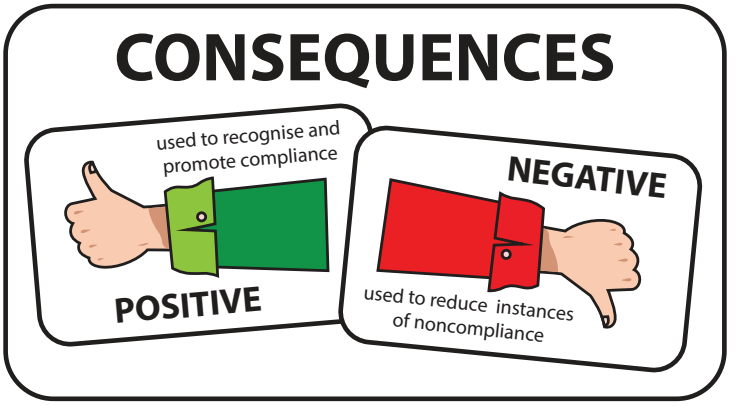


Figure 9.27. Consequences

Is physical punishment appropriate in a school?

Negative consequences should not involve physical or verbal punishment. Children who are physically punished often feel helpless, intimidated, and anxious. Moreover, they are more likely to have violent relationships in future. Verbal punishments, which involve mocking or embarrassing students, can also affect them psychologically. Teachers need to model *peaceful and respectful* responses.

Learning activity 2. Setting rules and consequences

The purpose of this learning activity is for you to set rules and consequences for a middle school classroom.

For a selected grade level in the middle school, design: 1) a set of classroom rules; and 2) appropriate consequences, both positive and negative.

9.4.2. Effective and inclusive classroom management practices

Expected learning outcomes

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

- Explain the shift in focus from 'behaviour management' to 'creation of safe and supportive learning environments' in professional standards;
- Identify principles and practices associated with effective and inclusive classroom management; and
- Role-play proactive classroom management techniques.

Creating a safe and supportive learning environment

In the Teacher Competency Standards Framework, there is reference to 'classroom management' as an area of competence in the Professional Skills and Practice domain.

The associated Standard refers to the creation of a **safe and supportive learning environment**.

The Minimum Requirements Indicators refer to teacher-student and student-student interactions, which are *respectful and regular*.

Box 9.10. Create a supportive and safe learning environment

Teacher Competency Standards Framework

Professional Skills and Practice ,– **Classroom management**

Area of Competence

B3. Create a **supportive and safe learning environment** for students

Competency Standard

- B3.1.2 Encourage student to ***interact*** with each other and to work independently and in teams
- B3.2.2 Encourage students to ***interact*** with each other with mutual respect and safety
- B.3.2.3 Learn to know each student,Äôs background and needs and ***interact regularly*** with all students

Indicators

The terms and emphases are important, as explained in a recent research article:[173]

> Whilst strong classroom organisation and behaviour management skills are critical for education, using methods that produce and ***increase constructive interactions*** will result in more successful classroom environments for both teachers and students.[174]

Effective classroom management strategies are designed to create positive learning environments by ***building in positive supports that prevent challenging classroom behaviour*** prior to the implementation of more reactive behavioural approaches.

It was for this reason that teacher education and those who were concerned with developing teacher standards, started to use the term ***creating positive learning environments*** rather than behaviour management.

Figure 9.28. Use methods which increase constructive interactions

173 Egeberg, McConney & Price, 2016, p. 5.
174 Oliver & Reschly, 2010.

Learning activity 1. Hot potato: listing strategies and support

The purpose of this activity is for you to generate lists of strategies to increase constructive interactions and positive supports to prevent challenging behaviour.

Form groups of six and complete two whole rotations of hot potato.

- Rotation 1: Identify one strategy to increase constructive interactions in the classroom learning community
- Rotation 2: Identify one positive support to prevent challenging behaviour in the classroom.

Table 9.11. Strategies and supports for creating a positive learning environment

Strategies to increase constructive interactions	Positive supports to prevent challenging behaviour
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Figure 9.29. Hot potato can be used with your middle school students

Characteristics of effective and inclusive classroom management

An evidence-based framework of effective and inclusive classroom management comprises five characteristics.[175] In this framework, teachers:

1. maximise structure through the use of:
   - explicitly defined *procedures and routines*; and
   - a *physical classroom arrangement*, involving good spacing of clusters of desks and visual displays.

2. establish expectations and teach social skills by identifying and defining a small number of positively stated *rules or agreements*.
3. actively engage *all* students in their learning by using a *variety* of teaching and learning approaches, strategies, and techniques.
4. *acknowledge appropriate behaviours* through the use of both individual and group encouragement.
5. use a range of strategies to *respond to inappropriate behaviours* from low-key techniques to providing students with clear choices and consequences.

175 Simonsen, Fairbanks, Briesch, Myers & Sugai, 2008.

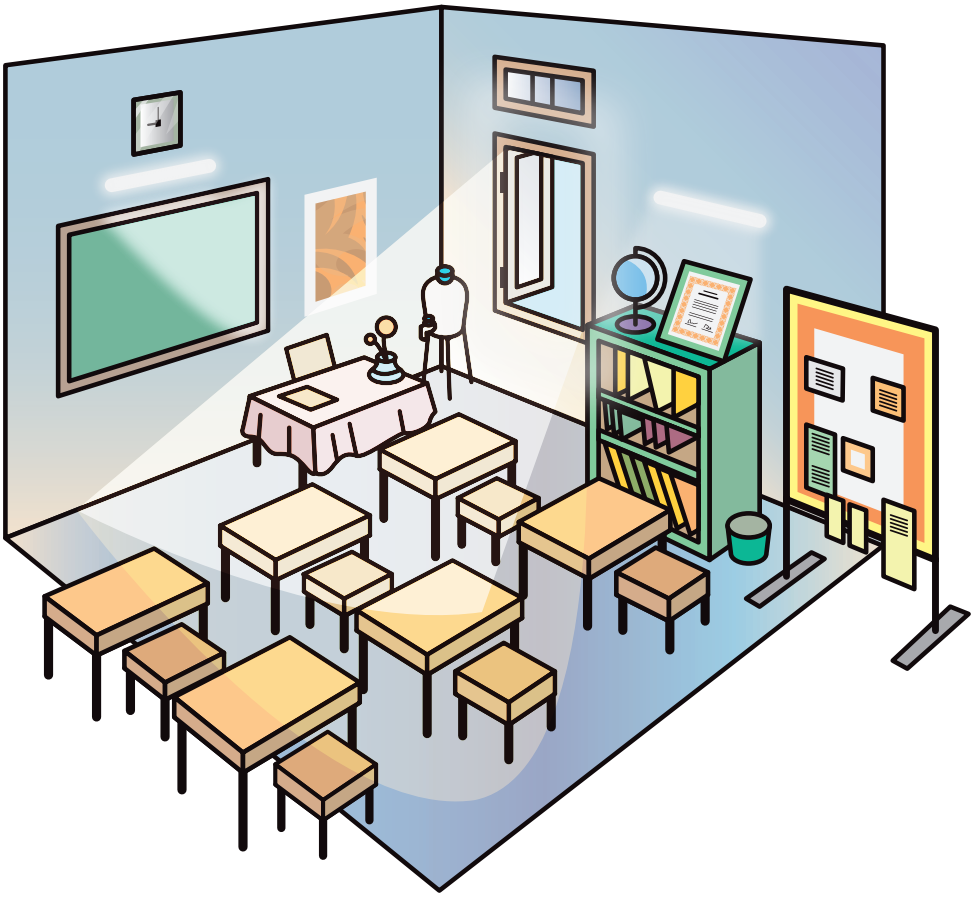


Figure 9.30. Good spacing of desks and visual displays

Proactive classroom management techniques

Teachers, who create safe and supportive learning environments, actively model and acknowledge productive behaviours and use **proactive techniques** to manage classroom situations.[176]

Proactive techniques can prevent inappropriate behaviour from occurring and situations escalating. Figure 9.29 presents 10 techniques that have been effectively adopted by teachers in Australian schools.[177]

176 Jackson, Simoncini, & Davidson, 2013, p. 31.
177 Davidson, 2011.

These proactive techniques are organised according to three clusters:

1. Set clear expectations
2. Acknowledge appropriate behaviour
3. Respond to inappropriate behaviour

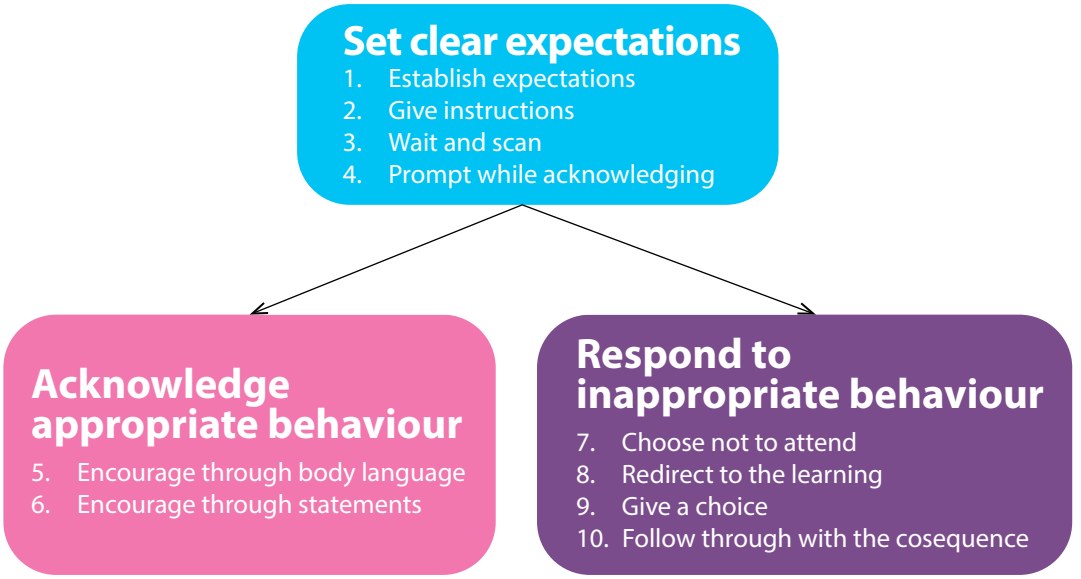


Figure 9.31. Proactive classroom management techniques

For each technique, Table 9.12 outlines:

- its aim and rationale; and
- an example of what the teacher may say (i.e., teacher dialogue) when using that technique.

Table 9.12. Proactive classroom management techniques: Aim, rationale, and dialogue

	Technique	Aim	Rationale	Teacher dialogue
1	**Establish expectations**	To establish clear expectations regarding behaviour.	Students are clear about what is responsible and safe behaviour in the classroom	[Student runs in class] *We walk in our classroom. Thanks Grade 6.*
2	**Give instructions**	To give clear instructions about what to do.	Students understand what is expected of them and can organise what to do next	*Take out your science notebook. Turn to a new page. Place the date at the top of the page. Thanks.*

	Technique	Aim	Rationale	Teacher dialogue
3	**Wait and scan**	To wait and look at students for 5-10 seconds after giving an instruction.	Students have time to process the instruction. It communicates to students that they are expected to follow the instruction.	No teacher dialogue. This technique avoids unnecessary talk.
4	**Prompt while acknowledging**	To acknowledge students who have followed instructions while prompting others to follow.	It cues other students to follow instructions. It contributes to a positive learning environment.	*Mg Mg, I see that you have your science notebook ready for the lesson. Thanks.*
5	**Encourage through body language**	To use physical closeness, body gestures and facial expressions to encourage productive behaviours.	Body language is an integral part of communication. It strengthens relationships and contributes to a positive learning environment.	No teacher dialogue. This technique uses body language (e.g. smiling).
6	**Encourage through statements**	To encourage students to become more aware of their competence by commenting on productive behaviours.	It gives students information about their competence. It focuses on strength and esteem building.	This group is on task. They are suggesting several ways that they could solve the problem.
7	**Choose not to attend**	To give minimal attention to safe off-task or inappropriate behaviour.	It avoids disrupting the class and giving attention to unproductive behaviour.	No teacher dialogue.
8	**Redirect to the learning**	To prompt student who are off-task with a redirection to the learning.	It provides a learning-focused prompt.	*Thin, have you finished your paragraph?* *Aye Aye, would you like some assistance?*
9	**Give a choice**	To respectfully engage students who are disrupting others and provide available choices and consequences.	It puts the responsibility for the decision-making onto the student.	[Yi Yi is disrupting peers] *Yi Yi, you have a choice to complete your work now; OR to stay in during the break time and complete it then. Make your choice.*
10	**Follow through with the consequence**	To remain calm and strong despite a student's ongoing disruptive behaviour.	It models assertive behaviour. If a critical incident (i.e. anyone's safety is at risk), then send for immediate help.	[Yi Yi continues to disrupt] *Yi Yi, you will need to stay in now during the break time, to make up for lost time.*

Learning activity 2. Role-playing classroom management techniques

The purpose of this activity is for you to discuss and role play the 10 classroom management techniques as in small groups.

Read the entry for each technique in Table 9.12. Role-play each of the techniques. Ensure that you all have turns in being the classroom teacher. See if you can combine techniques in your role-plays, for instance:

- Give instructions:
  Take out your science notebook. Turn to a new page. Place the date at the top of the page. Thanks.
- Wait and scan
- [After appropriate amount of time] Prompt while acknowledging:
  Mg Mg, I see that you have your science notebook ready for the lesson. Thanks.

Review questions

1. Why are classroom procedures and rules important?
2. What is the three-step process for teaching classroom procedures?
3. What are key areas of classroom activity where procedures are needed?
4. How many rules should a teacher set for a classroom?
5. Why is necessary to establish consequences for breaking (and obeying) the rules?
6. Is physical punishment appropriate in a school?
7. Why was there a change in terminology from ‘behaviour management’ to the ‘creation of safe and supportive learning environments’ in professional standards?
8. Identify characteristics and practices associated with effective and inclusive classroom management.
9. List proactive classroom management techniques.

9.5. Role of Technology in the Learning Environment

Teachers need to understand the issues related to the active, ethical, responsible and safe uses of technology in learning and teaching.[178] In this sub-unit, you will explore notions of the **digital divide** and maximising students' active use of technology for learning, as well as issues concerning academic integrity and cyber safety.

9.5.1. Active, ethical, responsible, and safe uses of technology

Expected learning outcomes

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

- Discuss the digital divide and active use of technology in the context of Myanmar; and
- Explain why middle school students need knowledge and skills relating to academic integrity and cyber-safety.

Digital divides

Teachers need to model, as well as explicitly teach students, how to use technology productively and safely at school, home and within the community.

In Unit 2, you explored the SAMR model, which supports teachers to consider the level at which they are integrating technology in the classroom.

178 Australian Institute for Teaching and School Leadership, 2017.

You learnt that at the ***transformative*** levels of the model, technology allows for:

- substantial redesign of learning activities (modification); and
- creation of entirely new activities, which were previously impossible to imagine (redefinition).

This lesson builds on that foundation.

The international literature refers to two different types of digital divides:[179]

- The **traditional digital divide** between students who have access to the internet and devices at school and home, and those who do not
- A **digital use divide** between students who have opportunity to use technology in active and creative ways to support their learning, as opposed to those who use technology to passively consume content and media.

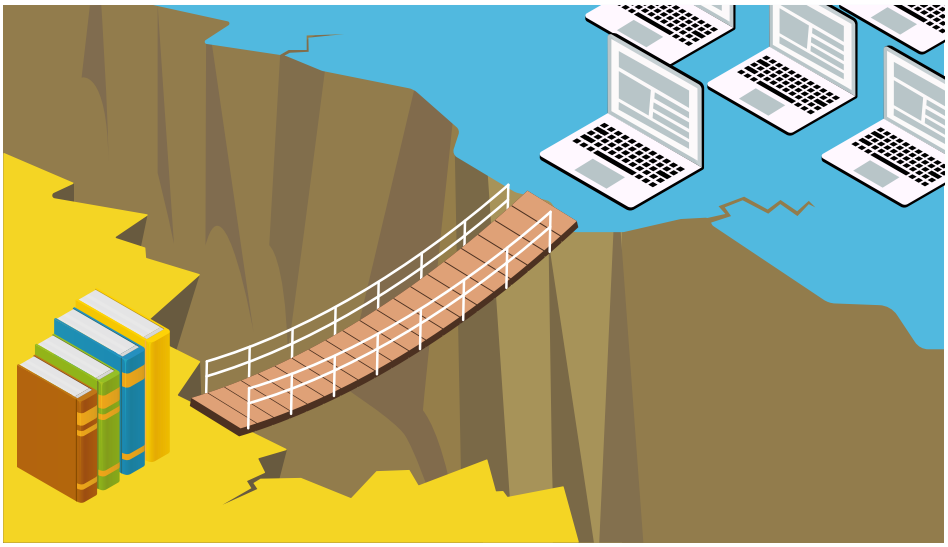


Figure 9.32. The traditional digital divide

How do these two divides relate to the Myanmar context? Recall, in Unit 1, the study that looked at learning and teaching in Myanmar's Indigenous schools. Of the 1811 Primary school children who were assessed in the study, only 19% of their families had mobile phones. The traditional digital divide needs to be closed in Myanmar.

179 US Department of Education, 2017.

The US Department of Education acknowledges that closing the traditional digital divide is essential. However, it states:

> This alone will not transform learning. We must also close the digital use divide by ensuring all students understand how to use technology as a tool to engage in creative, productive, life-long learning rather than simply consuming passive content.[180]

Active uses of technology

Students are able to engage in active uses of technology, and develop digital literacy and media information literacy competencies, in an environment where:

- The traditional divide no longer exists
- Teachers have been supported to develop deep *technological pedagogical content knowledge* (recall the concept of TPCK or TPACK from Unit 2).

Where these conditions come together, students will have opportunities to be active users of digital technology and communication tools and networks. Active uses of technology include:

- Locating, evaluating, using, and creating information;
- Engaging in design, coding, **simulation,** and media production; and
- Collaborating with peers and experts in the classroom, locally, and in global networks.

Learning activity 1. Reflecting on the Myanmar context

The purpose of this activity is to consider availability of technology and level of integrations in learning and teaching in the Myanmar context.

Draw from you own knowledge and life experiences to respond to the following questions:

180 US Department of Education, 2017, p. 21.

1. What is the extent of access to technology and the Internet in Myanmar? In urban schools? In rural and remote schools? From the region you are from?
2. In what teaching and learning contexts in Myanmar would students be provided opportunity to engage in active uses of technology?
3. Reflect on your own uses of technology in the past week. Did you use technology at home for active learning or for social networking?

Figure 9.33. Reflecting on students' access to technology in Myanmar

Ethical, responsible, and safe users of technology

Lawful and ethical use of content

It is important that students realise the legal and ethical responsibilities associated with use of technology and materials sourced online. Students need to understand concepts such as **intellectual property** (i.e., the expression of ideas by original authors) and its protection through **copyright laws**.

Middle schools

Students need to develop an understanding of **academic integrity,** which involves upholding ethical standards in all aspects of their scholarly work. The principles that are associated with academic integrity are honesty, trust, fairness, respect, and responsibility.[181]

Plagiarism is a breach of academic integrity. It occurs when ideas or work of another person are presented as one's own ideas or work. Students need to be aware that all ideas and works, which are not their own, need to referenced appropriately. The need for referencing applies to:

- text, images, and multimedia; and
- online and hard copy sources.

While referencing sources in scholarly writing is standard practice, students need to have increased awareness in the online environment. The Ministry of Education has produced a book on Integrity, as part of the new Grade 6 Basic Education Curriculum materials.

The excerpt from the new Grade 6 Basic Education Curriculum, shown in Figure 9.32, raises students' awareness around the need to avoid engaging in breaches of academic integrity, including:

- copying and pasting from the internet and re-arranging words and sentences;
- using information without referencing it;
- re-using someone else's work;
- buying papers online; and
- getting others to do your work for you (paid or unpaid).

Academic integrity has become a key educational priority worldwide, especially for the higher education sector, where many students learn online. It is essential to establish that students are truly the creators of their own work.

181 International Centre for Academic Integrity, 2014.

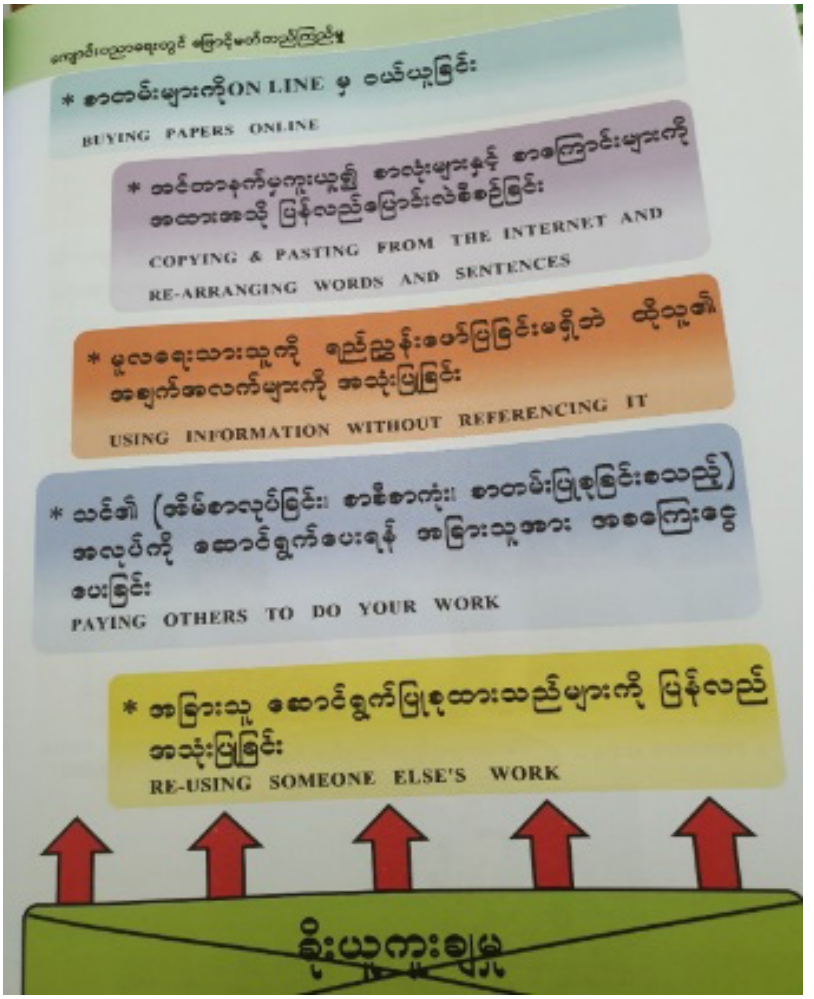


Figure 9.34. Excerpt from integrity resource in new Basic Education Curriculum

Acting responsibly in the online environment

There are simple protocols that can be reinforced with students on a regular basis in terms of acting responsibly in the online environment. Students need to know the importance of protecting their passwords and login details, and logging off from computers. They can be reminded of these protocols by way of posters in the media room, and teacher instructions.

Teachers and schools are also responsible for ensuring that their students are safe when using technology.

Students need to exercise caution in opening unknown emails and webpages.

They need to be taught to protect their identity and personal digital information.

There needs to be regular discussions with students, especially in middle and high schools, around disclosing personal information to 'cyber-friends' and other people on the Internet.

Cyber-safety also includes teaching students how to:

- build their **online identity** safely and responsibly, with an understanding that, once uploaded, digital posts are permanent;
- avoid inappropriate material or activities;
- prevent risks by having the confidence to tell parents or teachers when they feel unsafe, threatened, or bullied; and
- report criminal behaviour, including cyber-crime, abuse, and neglect.

Cyber-safety is not limited to online use. It includes the usage of mobile phones, cameras, and other personal devices.

Figure 9.35. Confidence to tell parents or teachers when they feel unsafe or bullied online

Learning activity 2. Reflecting on curriculum links and key learnings

The purpose of this activity is to think about how to best educate middle school students about the ethical, responsible, and safe use of technology, and to review key themes of the lesson.

1. Reflect on the subject areas where knowledge and skills may be developed in terms of:

    - Referencing source material, according to conventions
    - Building an online digital profile
    - Cyber safety risks.

2. Respond to review questions.

Review questions

1. What is the digital divide? What is the digital use divide?
2. Provide examples of students actively using technology.
3. What conditions are needed for students to use technology actively in the classroom?
4. What is academic integrity? Why is it an international priority in the education sector?
5. Why is there a need to reference the ideas and work of others in scholarly work?
6. Provide examples of breaches of academic integrity.
7. What are some of the issues involved in responsible use of technology and cyber safety?

Unit Summary

Key messages

- Students are included when they are present in the classroom, participate in learning, and achieve meaningful outcomes.
- Inclusion is an ongoing process of learning as a school.
- A teacher's beliefs about their students and learning can have the power to either remove barriers to learning or create and reinforce them.
- In supportive and safe environments, students feel that they can take more chances in their learning – that is, they can be risk takers.
- Physical, emotional and cognitive safety are all vital to students in middle school classrooms. A safe environment is widely acknowledged as pre-requisite to effective learning.
- An inclusive, quality education is the right of every human child. This includes children with additional needs.
- Elements within a classroom environment can either increase a student's level of disability or decrease it.
- There are many different barriers that children face in the classroom that prevent them from accessing learning opportunities. Some barriers are long-term (or lifelong), while other barriers are transient (they come and go).
- It is the role of the teacher to remove (or reduce) barriers to learning for all children particularly those with additional needs.
- Learning disorders include a wide range of conditions that impact on a student's ability to learn. An intellectual disability involves a child's ability to think and reason, while students with other learning disorders may struggle to access learning opportunities or communicate what they know.
- Teachers can help students with learning disorders to access learning opportunities by developing strategies such as altering the pace of learning, using a range of resources, altering the classroom environment and providing different ways for students to communicate what they have learnt.
- Teachers can develop communities of learning to support learning for children with additional learning needs. These communities may include parents, other teachers and specialists, community leaders etc.

- Individualised Education Plans should be developed to enable students with additional needs to be included in the mainstream classroom.
- In middle school environments, conflict may involve playground disputes between students, episodes of physical aggression, and emerging social differences between peer groups in values and beliefs.
- It is important for middle school students to learn how to resolve conflicts before they escalate. Rather than viewing conflicts negatively, they can be 'navigated' as opportunities for personal growth and relationship building.
- Constructive responses to conflict are likely to lead to learning, problem solving and relationship building, while destructive responses to conflict are likely to lead to an escalation of conflict and negative outcomes.
- The Thomas-Kilmann Conflict Mode Instrument maps five different response modes for handling conflict situations: compete, collaborate, compromise, avoid and accommodate. In 'collaboration', the attempt is to find a creative solution that fully satisfies the concerns of both people.
- The six-step STABEN process forms the groundwork for people, in conflict, to collaborate.
- Conflict resolution education starts with a focus on problems in personal relationships. Over time, it progresses to broader issues of social cohesion, reconciliation and peace.
- Procedures and rules establish the culture of a classroom.
- A three-step process for teaching classroom procedures involves explaining procedures clearly, rehearsing them and reinforcing correct procedures.
- A well-managed classroom has routines relating to administrative duties, student movement, lesson management, teacher-student and student-student interactions, and housekeeping.
- In establishing rules, teachers need to consider what kind of culture they wish to establish in their classrooms and what behaviours will support their students' learning.
- Rules must have consequences. Consequences are not punishments. Positive consequences or outcomes result if a student obeys the rules. Negative consequences or outcomes result if a student breaks the rules. Negative consequences do not involve physical or verbal punishment. Teachers need to model peaceful and respectful responses.
- Teachers, who create safe and supportive learning environments, actively model and acknowledge productive behaviours and use proactive techniques to manage classroom situations.

- Whilst teachers need to be able to set clear expectations, acknowledge appropriate behaviour and respond to inappropriate behaviour, using methods that produce and increase constructive interactions will result in more successful classroom environments for both teachers and students.
- Teachers need to model, as well as explicitly teach students, how to use technology productively and safely at school, home and within the community.
- While closing the digital divide is essential, this alone will not transform learning. We must also close the digital use divide by ensuring all students understand how to use technology as a tool to engage in creative, productive, life-long learning rather than simply consuming passive content.
- It is important that students realise the legal and ethical responsibilities associated with use of technology and materials sourced online. Students need to be taught about concepts such as intellectual property and copyright laws. Students need to develop understanding of academic integrity, which involves upholding ethical standards in all aspects of their scholarly work.
- There are simple protocols that can be reinforced with students on a regular basis in terms of acting responsibly in the online environment. Teachers and schools are also responsible to ensure that their students are safe when using technology.

Unit reflection

In Unit 9, there were many dedicated lessons on inclusive education. Inclusive education is a cross-cutting theme in your Bachelor of Education Curriculum. Reflect on your learning over the nine units in Educational Studies and compile either a concept map or mind map on inclusive education. Aside from Unit 9, you may wish to draw upon learnings from lessons focusing on themes such as:

- Unit 1: Non-formal education; literacy and schooling
- Unit 2: Student-centred pedagogy; culturally responsive pedagogy
- Unit 3: Inclusive communication; active learning; student-led learning; differentiation; constructive feedback; student motivation and engagement
- Unit 4: Planning for diverse learners; learner profiles
- Unit 5: Humanistic education; cooperative and collaborative learning; Positive Psychology in Education
- Unit 6: ESD and Human Rights Education agendas
- Unit 7: Student-centred philosophies
- Unit 8: Diagnostic and formative assessment; authentic and inclusive assessment.

You may select this concept map as part of your evidence of *achievement* of TCSF minimum requirements, at a *developing* level (i.e., at a second-year level), for your TCSF portfolio.

Further reading

9.1. Creating a Supportive and Safe Learning Environment

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9.2. Inclusive Education

International Bureau of Education (IBE)–UNESCO. (2016). Reaching out to all learners: A resource pack for supporting inclusive education. *Training Tools for Curriculum Development.* Retrieved from http://www.ibe.unesco.org/sites/default/files/resources/ ibe-crp-inclusiveeducation-2016_eng.pdf

UNESCO. (2009). *Policy guidelines on inclusion in education*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000177849

9.3. Conflict Resolution and Peace Education

CRAMMS (2015). Conflict resolution activities for Middle school skill-building. Retrieved from https://cpb-us-e1.wpmucdn.com/blogs.uoregon.edu/dist/8/11350/files/2015/05/ Compiled-Activities-1-r5x71c.pdf

Davis, K., & Mc Coy, V. (2016). Strategies for conflict resolution among Middle school students. *VISTAS online*. Retrieved from https://www.counseling.org/docs/default-source/vistas/ article_80_2016.pdf?sfvrsn=b0e2482c_4

Vargos-Barón, E., & Alarcón, H. (Eds.) (2005). *From bullets to blackboards. Education for peace in Latin America and Asia*. Washington, D.C.: Inter-American Development Bank. Retrieved from https://www.academia.edu/2335078/From_bullets_to_blackboards_Education_for_peace_in_Latin_America_and_Asia

9.4. Classroom Management

Jackson, C., Simoncini, K., & Davidson, M. (2013). Classroom profiling training: Increasing preservice teachers' confidence and knowledge of classroom management skills. *Australian Journal of Teacher Education, 38*(8), 30-46. Retrieved from http://ro.ecu.edu.au/ajte/vol38/iss8/3

9.5. Role of Technology in the Learning Environment

US Department of Education. (2017). *Reimaging the role of technology in education: 2017 National Technology Plan Update.* Office of Educational Technology. Retrieved from https://tech.ed.gov/files/2017/01/NETP17.pdf

Unit 10

Teacher Professionalism

Teaching is a key profession in the development of any nation's economic, cultural, and social identity and prosperity. High quality teaching is the most important factor influencing learning outcomes for students in schools. It is therefore in the nation's interest to ensure that the teaching profession take its place among the learnt professions in our society.

Teaching and teachers must take on the characteristics and responsibilities of a profession. These include:

- Rigorous and substantial higher education training and preparation for entry to the profession;
- Ongoing professional learning, growth and development throughout the professional's career;
- Agreed *competencies* and standards that define what professionals know and do, and their values and dispositions;
- Agreed *norms* which set boundaries around acceptable professional and personal performance and conduct; and
- Status and respect that are earned through the professional's commitment to service to the community.

In this unit we continue to explore how the Myanmar Teacher Competency Standards Framework (TCSF) supports and defines the work of teachers, and how Myanmar teachers ensure ethical and just professional teaching practice.

Expected learning outcomes

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

- Reflect on the TCSF as a link between pre-service and in-service teacher learning;
- Demonstrate developing understanding of the qualifications and requirements for career advancement in Myanmar's education system;
- Review the competency domains, areas and standards for School Heads;
- Identify the principles informing the five precepts of education and duties of the Myanmar teacher;
- Reflect on the obligations and duties of the Myanmar teacher with reference to codes of ethics and professional conduct from international settings;
- Participate in group discussion regarding challenging ethical scenarios from practicum;
- Identify sources of evidence to improve teaching practice and student learning;
- Use the TCSF to reflect on key learnings in Year 2 Educational Studies;
- Discuss characteristics of professional learning networks;
- Review and revise action plan for building a professional learning network;
- Identify opportunities for non-formal and informal learning relevant to professional development needs; and
- Create a poster communicating action research findings and reflections on the process and value of action research.

Competencies gained

C1.1 Demonstrate values and attitudes consistent with Myanmar's tradition of perceiving teachers as role models

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

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

D1.1 Use evidence of students' learning to reflect on own teaching practice

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

D3.1 Demonstrate understanding of the importance of inquiry and research-based learning to improve teaching practice

10.1. Professional Standards and Career Advancement

The Myanmar Teacher Competency Standards Framework (TCSF) has been developed to provide a clear statement about the skills, knowledge, and aptitudes that teachers in Myanmar require at different stages of their career. As a student teacher, you are already in the process of becoming a member of the teaching profession, and you have already been engaging with the TCSF in many ways.

In Year 1, you were introduced to the TSCF, and learnt about the Framework's broad purposes in improving the quality of teaching and its basic structure.

You and your teachers and mentors are using the Beginning Teacher level of the Framework as the basis for your professional learning, and you have started to demonstrate your mastery of the competency standards TCSF. In this sub-unit, you will explore the TCSF in some more detail, how the TCSF will support your transition from student teacher to teacher, and how the Framework will be an integral part of your career development as a Myanmar teacher.

10.1.1. Teacher Competency Standards Framework (TCSF) and career advancement

This lesson comprises three periods.

Expected learning outcomes

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

- Reflect on the TCSF as a link between pre-service and in-service teacher learning;
- Demonstrate developing understanding of the qualifications and requirements for career advancement in Myanmar's education system; and
- Review the competency domains, areas, and standards for School Heads.

Building on prior learning: How the TCSF is structured

In Year 1 you learnt that the TCSF organises the expected knowledge, skills, and attributes of teachers, including required levels of performance, around four domains:

- Professional Knowledge and Understanding
- Professional Skills and Practices
- Professional Values and Dispositions
- Professional Growth and Development

Each of these domains is broken down further into specific areas of competence, and for each area of competence there is a competency standard as well as minimum requirements for demonstrating achievement of the standard – usually two but sometimes one, three or even four.

The competency standards and the minimum requirements are the building blocks of the framework, and they specify the skills, knowledge, and other attributes a teacher should develop through their initial training and throughout their career.

The TCSF recognises that a teacher's skills and knowledge, as well as their personal professional character and involvement, do not remain static throughout their career. These attributes all become more refined, more advanced, more complex, and wider in their scope as the teacher continues to grow and develop throughout their career. For these reasons, the TCSF has four levels of complexity, corresponding to four widely accepted stages of a teacher's career progression.

It includes indicators describing what a teacher's performance might look like at these career stages:

- Beginning teachers
- Experienced teachers
- Expert teachers
- Leader teachers.

Figure 10.1. Teachers collaborating

In this unit, our main focus is on the Beginning Teacher stage. However, we will also think about more advanced levels when we are considering how our learning and development reflect our growth and career progression within the teaching profession.

The TCSF also recognises that teachers need different knowledge and skills, or need to know how to use them in different ways, depending on the stage of schooling or even the context in which they teach. The Framework includes a section where it provides specific indicators of good practice for different stages of schooling:

- Kindergarten teachers
- Primary teachers
- Middle school (Lower Secondary) teachers
- Upper Secondary teachers.

It is possible, that at some time in the future, it will be desirable to provide further levels of detail, such as specific indicators of good practice for teachers who are working in specialised subject or other teaching areas.

It is useful to think about how teachers engage with the Competency Standards and the Minimum Requirements.

As teachers, we can ask what we can or should be doing in our professional work to ensure that we are enacting the Competency Standards in our daily teaching and learning work. We can also ask ourselves what someone would see in our professional work and behaviour that demonstrates our achievement of the requirements.

We are considering the kinds of evidence that is relevant and valid in showing how well we meet the standards. This becomes very important when we are considering what to include in our professional portfolios though our initial training to be a teacher and then onwards through our professional career.

Make sure you have a printed copy of the most recent version of the Myanmar TCSF[182]

You will refer to this regularly throughout your studies and you will want to write in it and make notes.

182 *Teacher Competency Standards Framework (TCSF): Beginning Teachers. Myanmar.* Current: Draft Version 3.2. 1 May 2019.

Learning activity 1. Demonstrating achievement – Domain A: Professional Knowledge and Understanding

This activity takes place in period one. The purpose of this activity is to unpack the different domains of the TCSF Domain A and to start to think about the observable practices and evidence you could use to demonstrate meeting the standard.

There are five Competency Standards associated with Domain A. These are:

- Competency Standard A1: Know how students learn
- Competency Standard A2: Know appropriate use of educational technologies
- Competency Standard A3: Know the process of communicating well with students and their families
- Competency Standard A4: Know the curriculum
- Competency Standard A5: Know the subject content.

Read the Minimum requirements listed for each of these five Competency Standards. You will notice that there are nine of them altogether.

Eight of them require you to "Demonstrate understanding" of something, and one of them requires you to "Demonstrate respect" for something/someone.

It is never easy or straightforward to demonstrate or observe behaviours such as "understanding" or "respect". We often need to observe a person's actions and behaviours in order to make judgements about how well they understand or know something, or what their values are.

Individually, think about how you might demonstrate each minimum requirement and make notes in Table 10.1. Then, discuss with a partner, how you could demonstrate achievement of the Minimum requirements in Table 10.1.

While you are thinking about this, you may want to review your reflections from Practicum Blocs 5 and 6.

Table 10.1. Demonstrating achievement: Domain A

CS	Minimum Requirement	How you might demonstrate it?
A1	(Educational Studies) … understanding of how different teaching methods can meet students' individual learning needs	
A2	(Educational technologies) … understanding of appropriate use of Information and Communication Technology (ICT) in teaching and learning	
A3	(Students, families, schools and communities) … respect for the social, linguistic, and cultural diversity of the students and their communities	
A4	(Curriculum) … understanding of the structure, content and expected learning outcomes of the basic education curriculum	
A5	(Subject matter) … understanding of how to vary delivery of subject content to meet students' learning needs and the learning context	

Learning activity 2. Demonstrating achievement – Domain B: Professional Skills and Practice

The purpose of this learning activity is to deepen your knowledge about Domain B in the TCSF.

Domain B includes four Competency Standards:

- Competency Standard B1: Teach curriculum content using various teaching strategies
- Competency Standard B2: Assess, monitor and report on students' learning
- Competency Standard B3: Create a supportive and safe learning environment for students
- Competency Standard B4: Work together with other teachers, parents and community.

You will notice that the Minimum Requirements for these Competency Standards are quite different from those in Domain A. Instead of demonstrating "understanding" and "respect", this time teachers, including student teachers, are required to demonstrate "capacity to do something", "good lesson planning" and "strategies for doing something".

This is a good example of how important the action verb is when we set about defining the goals we set, and as teachers it is something we need to be aware of. The choice of verbs will affect how we make judgements about the achievement of learning goals and objectives.

In this activity, you are going to be working in a pair or small group for the period. Discuss in your pair of small group, what you might notice if you are observing a teacher whose teaching has NOT YET achieved these Minimum Requirements. Again, you might like to refer to your reflective journal from Practicum Blocs 5 and 6 in these discussions. Write your suggestions in Table 10.2.

Table 10.2. Demonstrating achievement: Domain B

CS	Minimum Requirement	What you might observe in teaching that does NOT meet the requirement?
B1	(Pedagogy) … good lesson planning and preparation in line with students' learning ability and experience	
B2	(Assessment) … capacity to monitor and assess student learning	
B3	(Classroom management) … strategies for managing student behaviour	
B4	(Communication)… strategies for working together with other teachers, parents, and the local community to improve the learning environment for students	

Learning activity 3. Demonstrating achievement – Domain C: Professional Values and Dispositions

The purpose of this activity is to familiarise you with Domain C of the TCSF (Professional Values and Dispositions) by identifying actions and evidence you can exhibit to demonstrate their own achievement of the minimum requirements. Domain C of the TCSF includes the Competency Standards relating to teachers' ideas, values, and beliefs about education, teaching and learning. These stem from the values expressed in the Myanmar National Education Law, and reflect the mutually agreed traditional public understanding between teachers and the community about Myanmar teachers – that the community will respect teachers who:

- Teach students to be disciplined
- Teach and explain to their best
- Teach everything known
- Appreciate students and stand up for students whenever needed
- Teach to value the professional work of being a teacher.

Domain C comprises three Competency Standards:

- Competency Standard C1: Service to profession
- Competency Standard C2: Service to community leadership
- Competency Standard C3: Promote quality and equity in education for all students

This domain also examines values of understandings, and of commitment. The statements of Minimum Requirements do not always give a strong indication of the behaviours exhibited by a teacher whose teaching meets the requirements of the Competency Standards.

Once again, we need to think about what might be observable in teaching that meets the requirements or in teaching that does not meet them.

Discuss together, and then write in Table 10.3, what you can start to do this year (as a second-year student teacher) to show what you have done this year to demonstrate your progress toward achieving the Minimum Requirements listed in the table.

Table 10.3. Demonstrating achievement: Domain C

CS	Minimum Requirement	What you have done this year to demonstrate progress toward the requirement?
C1	(Service to profession) … values and attitudes consistent with Myanmar's tradition of perceiving teachers as role models	
C2	(Service to community leadership) … commitment to serving the school and community as a professional member of the teaching profession	
C3	(Student-centred values) … respect for diversity of students and the belief that all students can learn according to their capacities	

Learning activity 4. Demonstrating achievement – Domain D: Professional Growth and Development

The purpose of this activity is to familiarise student teachers with Domain D of the TCSF (Professional Growth and Development) by identifying actions and evidence they can exhibit to demonstrate their own achievement of the minimum requirements. Domain D of the TCSF deals with teachers' continuing growth and development. It incorporates teachers' habits, motivation and actions related to their on-going learning and professional improvement.

It advocates the importance of all teachers being aware of their role as leaders within the community and highlights the need for active research to support teachers' classroom performance and continuing professional development. There are three Competency Standards:

- Competency Standard D1: Reflect on own teaching practice
- Competency Standard D2: Engage with colleagues in improving teaching practice
- Competency Standard D3: Participate in professional learning to improve teaching practice.

Throughout the four years of your initial teacher training, you are already on this journey of growth and development as a member of the teaching profession. You are learning about how children and young people develop and learn, and about how teachers shape and present knowledge to support student learning.

You are using the TCSF as both the curriculum for your own professional learning and the 'measuring stick' to show how you are achieving the *Minimum Requirements* of the *Competency Standards.*

In this activity, reflect in pairs about how your participation in your initial teacher training up to this point has contributed to your growth towards meeting the Minimum Requirements listed.

You should think about all of the different subjects and activities and how they are contributing to your growth. You may also want to refer back to your Practicum tasks and your personal action plan from Practicum Bloc 6 to help with this task.

Table 10.4. Demonstrating achievement: Domain D

CS	Minimum Requirement	What components of your initial teacher training are helping you meet this requirement?
D1	(Reflective practices) Regularly reflect on own teaching practice and its impact on student learning	
D2	(Collaborative learning) Improve own teaching practice through learning from other teachers and professional development opportunities	
D3	(Initiative for research culture) Demonstrate understanding of the importance of inquiry and research-based learning to improve teaching practice	

Learning activity 5. The School Heads and Education Officers Competency Standard Framework

The purpose of this activity is to introduce you to the Competency Standard Frameworks for School Heads and Education Officers and review the competency domains and indicators in the context of career progression, as an extension of the TCSF. In Myanmar, School Heads are traditionally recruited from among our experienced teachers. While these individuals may be excellent in the classroom, the important role of a Principal requires additional skills and knowledge in areas such as leadership and management. Just as teachers have the TCSF to guide their practice and professional learning, School Heads and education officers also have a competency framework to guide their work.

The vision of the framework is to create:

"School Heads and Education Officers who demonstrate well-developed personalities and high performance with dependable capability of effective leadership and quality management in education."[183]

The Competency Standard Framework for School Heads is made up of five competency domains:

1. Leadership
2. Management
3. Teaching & Learning
4. Collaboration
5. Personal Effectiveness

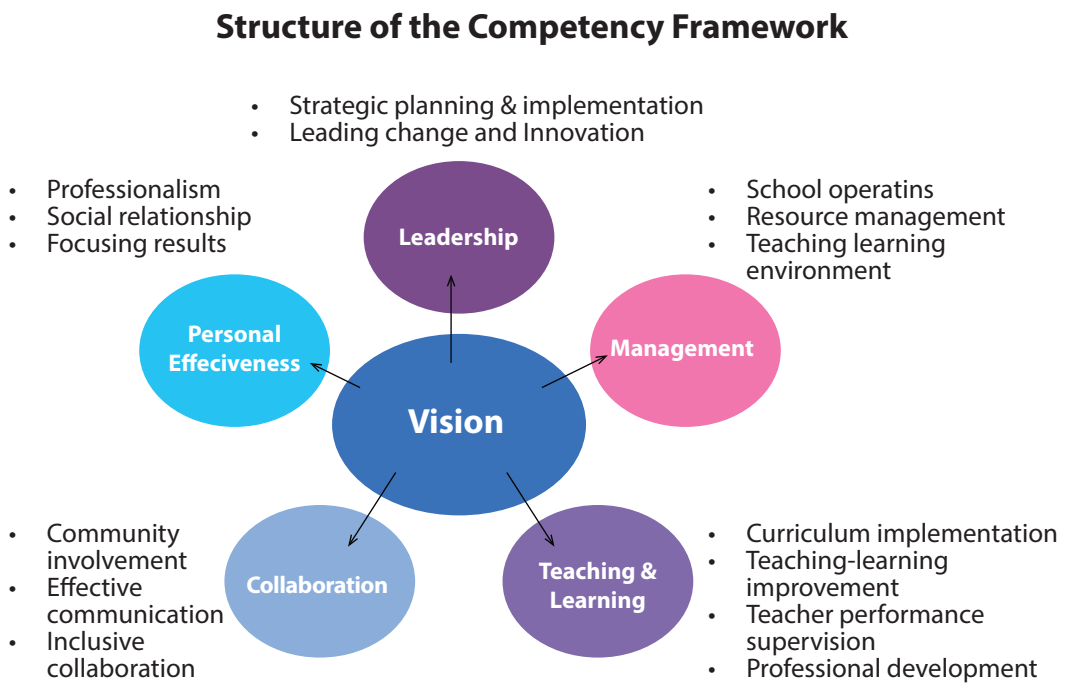

Figure 10.2. Competency Standard Frameworks for School Heads and Education Officers

183 Competency Standard Frameworks for School Heads and Education Officers in Basic Education, p.2

The first four domains are core management functions required by school heads to fulfil their role effectively, whereas the fifth domain, personal effectiveness, is defined as a set of attributes and other personal qualities rather than a management domain. The Competency Standard Framework for School Heads is structured in a similar way to the TCSF, in that each domain has a number of competency areas for each of which there is a specific competency standard and set of indicators.

For this learning activity, you should be organised in small groups of five. Your teacher educator will provide each group with a copy of the *Competency Standard Frameworks for School Heads and Education Officers in Basic Education*, which is available in the e-library.

Each person in the group is responsible for one of the five competency domains. Working independently, each person should investigate the domain they are responsible for and think about the following questions:

- What is the domain?
- What values do you think are embedded in this domain?
- How many competency standards are there in this domain?
- What are the competency standards?
- What are some actions or behaviours would demonstrate the indicators?

Prepare a mindmap on the competency domain you are responsible for that incorporates the answers to the above questions.

Once you have finished your mindmap, return to your group and present your mindmap to your group members. Each person should take no more than five minutes to present their mindmap. Your group members may wish to take a photo or copy of your mindmap for their own notes.

Review questions

1. What are the four domains of the TCSF?
2. Describe the purpose of the TCSF?
3. What are the four career stages of the TCSF?
4. How can teachers demonstrate that they have met the minimum standard of the TCSF?
5. What are the five domains of the Competency Standards for School Heads? Why do you think these domains are different from the TCSF?

10.2. Professional Values and Dispositions

This sub-unit comprises one lesson with three periods.

In Year 1 you were introduced to the idea of teaching as a profession, and explored what Myanmar society expects from its teachers in terms of professional responsibilities and practices. You learnt about the traditional relationship between society and teachers, and the respect that teachers earn by fulfilling their five traditional responsibilities.

In this sub-unit, we explore further the concept of professional ethics and ethical practice. We do this through studying more closely the basis for the five traditional responsibilities for teachers, and learning about how some international school systems have developed codes of ethics to support teachers in fulfilling their responsibilities to implement ethical professional practices.

In Sub-uit 10.1, learning activity 3, you closely studied the Competency Standards, Minimum Requirements and Indicators relating to Domain C of the TCSF – Professional values and dispositions. We referred at that time to the responsibilities of teachers as traditionally recognised by Myanmar society.

These responsibilities form the basis of an unwritten compact between teachers and the community, whereby the community will treat teachers who fulfil these responsibilities with respect. This statement has guided the professional activity of teachers for many generations.

You also learnt about these traditional responsibilities Myanmar teachers in Year 1. As revision, these responsibilities are:

- Teach students to be disciplined
- Teach and explain to their best
- Teach everything known
- Appreciate students and stand up for students whenever needed
- Teach to value the professional work of being a teacher.

At a higher and more formal level than this traditional statement of responsibilities is a code of ethics, based on five precepts of education,[184] see Figure 10.3.

Each of these five precepts is supported by a number of behaviours that teachers are expected to exhibit in fulfilling their obligations under that precept. The behaviours collectively make up a code of ethics for Myanmar teachers.

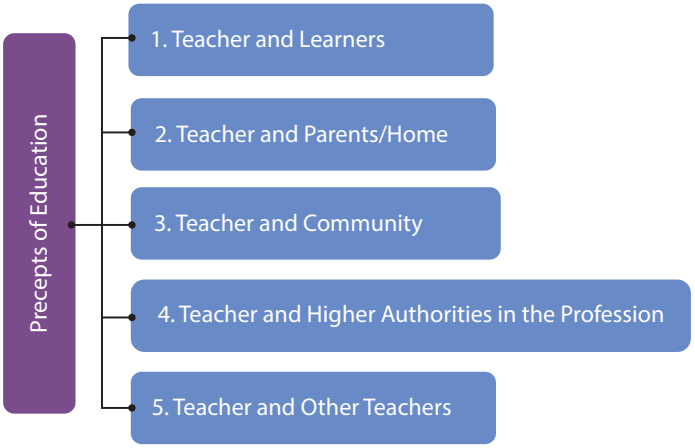

Figure 10.3. Five precepts of education

184 Saisuta, P.N. 2012.

10.2.1. Ethical practice: Professional ethics and teacher code of practice

In this lesson, we look at ethics and the *full text of five precepts of education and consequent teacher behaviours*.[185]

Expected learning outcomes

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

- Identify the principles informing the five precepts of education, and duties of the Myanmar teacher;
- Reflect on the obligations and duties of the Myanmar teacher with reference to codes of ethics and professional conduct from international settings; and
- Participate in group discussion regarding challenging ethical scenarios from practicum.

A code of ethics (or a code of practice) is a written and agreed statement (by a profession's members and stakeholders) which provides a basis for the professional and personal behaviour and performance of the profession's members. Teachers are able to use the statement to help them respond to situations where they may have a dilemma about how they should act in response to a particular set of circumstances.

A profession and its stakeholders rely on this statement, not only to guide behaviour and performance, but often to help determine whether a member of the profession has in some way contravened the profession's norms. In these situations, the code can provide a powerful means of correcting the person's behaviour and to support them in developing improved ethical behaviours in the future.

185 Saisuta, P.N. 2012.

Box 10.1. Five precepts of education - consequent teacher behaviours

In fulfilling the obligations of the first precept the teacher will:

- Deal justly and impartially with students regardless of their physical, mental, emotional, racial, economic, social
- Encourage students to work for the development of their physical, intellectual, creative, and spiritual endowments
- Aid students to develop an understanding and appreciation not only of the opportunities and benefits of our socialist democracy but also of their obligation to it
- Accept no remuneration for tutoring.

In fulfilling the obligations of the second precept the teacher will:

- Respect the basic responsibilities of parents for their children
- Help to increase the students' confidence in his own home
- Provide parents with information, and information received from parents.

In fulfilling the obligations of the third precept the teacher will:

- Adhere to any reasonable pattern of behavior accepted by the community for professional person
- Perform the civic duties and participate in community activities
- Discuss controversial issues from an objective point of view
- Respect the community in which he is employed and be loyal to the school, community and the Socialist Republic of the Union of Burma
- Work to improve education in the community and to strengthen the community's moral, spiritual and intellectual life.

In fulfilling the obligations of the fourth precept the teacher will:

- Conduct professional business through proper channels
- Refrain from discussing confidential and official information with unauthorised persons
- Apply for employment on the basis of competence
- Seek employment in a professional manner
- Engage in no gainful employment, outside of his main duty, where the employment affects adversely his professional status.

In fulfilling the obligations of the fifth precept the teacher will:

- Deal with other members of the profession in the same manner as he himself wishes to be treated
- Speak constructively of other teachers, but report honestly to responsible person in matters involving the welfare of students, the education system and the profession
- Make the teaching profession so attractive in ideals and practices that sincere and able young people will want to enter it
- Seek to make professional growth continuous by such procedures as study, research, travel, conferences and attendance at professional meetings.

In different countries, education systems have developed codes of ethics or codes of conduct in a range of ways. Some of these are voluntary codes which teachers willingly adopt and follow because they aspire to be values-driven professionals, they agree with the content of the code, and they have possibly participated in its development and adoption.

In some other jurisdictions, the code is more like a set of laws or rules that are imposed by government on teachers, which are enforced as a way of controlling behaviours. In between these two extremes there is a wide range of practice.

Sometimes codes are brief, and consist of succinct statements that reflect the broad values of the profession. Others are very detailed and provide a great deal of information about how teachers should, and should not behave, and the reasons.

An example of a code of ethics developed by teachers themselves through a professional body is one that has been adopted by the Queensland Teachers' Union in Australia, for nearly a century.[186]

Box 10.2. The Queensland Teachers' Union code of ethics

The Queensland Teachers' Union code of ethics

Teachers have an important responsibility in guiding their students' educational and social development. Therefore, teachers should possess the following attributes:

- social and emotional maturity;
- integrity;
- breadth and depth of learning; and
- an understanding of human experience.

The Queensland Teachers' Union trusts that all members will exemplify this code of ethics in the exercise of their professional duties.

The code

The primary professional responsibility of teachers is the welfare of all students within their care.

Teachers shall endeavour to promote such relationships between school and home as will contribute to the welfare and comprehensive development of each student.

Teachers shall strive to achieve standards of professional conduct and to display attitudes towards their colleagues which will create mutual respect.

- Teachers shall assert their professional, industrial and civil rights and support their colleagues in the defence of these rights.
- Teachers shall strive to fulfil their responsibilities in a manner which will enhance the prestige of their profession.

In some jurisdictions there exists a statement that is both a code of ethics and a code of conduct. In the first instance there is generally a statement of values and then a statement of rules.

186 Queensland Teachers' Union.

In California for example, the California Teachers' Association, the California Commission on Teacher Credentialing, and many school districts have a Code of Ethics that consists of two principles (Commitment to the Student and Commitment to the Profession) and 16 statements of behaviour – 15 of which refer to things a teacher should NOT do. Some district education officers add a range of regulations of their own to these statements.[187]

Learning activity 1. Five precepts of education - values in the teacher behaviours

The purpose of this learning activity is to deepen your understanding of the values that underpin teacher behaviours in the five precepts of education.

For each of the five precepts, there are a number of teacher behaviours listed, see Box 10.1. These are what a teacher will do in fulfilling their obligations under each precept.

For each teacher behaviour statement, identify and write down one word that describes the value contained in that behaviour description.

Box 10.3. Value in the teacher behaviours

For example, the first behaviour for the first precept talks about a teacher dealing justly and impartially with all students. A "value word" for this behaviour description might be fairness. For some of the behaviour statements there will be several possible correct single words.

At the conclusion of the activity, discuss your responses with another student teacher, your group, or the whole class.

187 Riverside County Office of Education, 2017.

Learning activity 2. Professional code of ethics – some dilemma scenarios

The purpose of this activity is to deepen understanding of the principles of and behaviours associated with the five precepts of education by applying the precepts to a range of practical scenarios. Discuss each of the following situations. For each one:

1. Identify which of the five precepts for education is relevant to the situation.
2. Identify which of the guiding behaviours is *not* being followed.
3. Suggest a course of action that could be taken by you, as an ethical and responsible teacher who observes the situation outlined in the scenario.
4. Share your conclusions with the whole class.

Box 10.4. Professional code of ethics – some dilemma scenarios

Scenario 1 A teacher in your school has some students with individual learning needs in her class. She tells colleagues that she does not modify her lessons for these particular students, stating that it is too time consuming and takes her attention away from the majority of the class.
Scenario 2 As a result of pressure from an influential parent, the School Head has told you that you must change the marks or grades of one of your students who has done poorly in his studies. The School Head points out that this parent has the capacity to make life very difficult in the community for both him and you.
Scenario 3 You are newly appointed to a school, and you soon notice that many of the teachers take home school supplies such as pens, paper, folders and so on for their personal use and for their families. They say that this is normal practice, one of the benefits of teaching there, and teachers have always done it.

Learning activity 3. Preparing for and learning from the practicum – professional values and dispositions

The purpose of this learning activity is to connect your developing knowledge and understanding of the TCSF to your practicum experiences.

In both your Education Degree College-based and school-based practicum experiences, you will be taking the role of a teacher, you will be undertaking the duties of a teacher, and you will be expected to take on the responsibilities of a member of the teaching profession.

Already you have begun to record how you are starting to achieve the Beginning Teacher stage of the TCSF. In Year 1, you began keeping a record in the tracker, and this year you have been transferring your notes from the Tracker into your development portfolio documentation. This includes Domain C – Professional Values and Dispositions.

While undertaking practicum experiences, it is important for you to include new evidence about the minimum requirements and indicators for Domain C in your Practicum portfolio. You will observe situations where you, your fellow student teachers, or the teachers in the school face decisions where they need to weigh up the action they should take, and what to ethically correct response would be. These are opportunities to see ethical teaching in practice.

If the situation applies to your own work in the practicum, it is an added opportunity for you to include your response as evidence in your development portfolio.

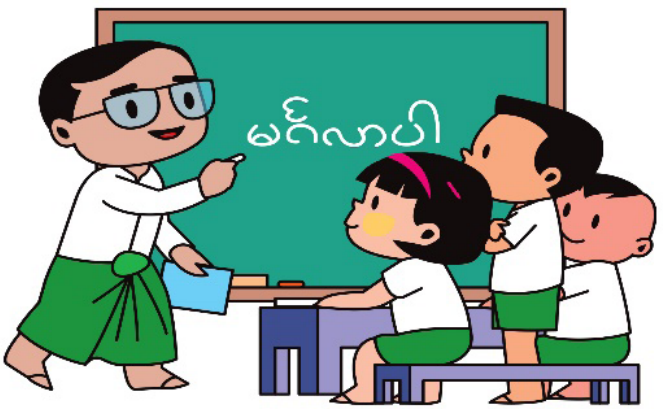

Figure 10.4. Active teaching

Please note - this learning activity may take place before or after Practicum Bloc 7.

Before/after: As a whole-class and/or group activity, discuss and identify some specific teacher actions you would like to watch for and make note of, in relation to the Competency standards and their Minimum Requirements and Indicators from Domain C. Try to identify at least one indicator from each of the four Competency Standards in this domain.

Before/after: As a whole class and/or group activity, discuss and identify some specific teacher actions (perhaps your own) that you actually observed during the block. Identify where these relate to the TCSF and report how you have recorded them.

Caution: Remember that in this activity you are discussing the professional work of fellow members of the teaching profession, and possibly information about students and their families that you have gained through your work.

You therefore need to be mindful of your professional obligations as a teacher to observe fairness, respect, confidentiality, and all of the other characteristics of ethical practice.

Learning activity 4. The traditional responsibilities of Myanmar teachers – an oral history

The purpose of this learning activity is to reflect on the obligations and duties of the Myanmar teacher and identify how these obligations and duties have changed over time. Many references report that the statement of traditional responsibilities of Myanmar teachers are part of the cultural knowledge systems and practices of Myanmar society.[188]

You are going to invite a small group of three or four senior citizens who had many years of experience as teachers to visit your class.

This is a good opportunity to celebrate these people's contributions as respected and valued elders of the profession, and to show them the high regard in which your generation of teachers holds them.

Divide your class into five groups of roughly equal size, and allocate one of the five traditional responsibilities to each group. Each group should now agree on two or three questions you would like to ask these former teachers about your allocated teacher responsibility.

188 See, for example, p.151 of your Year 1, Semester 2 Student Teacher Textbook

The questions should be framed so that they will help the former teachers to think about how that responsibility was enacted in their time, and to tell you their story as a teacher.

Following the visit, reflect as a group on what the former teachers told you:

1. As a group, write a short summary of what the former teachers shared with you.
2. Reflect on how teaching has changed since the time of those former teachers, and write a few paragraphs to describe how the work of teachers has changed.
3. Has the attitude of the society to teachers changed? Reflect on how the attitudes have changed, and why this might have happened. Write as a group a summary of your reflections and discussions about either on a whiteboard or on butcher's paper.
4. Finally, conduct a sharing session where you and the other groups come together to share your findings about each of the five traditional responsibilities.

Review questions

1. What are the five precepts of education and how do they relate to the traditional values of a Myanmar teacher?
2. How have the roles and responsibilities of a teacher in Myanmar changed over time?
3. What is the purpose of a teacher's code of ethics?
4. Describe what the phrase 'professional teacher' means to you.
5. How is a code of conduct different to a code of ethics?

10.3. Professional Growth and Development

This sub-unit comprises two periods and two lessons.

In Year 1 you were introduced to the idea of the reflective teacher. You learnt that in its simplest, and probably purest, form this happens when a teacher takes the time to think purposefully about a lesson, a unit of teaching, or about their teaching as a whole. They reflect on what was successful, what did not go so well, and what they might change next time in order to improve the learning of their students.

Sometimes teachers undertake reflective practices on their own, and at other times it is useful for them to reflect in groups, with their peers and/or supervisors. We often feel safer when we reflect alone, because reflection on our teaching is a kind of assessment and we are not always comfortable in opening up our practice to the possibility of critique from others. However, personal reflection is limited by the extent of our person professional knowledge and insights.

The "father of reflective practice" was Donald Schon. Schon defined reflective practice as the practice by which professionals become aware of their implicit knowledge base and learn from their experience.

He tells us that professionals reflect in action (that is, they think about and question their practice as they work) and they also reflect on their practice (that is, they think about, question and respond after they have undertaken their work).

Schon's ideas have led to much modern thought about how professionals, including teachers, learn about doing their work better through their work itself. It has been built on to develop many important professional learning practices, including Action Research[189].

189 Smith, M. K. 2011.

10.3.1. Reflective practice: Teacher as a reflective thinker

Expected learning outcomes

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

- Identify sources of evidence to improve teaching practice and student learning; and
- Use the TCSF to reflect on key learnings in Year 2 Educational Studies.

Group or peer reflection opens up the possibility of drawing on a wider and deeper range of professional knowledge and experience. We may find that our colleagues or supervisors have encountered similar situations to our own, and they will be able to share a range of responses and the effects of those actions.

Collegial professional learning is a powerful way of improving personal and team professional performance. From time-to-time, professional teachers will engage in both personal and group refection on their teaching practice.

In both, though, a key consideration is to ask the question “How do I / we know how successful our teaching has been?” Another way of framing this important “How do we know” question is “What is the evidence?”

Figure 10.5. Reflection on teaching

Evidence of student learning is the most important way we can ascertain the effectiveness of our teaching.

There are many different types of evidence that teachers can consider when they reflect on and make improvements to their teaching.

In order to answer the question '"How do I / we know how successful our teaching has been?," a teacher may gather samples of class work or look a at a student's assessment or exam results; they may revisit their reflective journal or lesson plan, or read and annotate an article that is relevant to their teaching.

All these documents can be considered evidence of teaching and learning. While evidence of teaching and learning can come in many different forms, educational thinkers have determined that it can be categorised into three main groups:

- formal and informal curriculum related evidence, which may come from assessment, or observation of students' and teachers' work;
- evidence of teachers' own knowledge and skills, which are observable in how students learn and develop their own knowledge and skills; and

- evidence from research and other sources that are relevant to the particular teaching and learning situation and can inform how teachers might proceed towards improvement.[190]

Learning activity 1. Collecting evidence

The purpose of this activity is to identify potential sources of evidence of teaching and learning within student teachers own teaching context. In pairs, discuss and identify at least two or three kinds of evidence that you might be able to use, from each of the three evidence groups, to help you think about how successful your teaching may have been across a sequence of lessons – and how you might improve next time.

Write your responses in Table 10.5 and then compare your findings with those of another pair. Finally, have a class discussion about the outcomes. You will need to consider the kinds of evidence you might use, and how you could collect or find it.

Table 10.5. Collecting evidence

Group	Kind of evidence	How to collect / find it
Curriculum-related		
Professional skills and knowledge		

190 Timperley, H. 2010.

Group	Kind of evidence	How to collect / find it
What research says about this		

Learning activity 2. Reflecting on learning using the TCSF

The purpose of this learning activity is to give you an opportunity to reflect on Year 2 with your peers.

Over the course of the year, you have built on what you learnt in your first year of Educational Studies, to investigate topics such as Education for Sustainable Development, Human Rights Education, Integrated Approaches to Curriculum Design, Educational Philosophy, Assessment and Inclusive Education. Working in pairs or small groups, reflect on your learning across Year 2 of Education Studies. You might like to flip through your textbook to remind yourself of these lessons.

When you are reflecting on your learning, discuss the below questions with your group. As a personal reflection, there is no right or wrong answer to these questions, and you may find that your group members have different answers to the questions than you.

- In which topic/areas do you feel you have learnt the most?
- In which topics/areas do you feel you still have a lot to learn?
- Which topics/areas would you like to explore further?
- How can you pursue these topics further?

Working independently, refer to your copy of the TCSF and the Competency Standards highlighted at the start of each lesson in this textbook.

Select one competency standard from each domain and think about how you have reached the minimum standard in your Educational studies subject.

Once you have identified this, use your TCSF to look at the indicators relevant for your teaching level and make a note of what evidence you have to demonstrate this. The below table will help you organise your thoughts.

Table 10.6. Reflecting on learning using the TCSF

Domain A: Professional Knowledge and Understanding
Competency Standard: Evidence:
Domain B: Professional Skills and Practice
Competency Standard: Evidence:

Domain C: Professional Values and Dispositions
Competency Standard: Evidence:
Domain D: Professional Growth and Development
Competency Standard: Evidence:

Period 2

Learning activity 3. Writing a reflective journal entry

The purpose of this learning activity is to afford you individual time to reflect on your learning

Use your answers to the reflective questions and your notes from the table to write a reflective journal entry of approximately 500 words.

In your reflective journal; you should make reference to at least four competency standards (one from each domain) and demonstrate how you achieved them in your studies.

10.3.2. Collaborative learning: Continuous professional development

This lesson comprises two periods.

Expected learning outcomes

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

- Discuss characteristics of professional learning networks;
- Review and revise action plan for building a professional learning network; and
- Identify opportunities for non-formal and informal learning relevant to professional development needs.

Building on prior learning: Continuing professional development

In Year 1, you learnt about the value and importance of continued professional development for teachers across the span of their career. You also learnt that continued

professional development can come in many forms, including formal or informal courses and workshops, within school initiatives that target specific, school-based challenges and professional learning networks.

As part of your Year 1 Curriculum, you also had the opportunity to plan for and participate in a professional learning network at your Education Degree College or institution. As you learnt last year, a professional learning network is a meeting for groups of teachers from different schools, colleges, departments, or year groups who gather to provide mutual support for one another. These interactions can be hosted either face-to-face or virtually. The material teachers engage with in these meetings tends to be chosen to address the interests and concerns of the participants and can develop and change over time. It is important to note that although teachers can sometimes receive acknowledgement of their participation in a network, such as a certificate, networks differ from courses and workshops as the aim of a network is to share ideas between teachers and be mutually supportive of each other. Networks are not one-off events but run over a longer period of time.

A key feature of a professional learning network is teacher collaboration. Teacher collaboration can be defined as teachers working together to improve their professional practice. Teacher collaboration can take many forms, such as:

- Sharing resources, teaching strategies and classroom experiences
- Discussing ideas or research in the staffroom
- Participating in action research together
- Observing each other's lessons and providing feedback.

Collaboration is different to other forms of group professional learning in that the benefit flows both ways, meaning that all teachers engaged in collaboration both contribute to and learn from the collaborative activity. The purpose of a professional learning network is to provide the space and structure for focused teacher collaboration.

Over the past two years, you have engaged in many collaborative activities as part of your teacher education studies. In your classwork, you have engaged with your coursework through collaborative group work activities such as think-pair-share, jigsaw and round-robin, and during your practicum experiences you have prepared and presented lessons and obtained feedback from your peers in order to improve your professional practice.

Learning activity 1. Group reflection - stories of collaboration

The purpose of this learning activity is to explore, with your peers, how you have collaborated to improve your practice.

Over the course of the last year, you have contributed to many collaborative learning experiences as a pre-service teacher in your class activities, during your practicum and while participating in your Education Degree College's professional learning network. Think of a time that you have collaborated with your student-teacher peers, class teachers or practicum supervisors over the past year and answer the following questions:

- Who did you collaborate with?
- What made your collaboration a successful learning experience?
- What was the outcome of your collaborative activity?
- What did you learn from the experience?

Share your thoughts in a small group of four.

Learning activity 2. Effective professional learning networks in practice

The purpose of this learning activity is to examine the characteristics of a professional learning network to which you belong.

One of the activities in Year 1, was to plan for and establish a professional learning network at your college or university. Thinking about this professional learning network, or another online or face-to-face network that you may be a part of, how does the network you are involved in demonstrates the characteristics of an effective professional development network. You might want to describe the activities or meeting procedures, how your network identifies topics or how members participate. Use the table to record your thoughts.

Once you have recorded your thoughts, and compare and contrast your answers with the person next to you.

Table 10.7. Characteristics of effective professional learning networks

Characteristics of effective professional development for the teaching profession	Example of how this was demonstrated in your professional learning network
Encouragement of *purposeful* networking among teachers	
Is grounded in classroom practice	
Is based on sound educational practice	
Supports reflection and inquiry by teachers on both their own learning and their own classroom practice.	
Builds on what teachers already know, taking into account the voice of the teacher in a supportive 'safe' environment with room for dissent	
Commitment to the enterprise by both institutions and teachers	

Formal, non-formal and informal professional learning

Like other forms of learning, professional development for teachers can be divided into three categories, formal, non-formal, and informal learning opportunities.

The differences between formal, non-formal and informal professional development for teachers are summarised in Table 10.8.

Table 10.8. Formal, non-formal and informal learning

	Formal	Non-Formal	Informal
What is it?	Learning that results in a recognised qualification	Complementary learning that builds on recognised learning	Purposeful, self-directed learning guided by interest
How is it structured?	Planned, structured and instructor led	Planned and structured; can be instructor or participant led	Unstructured, spontaneous, self-motivated learning
Where does it happen?	Schools, colleges, universities	Courses, workshops, professional learning networks	Anywhere
Example	Your pre-service teacher training	Professional Learning Network	Discussing behaviour management strategies with your supervising teacher

Learning activity 3. Creating learning goals

You have had opportunities to create your own learning goals and personal action plans through your practicum activities.

The purpose of this activity is to reflect upon your programme as a whole up to this point which is the end of the first cycle of the four-year teacher education programme. Over this first cycle, think about the following questions:

- What challenges did you face?
- What topics interested you most?
- What would you like to learn more about?

Write your top three learning priorities for the next cycle of your programme in Box 10.5.

Box 10.5. Top three learning priorities

Learning Priority 1:
Learning Priority 2:
Learning Priority 3:

Learning activity 4. Identifying informal professional learning opportunities

The purpose of this learning activity is for you to think specifically about *informal* and *non-formal* professional learning opportunities as you move into the second cycle of your teacher education programme.

Looking at your top three learning priorities, think about how you can improve your professional practice through non-formal or informal learning opportunities. What resources you can access, where you can go and who you can speak to improve your professional knowledge and practice?

For example, if you identified inclusive learning strategies as a learning goal you could look to see if there are any resources or webinars you can participate in to increase your knowledge in this area. There may be someone with expertise in your professional learning network who could help you. These are considered non-formal learning opportunities. You could also access the library or e-library to search for the books and articles in the Unit 9 reading list, search for teacher's blogs and example lesson plans from reputable websites or have a conversation with your teacher educators to discuss the strategies they use to include learners in the class. These are examples of informal learning opportunities.

You can use Table 10.9 to help order your thoughts. Once you have completed the table, swap your textbook with another student teacher in your class and see if you can add your ideas to their list.

Table 10.9. Non-formal and informal learning opportunities

Learning goals	Non-formal learning opportunities	Informal learning opportunities

10.3.3. Initiative for research culture

This lesson comprises four periods.

Expected learning outcome

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

- Create a poster communicating action research findings and reflections on the process and value of action research.

Building on previous learning

In Year 1 of Educational Studies, you were introduced to the concept of action research. You learnt that action research is a useful way to reflect on and evaluate your teaching and learning by implementing new strategies, identifying areas of your teaching that can be improved and engaging in continuous evaluation of your teaching practices.

In Practicum Blocs 6 and 7, you developed a plan for, and then implemented, an action research project. In the last two days of Practicum Bloc 7 you had an opportunity to prepare your action research poster. The action research steps below may refresh your memory. In this lesson, we will build on your action research project from

Practicum Blocs 6 and 7 in order to learn how to communicate your research findings through an action research poster presentation.

Communicating the findings from your action research project is an important step in the research process. Sharing what you learnt from your action research allows other teachers to learn and improve their own practice, allows you to engage in debate with the wider professional community as well as contributing evidence to the wider body of professional knowledge held by teachers.

One popular way of communicating research findings is through a research poster. A research poster summarises all the main steps of your research, including the problem statement, contributing research, research methods and data collection, as well as your data analysis, and findings.

Learning activity 1. Poster preparation

The purpose of this activity is to check that you have all the elements required for your poster. This activity builds on the preparation work you did in the last two days of your Practicum Bloc 7 and acts as a check that you have all the elements in your poster.

Review your action research plan and project notes from Practicum Bloc 6 and 7.

Using Table 10.10, summarise your project under the headings; answer the questions in each box in a few clear sentences. This will help you talk succinctly in your presentation.

Table 10.10. Action research project review

Action research steps	
STEP 1 Identify your problem. What would you like to improve in your school/department/ professional practice?	*Completed in Bloc 6 Practicum*

Action research steps	
STEP 2 Investigate what the research tells you about how you could improve your practice/student learning outcomes.	*Completed in Bloc 6 Practicum*
STEP 3 Design a plan for investigating the question/problem. What strategies/interventions will you put in place and what data will you collect and why?	*Completed in Bloc 6 Practicum*
STEP 4 Collect your data (e.g., structured observation, formative and summative assessment)	*Completed in Bloc 7 Practicum*
STEP 5 How did you analyse your data?	*Completed in Bloc 7 Practicum*
STEP 6 What were your findings? (What did you learn?)	*Completed in Bloc 7 Practicum*

Action research steps	
STEP 7 Communicate your findings	*Research Poster*
STEP 8 Decide your next actions (your next action research cycle)	

Peer-reviewed poster presentations are a common feature at research conferences. Typically, delegates at a conference use scheduled times (often break time between keynote presentations) to walk through poster displays and engage with the poster author in short one-to-one discussions. This means, as the researcher you need to communicate your research messages succinctly and in an engaging way in a very short period of time.

In addition to communicating your key messages you need to be prepared to answer questions about your work. You might be asked to expand on a key message, explain an aspect of your research in more detail, or consider and alternative point of view. It is helpful to prepare answers to likely questions about your research beforehand so that you can respond naturally to even unexpected questions.

Learning activity 2. Small group presentation and discussion

The purpose of this learning activity is to give you practice in poster presentations and answering questions.

In groups of four, present your action research project to your peers, using Table 10.10 as a guide for your key messages. Each person should have a maximum of three minutes to present their key messages and two minutes to answer questions.

After listening to your peers' presentations and asking them questions, provide them with oral feedback using the 'two stars and one wish' framework. You should note any feedback you receive from your group in the box below.

Box 10.6. Two stars and one wish

Two Stars – What did I do well in my Action Research Project?
One Wish – One thing I need to improve

Learning activity 3. Poster presentations

The purpose of this learning activity is to have an authentic learning experience of presenting your action research findings using a poster presentation format.

You will use your classroom space to display your action research posters. Your teacher educator will divide you into three groups: A, B, and C.

- In Period 2, group A will present their posters.
- In Period 3, group B will present their posters
- In Period 4, group C will present their posters.

Your teacher educator will divide the non-presenters in each session into small groups who will rotate between each poster according to the available amount of time in the period. This means you will present your action research project to multiple groups.

At research conferences, there is often an award relating to the "people's choice" that is the poster that most participants vote as the best in conference.

Review questions

1. What is reflective practice?
2. How is collegial professional learning different from individual reflection?
3. In what ways can a teacher answer the question "How do I know how successful my teaching has been?"
4. What is 'evidence' and how can it be used to demonstrate quality teaching practice?
5. Provide examples of evidence that you can use to demonstrate the minimum standards of the TCSF?
6. What is a Professional Learning Network (PLN)?
7. Describe the characteristics of an effective PLN and how this works in practice?
8. What is the meaning of teacher collaboration?
9. Describe some examples of collaborative activities that teachers can engage in to improve their practice?
10. What are the key differences between formal, non-formal and informal learning?
11. Explain the process of action research?

Unit Summary

Key messages

- Teaching is a key profession in the development of any nation's economic, cultural and social identity and prosperity. High quality teaching is the most important factor influencing learning outcomes for students in schools.
- As professionals, teachers must take on the characteristics and responsibilities of a profession, including higher education training and preparation for entry to the profession, on-going professional learning throughout their career, adherence to the competencies and standards, acceptable professional and personal performance and conduct and commitment to service to the community.
- A code of ethics is a written and agreed statement by a profession's members and stakeholders which provides a basis for the professional and personal behaviour and performance of the profession's members. Teachers are able to use the statement to help them respond to situations where they may have a dilemma about how they should act in response to a particular set of circumstances.
- In Myanmar, the code of ethics for teachers is based on the five precepts of education. Each of the five precepts is supported by a number of behaviours that teachers are expected to exhibit in fulfilling their obligations under that precept.
- The Myanmar Teacher Competency Standards Framework (TCSF) has been developed to provide a clear statement about the skills, knowledge and aptitudes that teachers in Myanmar require at different stages of their career.
- The TCSF organises the expected knowledge, skills and attributes of teachers, including required levels of performance, around four domains: Professional knowledge and understanding; Professional Skills and Practices; Professional Values and Dispositions; Professional Growth and Development. Each of these domains is broken down further into specific areas of competence, and for each area of competence there is a competency standard as well as minimum requirements for demonstrating achievement of the standard.

- Evidence of learning such samples of class work and student assessment, reflective journal entries and annotated lesson plans, should be collected to demonstrate that teachers have met the minimum requirements of the standards.
- When demonstrating the minimum requirements of the standards, it is not straightforward to demonstrate behaviours such as "understanding" or "respect". We often need to observe a person's actions and behaviours in order to make judgments about how well they understand or know something, or what their values are.
- A key feature of continued professional development for teachers is teacher collaboration. Teacher collaboration can be defined as teachers working together to improve their professional practice. Teacher collaboration can take many forms, such as sharing resources, teaching strategies and classroom experiences; discussing ideas or research in the staffroom; participating in action research together and observing each other's lessons and providing feedback
- Like other forms of learning, professional development for teachers can be broken into three categories; formal, non-formal and informal learning opportunities.
- Formal learning can be defined as learning that is provided by a formal education institution such as a school, university or college. It is planned, structured, and intentional learning that is directed by an instructor. Formal learning leads to a recognised qualification or certificate.
- Non-formal learning is also planned and structured learning that is provided by education providers. However, non-formal learning is considered complementary to formal education and may not lead to a formal qualification or certificate.
- Informal learning refers to forms of learning that are intentional or deliberate but are self-directed rather than being provided by an institution. Informal learning opportunities are often spontaneous.

Unit reflection

In Unit 10, you looked at the characteristics and responsibilities of a teacher as a professional through the lens of the TCSF. Using the domains of the TCSF as headings, create a mindmap that identifies how the content and activities of this unit meets the minimum standards of the TCSF. As a second level in your mindmap, identify what sorts of evidence you can draw on to demonstrate your attainment of the minimum standards.

Further reading

10.2. Professional Values and Dispositions

Forster, D. J. (2012). Codes of Ethics in Australian Education: Towards a National Perspective. *Australian Journal of Teacher Education, 37*(9). Retrieved from https://ro.ecu.edu.au/ cgi/viewcontent.cgi?article=1825&context=ajte

Glossary

Terms	Elaborations
Academic integrity	Upholding ethical standards in all aspects of scholarly work, upholding the principles of honesty, trust, fairness, respect, and responsibility.
Academic misconduct	Acting in a way that may create an unfair academic advantage, for example cheating, or re-using other's work without referencing it.
Action learning	A form of experiential learning that involves small group problem-solving related to an authentic issue.
Assessment as learning	Assessment in which students are their own assessors.
Assessment for learning	Formative assessment that provides ongoing feedback that can be used by teachers and students to improve student learning.
Assessment of learning	Summative assessment in which teachers assess achievement against outcomes and standards.
Authentic assessment	Performance-based assessment using rich tasks that relate to the world beyond the classroom.
Competencies	Knowledge and understanding, skills and practices, and values and dispositions.
Competency	An explicit skill, item of knowledge, or aptitude identified as necessary to undertaking a specific role or activity.
Constructive alignment	Alignment of unit-level learning outcomes with assessment tasks, success criteria, and learning and teaching activities.
Copyright laws	Intellectual property laws in force from national Copyright Acts and international conventions.
Corrective measures	Actions taken to enforce legislation, or correct an error related to a law.
Criteria	Properties or characteristics by which to judge quality.
Critical theory	A philosophy that looks at power relationships within institutions, organisations and instruction, with a view to changing systems to overcome oppression and improving the human condition.
Diagnostic assessment	Assessment that provides teachers with information about students' prior knowledge and misconceptions before the beginning of a learning experience.
Digital divide	The gap between students who have access to the internet and devices at school and home and those who do not.
Digital literacy	The ability to use digital technology and communication tools and networks to locate, evaluate, use and create information.
Digital use divide	The gap between students who have opportunity to use technology in active and creative ways to support their learning, as opposed to those who simply use technology to passively consume content and media.
Dimensions of sustainable development	Interconnected systems related to sustainability, for example: natural/ environmental systems; economic systems, social systems; and political systems.
Discrimination	Unfavourable treatment of individuals or groups on arbitrary grounds.
Eclecticism	An approach to philosophy that draws upon, or selects, ideas from a number of other philosophies, rather than staying with one set of ideas.
Education for sustainable development	A lifelong learning process that aims for informed and involved citizens with the problem-solving skills, scientific, technological and social literacies, and commitment to engage in sustainable development.

Terms	Elaborations
Educational philosophy	Statement of a teacher's guiding principles, beliefs, goals and values.
Environmental limits	The range of conditions beyond which there is a significant risk of irreversible changes to the services provided by natural systems to humans.
Essentialism	An educational theory that sees education as a way of teaching students the essential skills and knowledge of the culture.
Exemplars of student work	Samples of previous students' work, often of different qualities.
Existentialism	A philosophy that deals with issues of why we exist, rejecting universal truths in favour of individual constructions of reality.
Formal assessment	Assessment using prescribed tasks directly related to specific course requirements, components and weightings.
Formative assessment	Low stakes assessment activities intended to provide ongoing feedback that can be used by teachers to improve their teaching and by students to improve their learning.
Globalisation	A philosophy that promotes understanding, interacting and developing relationships with people around the world.
Human rights education	A lifelong learning process that builds the competencies that promote and uphold human rights.
Idealism	The philosophy that truth and values are universal and absolute.
Informal assessment	Assessment that uses activities undertaken and anecdotal evidence gathered through teaching and learning in a less prescribed manner than formal assessment.
Integrated approach	Multidisciplinary, interdisciplinary and transdisciplinary approaches to the teaching of subject knowledge that build on connections.
Intellectual disability	A disorder of intellectual development resulting in general difficulties in overall cognitive function, and in developing the skills to function in everyday life.
Intellectual property	The rights that a person or organisation hold over ideas or designs they created, meaning that nobody else can copy or reuse musical, literary and artistic works, discoveries and invention without the owner's permission.
Intellectual risk taking	Engaging in adaptive learning behaviors, such as sharing their ideas, asking questions, attempting to do and learn new things, despite the possibility of making mistakes or appearing less competent than others.
Learning difficulty	Disorder that impacts on a student's ability to process information that they are presented with in class, and/or communicate effectively what they know and can do.
Learning disability	A neurological disorder that impacts on a student's ability to process information that they are presented with in class, and/or communicate effectively what they know and can do.
Learning disorder	A specific or developmental disorder that causes students to experience challenges in developing academic skills, particularly literacy and numeracy.
Media Information Literacy (MIL)	The ability to evaluate how digital technology and communication tools and networks are used in critical, ethical and effective ways in personal, professional and societal activities.
Mentor	An experienced and accomplished practitioner who supports and provides guidance to a beginner in any area of human activity.
Model of disability	Ways of thinking that influence perceptions and policies related to people with disabilities. The Medical Model of Disability focuses on the person's deficit and their need of fixing. A Social Model of Disability sees that environmental, social and cultural factors can be adjusted to reduce the extent of a person's disabilities.
Moderation processes	Assessment quality assurance processes aimed at confirming that assessment is conducted with accuracy, consistency and fairness.

Terms	Elaborations
Negative consequences	Unpleasant outcomes used if a student breaks the rules; aimed at decreasing the probability that this behavior will occur in the future.
Norm	A rule or standard of performance, written or unwritten, shared by members of a connected group of people.
Perennialism	An educational theory that states that teachers should teach knowledge that is relevant to all people throughout time.
Performance-based assessment tasks	Assessment that measures students' ability to apply the skills and knowledge learnt from a unit or units of study in which they create a product or complete a process.
Plagiarism	A breach of academic integrity when ideas or work of another person are presented as one's own ideas or work.
Positive consequences	Pleasant outcomes used to reward and increase the frequency of positive behaviour.
Postmodernism	A philosophy that claims that all knowledge is constructed by people in power who use that knowledge to oppress and exploit others. They see the role of education as empowerment and transformation of the oppressed.
Pragmatism	A philosophy that argues that reality changes and depends on what is observed and experienced, and how it is interpreted.
Precept	A statement, written or unwritten, that described the expected behaviour of an individual of group of people.
Proactive techniques	Strategies used to prevent inappropriate behaviour from occurring and situations escalating.
Progressivism	An educational theory that stresses that ideas must be tested and learning could come from what learners want to know.
Realism	The belief that reality can be found in our physical world and that knowledge comes through experience and reasoning.
Reconstructionism	An educational theory that calls on schools to advocate for social change and democracy.
Reliable	Assessment that is accurate and consistent, and shows stability of results from a test for a given population.
Right	A moral or legal entitlement to have or do something; the responsibility to respect the rights of others.
Simulation	In which real-life situations and values are modelled in role play situations or computer-based representation.
Society-centred approaches	These philosophies go beyond individuals to focusing on educating groups of people.
Standards	Levels of achievement or performance.
Standards descriptors	Qualities required to demonstrate achievement for levels of performance for each criterion.
Student-centred approaches	These philosophies focus on individual students achieving their potential, and how teaching can best support this.
Student profile	A statement that records evidence of an individual student's progress in learning against a framework.
Summative assessment	Assessment strategies designed to confirm what students know at the end of a stage of learning and whether or not they have met the curriculum outcomes or goals of their individual learning achievement.
Sustainability	Ability of an individual, organisation, programme or system to continue and/or prosper, meeting the needs of the present generation while leaving equal or better opportunities for future generations.
Sustainable development	Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Terms	Elaborations
Teacher-centred approaches	These philosophies say that knowledge is transferred from one generation of teachers to the next.
Unit-level learning outcomes	The knowledge and understandings and skills and dispositions to be developed and assessed over a unit.
Valid	Assessment that effectively measures student attainment of the intended learning outcomes at the appropriate level.

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Annexes

Annex 1. Differences in TSCF minimum requirements for Beginning KG, Primary and Lower Secondary/ Middle school teachers

Kindergarten Teachers	Primary Teachers	Lower Secondary Teachers
A4.1.1 Describe the core principles, education concepts, content and objectives for learning of the Kindergarten curriculum, for example **social development and foundational literacy**	A4.1.1 Describe key concepts, content, learning objectives and outcomes of the primary curriculum for the subjects and grade level/s taught	A4.1.1 Describe key concepts, content, learning objectives and outcomes of the lower secondary curriculum for the subjects and grade level/s taught
A5.1.1 Describe the key learning objectives, concepts and content for each of the **six Learning Development Areas (LDA):** • Wellbeing (holistic physical development) • Social and emotional and moral development • Communication (mother tongue and first additional language) • Exploring mathematics • Creativity and problem-solving • Knowledge and understanding of the world	A5.1.1 Describe the 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 **subject content and skills** A5.1.3 Describe approaches used to promote learning in key areas of **literacy, numeracy, science and social studies** for the grade levels taught and linked to real life	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
No corresponding minimum requirement	A5.2.3 Describe approaches to develop students' fluency in **reading and numeracy**	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
No corresponding minimum requirement	B1.1.2 Select instructional material to link learning with **students' prior knowledge, interests, daily life and local needs** B1.1.3 Encourage students' awareness of their own **ideas to build new understanding**	B1.1.2 Select instructional material to link learning with **students' prior knowledge, interests, daily life and local needs** B1.1.3 Encourage students' awareness of their own **thought processes and use of reflection** to build new understanding

Kindergarten Teachers	Primary Teachers	Lower Secondary Teachers
B1.2.2 Use knowledge of literacy and numeracy instructional strategies to support students' **language and literacy development**.	B1.2.2 Use knowledge of **literacy and numeracy instructional strategies** to support students learning in different subject areas	B1.2.2 Use knowledge of different literacy teaching strategies to support development of **subject matter literacy**
B1.2.3 Facilitate children's learning through **play** and provide **visual, auditory, oral examples** to introduce and illustrate concepts to be learnt	B1.2.3 Create opportunities for students to **investigate** subject-related content and concepts through **practical activities**	B1.2.3 Create opportunities for students to investigate subject-related content and concepts through practical activities
B1.3.2 Plan timed and focussed learning activities to engage students	B1.3.2 Provide lesson introductions to **link new learning to prior learning**, to engage students' interest and to motivate them in learning	B1.3.2 Provide lesson introductions to link new learning to prior learning, to engage students' interest and to motivate them in learning
B1.3.3 Use **themes to integrate topics**, connected with the local language, culture and environment to learn about self, family and others	B1.3.3 Prepare **focused and sequential learning experiences** that integrate learning areas and are responsive to students' interests and experience	B1.3.3 Prepare focused and sequential learning experiences that integrate learning areas and are responsive to students' interests and experience
B1.3.4 Prepare learning experiences that integrate the 6 Learning Development Areas	B1.3.4 Use **questioning techniques and examples** to introduce and illustrate concepts to be learnt	B1.3.4 Use questioning techniques and examples, to introduce and illustrate concepts to be learnt
B3.1.2 Encourage students to **interact and play safely** with other students	B3.1.2 Encourage students to interact with each other and, to **work both independently and in teams**	B3.1.2 Encourage students to interact with each other and to work both independently and in teams

Annex 2. Sample responses to six families of strategic questions

Observation *questions*:

How does the issue/problem affect your local area?

- Lack of electricity sometimes creates problems for daily life e.g.:
  - Cannot continue working or need to use generator with cost of petrol
  - Not being able to sleep at night-time especially during hot season.

What do you know for certain?

- The government:
  - Is struggling to provide electricity for the whole country (i.e. the resource is still very limited)
  - Saves energy by providing electricity at the times when people need it most (e.g. cooking times for daily meals)
  - Should identify and rely on the renewable energy in Myanmar.

Feeling *questions:*

How do you feel about the situation?

- People may overlook ways they can reduce electricity consumption.

Has this problem affected your own physical or emotional well-being?

- We experience the consequences of the lack of electricity.

Visioning *questions:*

How can the situation be changed?

- Every household resident can become aware of how to use electricity in more efficient ways, while still meeting their needs. For instance, they can:
  - Use natural light through their windows
  - Use natural air for cooling
  - Switching off the light when sleeping etc.

How would you like it to be?

- **Implementation of householder awareness programme:** Since lack of awareness results in electricity waste in the households, an effective intervention would be to provide the necessary information for residents.
- **Installation of solar power:** Almost all areas of Myanmar have high potential to generate solar energy. Solar energy is **a sustainable way of generating electrical energy.**

Change *questions:*

Who can make a difference?

- Individual households are critical to making a difference.

What will it take to bring the current situation closer towards your vision?

- **Implementation of householder awareness programme:**
  - Distribution of instruction pamphlets to households on how to use electricity in more efficient ways
  - Government announcement through various media channels etc.

Personal inventory and support *questions:*

What would you like to do that might be useful in bringing about these changes?

- I will follow the instructions and use electricity in more efficient ways.
- I will encourage others in my community to do so.

What support do you need to make this contribution?

- I will need to be conscious of sustainable ways of using energy on a day to day basis.

Personal action *questions:*

How can you best collaborate with others to work on this issue?

- I will participate in the campaign.

Source: Provided by Myanmar educator

Annex 3. Year 2 lesson plan template

Class:	Date:	Time:	Teacher:
Lesson: (What is the topic/title of your lesson?)			
Know the Students': **a. Prior knowledge** (What do students know? What can students already do?) **b. Student profile** (What do you need to consider regarding individual students' needs?)			
Lesson objective: (What is the purpose of the lesson? What does you intend to do?)			
Learning outcomes: (Construct SMART learning outcomes. What will students know and be able to do by the end of the lesson?) By the end of this lesson, students will be able to:			
Criteria for success: (How will you and your students know if they have achieved the learning outcomes of this lesson? e.g. They will be able to solve 7 out of 10 mathematics problems; They will be able to label all parts of a flower on a diagram.)			
Teaching approach: (Is the lesson Teacher-centred, Student-centred or both?)			

Teaching and learning strategies: (Is the lesson Inquiry-based? Problem-based? Project-based? A direct instruction lesson? etc.)
Teaching and learning methods and techniques: (Will you use Brainstorming? Storytelling? Role play? Questioning? Discussion? Think-pair-share? Group work? etc.)
Teaching aids and resources (visual aids, audio aids, integration of technologies): *(Will you need paper? Drawing materials? Computers? etc.)*

Stage	Timing (45 minutes)	Teacher activity (What are you doing?)	Student activity (What are students doing?)	Differentiation (How will you differentiate teaching and learning to respond to students' needs?)
Introduction (How will you gain students' attention; connect to prior learning; communicate intended learning outcomes and success criteria?)				
Body (Will there be different stages in the body of the lesson e.g. explicit teaching, guided practice, independent practice?)				
Review (How will you assess student achievement of learning outcomes; support students reflecting on learning?)				

Teacher evaluation (plan questions for evaluation; complete this section after delivery)

e.g., Did all your students understand and meet the intended learning outcomes? Were the learning outcomes suitable for students' level/s? Were they realistic given time allocation?

1. How effective were the teaching and learning strategies/methods? Teaching aids/ resources? Formative assessment and feedback opportunities?

2. What would you do differently next time to enhance student learning?

Annex 4. Middle school conflict scenarios

Scenario 1: Whenever you have friends over, your little brother wants to do everything with you. He annoys you by following you around, interrupting when you're talking, and demanding a turn in everything you do. It is very hard to find some privacy with your friends when he is around.

Scenario 2: You and your best friend have always played soccer (football) together on town and recreational teams. You both try out for the school's travel team. You make it and your friend doesn't. At first your friend claims not to care, but you soon realise your friend is very angry. Your friend doesn't want to spend as much time together as you used to, and, of course, you have daily practices and games your friend doesn't attend.

Scenario 3: Your friend tells you a secret in absolute confidence. You don't really mean to, but you tell another friend. Soon the whole school seems to know what your friend's secret is. Your friend is really mad at you. Your other friends are also upset that you revealed the secret.

Scenario 4: Your parents have a strict rule that all homework must be done before you can go out after school with your friends. All your friends go down to the basketball courts after school to play basketball. By the time you get there, teams are already set and games have already been played, so it's really too late to join in.

Scenario 5: You are invited to go to the mall with a new group of friends from school. You don't know them that well, but are excited that they included you in their plans. When you go into a crowded music store, you think you see one of them slip a CD into a pocket without paying.

Scenario 6: Your teacher asks you to stay after class. The teacher shows you two tests that are identical in every answer: your test and that of the student who sits next to you. You have the feeling that the other student has been copying your work, but don't know for sure.

Scenario 7: Your middle school is much bigger than primary school. There you saw your best friend all the time. Now you don't have any classes together and you hardly see each other at school, except at lunch. Your friend seems to be making a whole new group of friends that you don't know. Today at lunch, for the first time, your friend is sitting with some new friends. When you walk by with your lunch, your friend doesn't ask you to sit down as usual.

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