Observations from South African Classrooms: Some Inclusive Strategies

Sai Väyrynen

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Introduction

This document introduces some classroom and teaching strategies that can be easily used in South African classrooms in order to better cater for diversity. This is not a guidebook for learning programme design nor does it provide direct guidance for lessons plans. This material assumes that educators are already aware of the basic principles of Curriculum 2005 and Revised National Curriculum Statement (2003), as well as outcomes-based education. It draws on various draft guidelines on inclusive education, developed by the national Department of Education, as well as on international literature and grassroots experiences. It adds on some practical aspects to the curriculum delivery through examples, also depicting on how large classrooms can be managed more effectively by using various environmental and instructional teaching practices. It should not be considered as an exhaustive list of possibilities nor the 'one right way' of doing things. It further assumes that teaching is about learning; it is learning about our learners, it is learning about 'what works', it is learning by trial-and-error. It acknowledges that teaching is a part of an interactive process where learners and their educator explore the world around in order to make sense out of it.

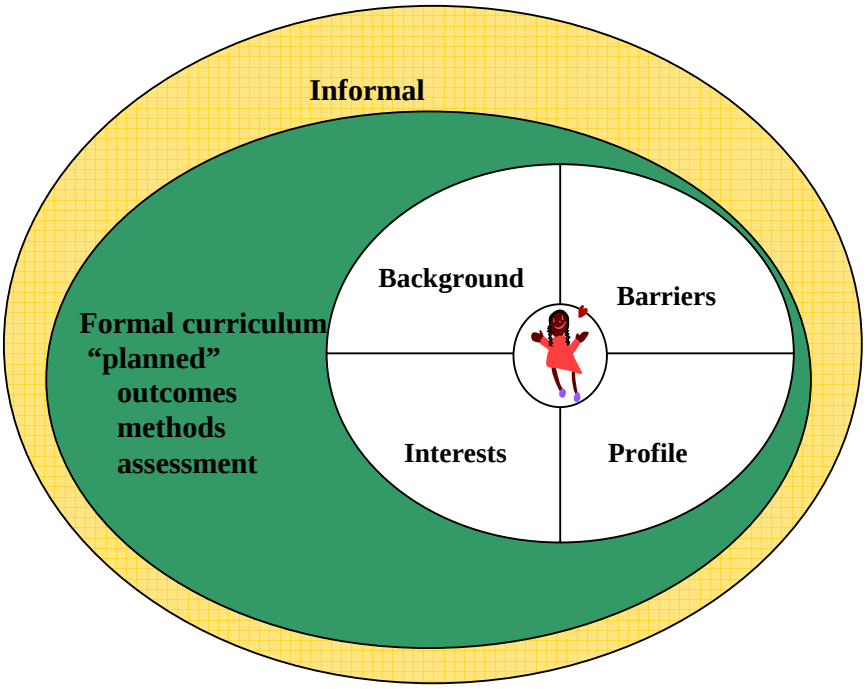
The document contains 'real-life' practices and examples from a number of classrooms in South Africa, mainly from SCOPE Inclusive Education pilot schools in Mpumalanga and Northern Cape. There are also educators' ideas of how to use the strategies presented in this document, developed in a series of workshops in the SCOPE pilot schools.

Curriculum and Inclusive Education

The success of inclusion is clearly related to curriculum since curricula often create significant barriers to learning. These barriers are related to a number of interconnected parts of the curriculum such as content, language of teaching, classroom management, learning styles and paces, timeframes, materials and equipment available for teaching and learning, and assessment methods and techniques.

'Curriculum' can be seen from a broader or a narrow perspective. A broad understanding of 'curriculum' would embrace all learning experiences that are available for learners in their schools and communities. A narrow definition usually refers to planned teaching and learning opportunities which are available in classroom and in the school.

The figure below illustrates the various 'layers' of curriculum. The core of the curriculum is the 'formal curriculum', the Revised National Curriculum Statement which gives the direction to educators. Educators use this framework to plan their work in terms of content, outcomes, methods and assessment. Behind the 'formal' curriculum is 'informal curriculum' which is about 'unplanned' learning – learning that happens in our daily interaction with our environment. In the heart of the picture is the learner – all planning should start from our knowledge of our learners.



Formal curriculum

Traditionally, South Africans were exposed to conservative theories and practices of teaching and learning. Learning was perceived as a set of prescribed contents which were to be learned in a certain order and time. Rote-learning was widely spread, and there was a little space for critical thinking and questioning. Most educators were trained to fit in this framework. Many

children were excluded as a result of systemic factors such as poverty and second language issues or other barriers if they did not fit into the prescribed scheme.

Contemporary theories do not assume that 'knowledge' is a package that can be delivered to all learners in same ways. It is understood that knowledge:

- ✓ Develops and is constructed by learners individually and collectively
- ✓ Is not fixed with facts and inflexible principles
- ✓ Knowledge construction is encouraged by educators instead of knowledge reproduction.

(Dept. of Education, Draft Guidelines for the Implementation of Inclusive Education, 2002)

Within the context of democratic South Africa, a new pedagogy was required to develop citizens who are independent, critical and reflective thinkers. This was based on our new understanding of the nature of knowledge and learning, and the various barriers that may hamper learning. Curriculum 2005, the Revised National Curriculum Statement guidelines and the Education White Paper 6 (2001) outlined, therefore, the principles that any practice should be consistent with:

- All learners can learn given the necessary support.
- Outcomes-Based Education is learner-paced and learner-based.
- Schools create conditions for learners to succeed.
- Support for learners should be based on the levels of support needed for overcoming individual barriers to learning and development rather than on the categorisation of learners according to their abilities or disabilities.

(Dept. of Education, Draft Guidelines for the Implementation of Inclusive Education, 2002)

In developing inclusive practices, one crucial issue to consider is that of the relative degrees of ease or difficulty with which different learners succeed at school. A number of learners experience difficulties with learning, while others learn more quickly and easily than their peers. On both counts it is the responsibility of the education system to create the conditions for success.

Traditionally, educational difficulties were attached to the characteristics of learners. However, a great number of other factors have an impact on learning. Some of these factors identified in the Education White Paper 6 may include:

- Negative attitude towards difference
- Inflexible curriculum
- Inappropriate language of learning and teaching
- Inappropriate communication
- Inaccessible and unsafe built environment
- Inadequate support
- Irresponsive teaching/learning practices.

In addition to these 'external' factors, learners may experience barriers to learning due to impairments, particular life experiences or various psycho-social factors. Therefore, we need to ask: What kind of pedagogy can ensure that all learners have the same opportunities to learn, and still address individuality and individual needs in the best interest of the learners?

How do we enable our learners to be creative and imaginative? How do we prepare all our learners for a mainstream social, economic and political life? How do we enable our classrooms to become thinking spaces that create possibilities for all our learners and teachers to develop their potential?

The new pedagogical thinking emphasises that

- Learning has to be active.
- There is a focus on critical thinking, reasoning, reflection and action.
- Knowledge is integrated in the sense that it is relevant and connected to real-life situation.
- The educator is a facilitator for learning – and that learning goes beyond memorising.
- Learning programmes are viewed as guidelines that educators can use in designing creative and responsive activities so that every learner can achieve to his/her potential.
- Outcomes count – what the learner becomes and understands.
- Flexible time frames allow learners to work at their own pace.
- Comments and inputs from the community are sought and encouraged.

(Dept. of Education, Draft Guidelines for the Implementation of Inclusive Education, 2002)

Through this document SCOPE pilot schools demonstrate how these ideas can be put into practice – with the resources and in the conditions that determine what is feasible.

Informal curriculum

Learning experience is not only about 'planned' activities. There are many learning experiences which are difficult to plan but which can be influenced by educators, schools and the education system in a wider sense. These are experiences such as interactions between learners and their educators both in and out of school or opportunities in the community – through hobbies, social gatherings and other events. This can be described as 'informal curriculum'.

All learners come to school with a wealth of experience from their day-to-day life. The Curriculum refers to this as 'prior knowledge'. In order to truly cater for diversity in the classroom, educators should make conscious efforts to bring these experiences on board in the learning process. This is particularly important in terms of building the knowledge – learners need to connect new information to what they already know, otherwise knowledge becomes a collection of fractions of information. This will be discussed more on p…?

Hidden curriculum

The third dimension of the curriculum is the one which is often called 'the hidden curriculum'. In the picture of the curriculum layers, 'hidden curriculum' does not show: It is a dimension which is rather difficult to grasp because it is about values, principles and practices that learners are supposed to follow or learn intuitively. It is about attitudes and beliefs that we as educators attach to learning and teaching, roles and responsibilities of the various stakeholders in the learning process.

Examples of the 'hidden' curriculum:

Example 1

In a Grade 6 class, learners are doing some revision on 'family':

Educator: "Who is the head of the family?"
Learners: "Father".
Educator: "Correct."

There are also example sentences to be copied from the chalkboard:
"My brother must wash the car."
"My sister cleans the house and washes the dishes."

In Grade 5 learners are writing an assignment of 'girls' jobs and boys' jobs'. Towards the end of the period the learners report back on what they have written. The following interaction happens between the educator and the learners:

Educator: "Why don't we ask boys to make tea for the class educator?"
Learners: "Boys are careless."
Educator: "Correct. Boys are careless."

Example 2

In a Grade 2 classroom, educator has divided her class in groups according to their perceived level of achievement. She allocates different tasks to the groups to engage in. The 'slow learners' group is supposed to draw pictures of what they eat in the morning. Learners start to work. After some time, the educator goes around and looks at learners' work. She asks them to explain what they have drawn. One boy says: "I eat pap, bread and banana." The educator shouts at him: "Banana!! You DON'T eat banana in the morning! Pap and bread yes but NOT banana!"

Example 3

The school is committed in providing access and quality education to all learners in its neighbourhood. The school has been so successful in their efforts to do this so there are a number of learners with disabilities who come to the school from the neighbouring communities as well. As the principal tells the story of the school, she refers to a boy with Down Syndrome. She tells that the boy had been kept at home for a long time, and through the advocacy carried out in the community, the boy has finally started school. At the beginning, he was very disruptive and eccentric. He did not have an idea about how to behave in a socially accepted way and he caused a lot of inconvenience among learners and educators. Little by little he gained new social skills and he is now well adapted in the school environment. The principal ends her story by indicating that he is 'uneducable', though.

For reflection:

Example 1:

- *What do educators' questions and the example sentence assume of 'families' and about women's and men's jobs?*
- *Do the questions and examples of 'family' reflect the reality of learners?*
- *How could these assumptions about 'family' impact learners and their attitudes?*
- *What might the educator's statement 'boys are careless' tell about her attitude?*

Example 2:

- *What does the educator seem to assume about the learner's life and/or culture?*
- *How could the educator's attitude affect her work?*

Example 3:

- *What might the principal's story tell about her attitude towards education?*
- *What is the impact of her attitude to the education of the boy?*

Reflecting: What do we think about teaching, learning and the curriculum?

These stated principles discussed above should permeate to the ethos of the school and in the ways in which we manage and organise classrooms, and arrange learning. A good starting point for reflecting our practices is to pose questions, such as the following, about our perceptions of teaching and learning:

- ✓ Are curricular materials culturally relevant?
- ✓ Is particular attention paid to the accessibility of spoken and written language for both learners and their families?
- ✓ Are alternative ways of giving access to experience or understanding provided to learners who cannot engage in particular activities?
- ✓ Do all staff avoid "classist", sexist, racist, "disablist" or other forms of discriminatory or categorising remarks?
- ✓ Are all languages treated as equally valuable?
- ✓ Do educators show that they respect and value alternative views during class discussions?
- ✓ Do educators work collaboratively, e.g. planning jointly, co-teaching, sharing learning/teaching materials, plans?
- ✓ Are learners encouraged to take responsibility of their own learning?
- ✓ Are learners taught how to study, such as taking notes, doing research, making presentations, making summaries, making revisions for tests and exams, making joint reports from the different contributions of a group?
- ✓ Are curriculum plans shared with learners so that they can work at a faster pace if they wish?
- ✓ Are learners involved in assessing and commenting on their own and each other's learning?
- ✓ Are a range of assessments used that allow all learners to display their skills?
- ✓ Are their opportunities for assessment of work done in collaboration with others?

(Booth & Ainscow, 2003)

Uncovering the thinking, attitudes and beliefs behind our practice, we can identify areas where we as educators need to develop ourselves in order to better accommodate learners who experience barriers to learning and how we can improve our practices so as to cater for the full learner diversity in ordinary schools.

> *"I need to reflect my teaching styles because there are strategies that I personally have been implementing in my classroom but I didn't have a clue what it was all about."*

An educator

Getting Practical: What Can I Do in my Classroom?

> *When ever education experts discuss the causes of the rising school drop-out rate, they often cite poverty, forgetting other causes which may not be as pronounced… Yet… poverty can only partly explain the phenomenon.*
>
> *The main problem could lie with school curricula and teaching methods. Our learning system… has no patience with children with learning disabilities… They are branded slow-learners, lazy and stupid. They are made to repeat classes several times, are punished heavily for not catching up with the rest… It is the feeling of rejection that compels them to drop out, if they do not persevere long enough to be weeded out by national examinations… Children are dropping out of school for reasons that are not difficult to correct…*
>
> Daily Nation, Kenya, 23 July 2001, Editorial

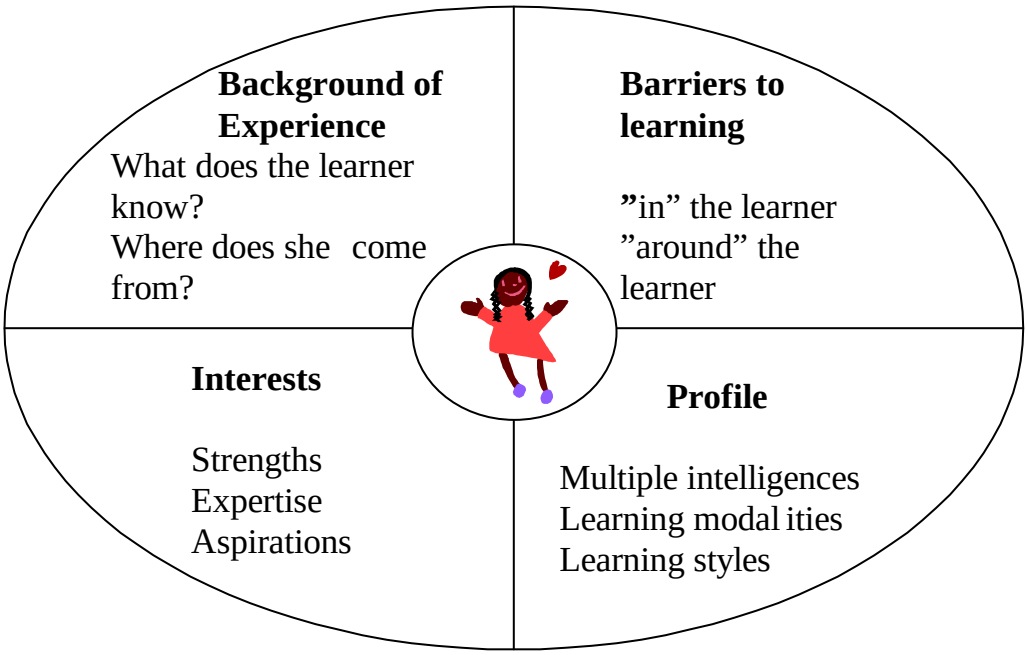
If we understand learning as building of knowledge, we realise that learning is a dynamic, interactive process between the learner and his/her environment. Environment here means human, social and physical environment. In an outcomes-based approach, the process of learning is equally important as the content of education. Educator's role in this process is to facilitate. How can this be done?

Who are my learners?

The starting point for inclusive practices in classroom is the realisation that there are no two learners who are alike. Therefore, teaching and learning is differentiated by default. Learners should be in the centre of our planning for teaching and learning, as illustrated in the picture on p…?

> *Think about your classroom. Who are the learners that you know? Aren't they those who somehow cause concern to you? The one who cannot stay in one place for two minutes and you have to attend him all the time? The one who has difficulties in spelling? The one who is misbehaving? But do you really know who they are and what they like? Do you know what your learner who cannot spell is good at? Do you know what your learners like and what they dislike? Is there a hidden talent in your classroom? In what ways your learners like to learn? By listening, by observing, by doing, by exploring, by discussing?*

In the context of inclusive education, there has been, and still is quite rightly, a lot of emphasis on identifying barriers to learning that learners face. It is important to identify whether learner's barriers relate to something which is 'with' the learner (such as an impairment) or to factors in the learner's environment, such as inappropriate teaching methods, lack of assistive devices, language difficulties, impact of poverty, etc. Identifying barriers and addressing them in the teaching and learning process are essential in order to provide appropriate support for learners to reduce or remove the barriers, but this support is most effectively provided if we build it on the basis of learner's strengths and different abilities, following the principle that "all children are gifted, show their talents differently and learn at different paces".



Background of experience

Learner's experience with new information is based on related concepts or skills that the learner already knows. This does not refer only to learning that takes place in school setting. A learner might have a wider range of knowledge e.g. of agriculture because he lives on a farm and participates in various farming activities. Knowing learner's background of experience helps us to decide where the learner should begin in the planned learning process. In the framework of Curriculum 2005, this is referred to as 'prior knowledge'. The Education White Paper 6 on Inclusive Education describes these experiences by emphasising the importance of acknowledging and respecting differences in learners whether due to age, gender, ethnicity, language, class, disability or HIV status and that learning also occurs in the home and community, and within informal modes and structures. These are all factors that influence learning.

Background of experience does not refer only to knowledge but to learner's various experiences – some learners could be traumatised by a family tragedy, some might have a multicultural identity because they have grown up in such an environment, or another learner might appear very mature because he/she has been responsible for taking care of his/her siblings as the head of the household.

Interest and learning profile

If we think ourselves as learners or students, what is it that we like to be engaged in? Usually, it is something that we are interested in for whatever reason. It might be further studies, engaging in sport or community activities, socialising, etc. We are usually interested in activities that we are good at because it is satisfying to succeed. The same applies to learners.

Learners learn more effectively when they are interested in their learning, therefore, they should be engaged in the lesson for learning to take place rather than just being present. **Interest** refers to how receptive and engaged the learner is in learning more about the topic, concept or skill. Usually learners are interested in areas where they have strengths or expertise.

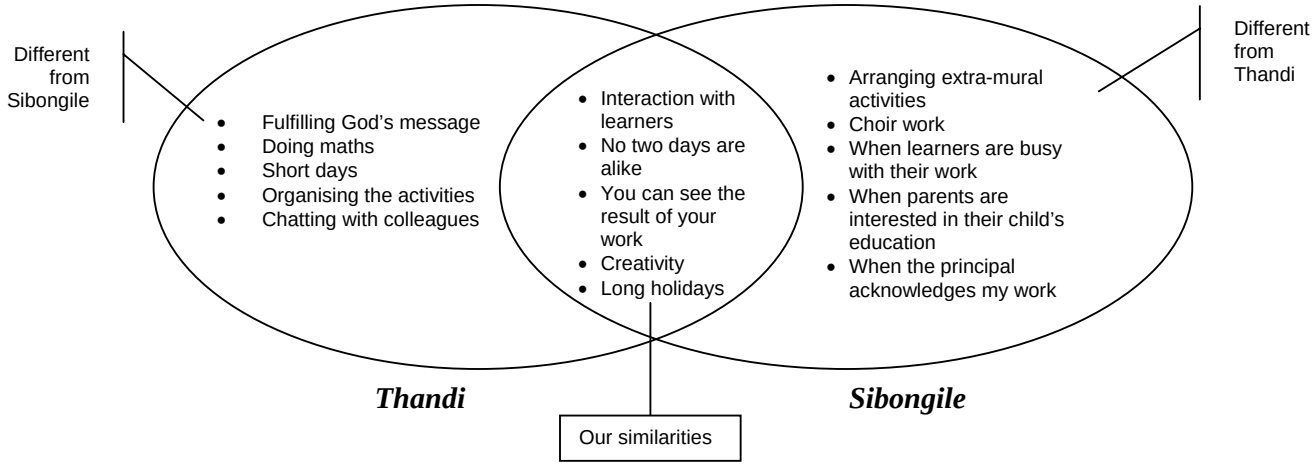
It might sound overwhelming to try to get to know all learners in large classrooms. However, in order to provide quality education for ALL learners, regardless of their differences, it is essential to do. There are a number of strategies that can be used to assess learners' interests and strengths, and use this information to help learners engage in the activity.

A Grade 6 educator wanted to get to know her learners in order to better design learning activities that would help them to fulfil their potential. She decided to design a learning activity for life skills that aimed at making learners to think about themselves and being more sensitive towards one another. She asked learners to work in pairs and interview one another about what they like and don't like, what they are interested in or good at, and what they would like to do as adults. Some pairs produced 'articles' about their findings (like in magazines), some pairs made posters, and some tape recorded their interviews. Through this activity, the educator managed to tease information which was useful for her planning. In the same way, this could be used with smaller learners, but the interview questions and the presentation of the findings could be made suitable for their level.

Another idea is to use so called **'Venn Diagram'**. It consists of two or more overlapping circles. It is a way to describe and then compare and contrast elements, characteristics or attributes of items (e.g. people, events, concepts, stories). It helps learners to organise similarities and differences of items visually. In the middle of the circle the 'similarities' are shown, and in each circle those elements that are 'different'.

This approach was used in a school-based in-service training workshop by a group of educators but could be well used by learners. The educators were asked to work in pairs and identify what they like in teaching. The purpose of the activity was to identify the strengths of the individual educators following the idea that people are usually good at things that they like. This information was then used to make a better use of the resources within educators in the school. Following is an example of this exercise:

What I like in teaching?



The third aspect to getting to know our learners is their 'learning profile'. If we accept that all learners are different, then we need to recognise that their styles of learning are also different. Their intellectual capabilities may be different, but in addition, their intellectual capabilities and interests most probably also relate to different areas, such as linguistic, logical-mathematical, kinaesthetic, musical, spatial, intrapersonal, interpersonal or environmental intelligence ('multiple intelligences'). Furthermore, some learners prefer concrete learning style while others feel more comfortable with abstractions. Many learners learn best through

reading and writing, whereas others need more listening, speaking or visualising. 'Learning by doing' or manipulating could be beneficial for many learners. Again, a number of strategies can be used to make an inventory of learner's styles of learning.

Some learning styles

The following characterisation of some different learning styles gives you an idea about what are the kinds of things you could take into account when planning your teaching.

Visual style	**Auditory style**	**Tactile style ('Doer')**
Likes to see text, pictures, illustrations, charts, maps	Likes to listen, hear and discuss	Likes hands-on experiences, working with peers and going outside the classroom to investigate
Likes to read notes and write summaries	Learns well when the presenter is interesting and clear	Enjoys physical exercise, handcrafts, gardening, etc.
Enjoys reading	Reviews notes by reading aloud and talking with peers	Likes to 'do' things, scribble and draw
Could be meditative	Enjoys telling stories and jokes	Eager to participate in various activities
Learns and remembers things by writing them down	Plans the work by talking it through with somebody	Likes to study in a group and use models and charts
Benefits from writing formulas and instructions on cards and reviewing them	Memorises formulas and instructions or talk aloud	Likes to draw plans for projects and activities on large sheets of paper
Makes lists and keeps detailed calendar	Recognises faces and places but not names	Enjoys using blocks, marbles, and other three-dimensional models
Has a good visual memory for faces, places, instructions	Repeats instructions	Has a good memory of events, but not for faces or names
Has a good sense of directions	Enjoys rhyming, likes to talk	Likes to try out things, doesn't bother about errors
		Enjoys exploring

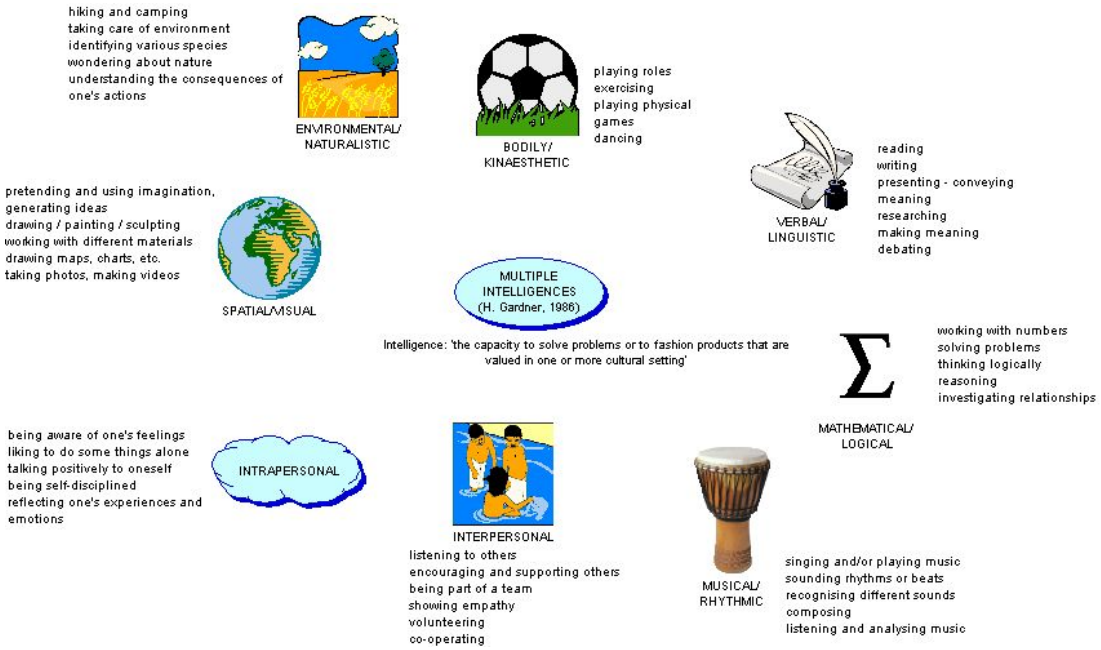
A word of caution is required, though. Characterisations should not be used to categorise learners, for example, to 'visual' or 'tactile' learners but to enhance the range of possibilities for stimulus and activities in the learning process. Most people use various styles and no one style is better than the other. The wider range of learning activities and stimuli are available in any given lesson, the better is the chance of increasing access to curriculum and success for all learners. Therefore, the more you can offer in variety of activities available (reading and writing / looking at pictures / discussing pictures / physical activity / 'doing with hands', etc.) in your teaching sessions the more likely you are to provide beneficial opportunities for learning for your learners.

Multiple intelligences

According to the theory of multiple intelligences, there are at least seven, but probably even eight or nine different types of 'intelligence'. The term 'intelligence' does not refer to IQ but an inclination towards a certain area of intelligence. Howard Gardner who came up with the theory in 1986 defined 'intelligence' as *the capacity to solve problems or to fashion products that are valued in one or more cultural setting.* It recognises that all people, regardless of their traditional academic capability, show intelligence in some area at least and that most people have the ability to develop skills in these areas. What is important about this theory is

that it acknowledges that human talent manifests in different ways and all these ways are equally valuable – we are all 'wired' differently. It also suggests that we learn in many different ways.

In the following the different dimensions of intelligence have been noted with some ideas of kinds of activities that stimulate and use these areas:



For reflection:

In education we tend to emphasise only two of the intelligences, namely logical/mathematical and verbal/linguistic. Think about your own teaching:
How often do you design learning activities that develop skills in other areas of intelligence?

Think about your learners:
Do you have learners who are very good at solving disputes and listening to other learners? How do you encourage that kind of intelligence?
Do you have learners who enjoy physical activities or who like to do things with their hands? How often you design activities where their particular intelligence in can be stimulated?

An example of using 'multiple intelligences' in classroom will be given in connection with learning centres (p…)?

It is obvious: the better we know our learners the better we can plan the teaching / learning experience. Although it might be difficult to gather all this information from each and every learner we are dealing with, most educators do have 'an idea' what are the interests, strengths and learning styles of their learners, as well as what is the kind of support needed to overcome the barriers they might face.

In the following example, the educator uses effectively children's natural curiosity by designing a problem-solving activity and supporting them to verbalise their solution after the

activity. She also considered a practical way of including a blind learner in a meaningful learning activity.

> In a Grade 1 class, the educator brought a big bowl of bottle tops for a small group of learners. One of the learners was blind. When the other learners saw the bowl they said: "Oh, I wonder how many bottle tops are there?" One of the learners placed the bowl in the middle of the group and said to the blind learner: "Hey, touch, feel how many bottle tops!" The educator responded to the group: "Yes… I also wonder how many bottle tops are there… What do you think?" Learners started to guess: 43, 79, 135. Then the educator moved on: "How could you find out the number of the bottle tops?" One of the learners knew that they would need to count. The educator left the group, and learners started to count. The learners first started to line up the bottle tops in long rows and then count. All learners were very much engaged in the activity but they realised that they got messed up with the figures and they never reached an agreement about the number of the bottle tops. Then one of them suggested that if they would group the bottle tops in tens, it would be easier to count. This they did and when the educator came back to the group, they had their answer ready. The educator asked them to explain how they had come into their conclusion, and the learners took turns in describing their steps.

What are the learners supposed to achieve?

Before we can decide how we are going to facilitate learning, we first need to identify the purpose of the learning activity – think of the learning outcome. This is not important only for the educator but also for learners so that they have clarity of what they are expected to know, understand or be able to do. This could be knowledge, such as facts or concepts, skills, attitudes or values. Learning is the process whereby the curricular content is processed into a body of information, ideas, practices and skills which may change and develop over time. Learning, therefore, is about constructing knowledge, skills, attitudes and values through interaction, i.e. learning is a social process.

In order to facilitate the process, the educator needs to have a clear idea first WHAT learners are supposed to learn (the outcome). Secondly, she needs to know her learners; about their background experiences and knowledge, their strengths and barriers, their culture and language, their interests and ways in which they learn the best. And thirdly, she needs to design learning programmes that allow learners to use their different abilities and develop their full potential.

The key questions might be:

- ✓ What are the outcomes learners should reach? Is it understanding, skills, attitudes or values?
- ✓ How can learners achieve those outcomes? What are the methods and activities (learning activities) learners use in order to understand the content on their own terms?

The third aspect of the curriculum is evaluating the learning. This does not mean evaluating only the outcomes of learning but also the process that leads towards the expected outcomes. An educator who aims to develop inclusion in her classroom or in her school needs to widen her assessment strategies on:

- ✓ How learners show understanding of what they are learning or have learned?

These questions will be addressed through practical examples throughout this material.

How knowledge, skills, attitudes and values to be achieved are presented to learners so as to facilitate their knowledge construction?

In order to deal with the information that the educator wants learners to reconstruct, the learners need to connect the information to their previous knowledge or experiences. Therefore, activities that are carried out **before** the new information is presented are as important as the activities to be carried out afterwards. Continuous assessment provides an idea of learners' progress but there are also simple ways of getting to know where learners are in terms of their knowledge and experience. This is particularly useful when we are planning for introducing new skills of concepts. Learners make more sense of what they hear when they have the connection to what they already know.

A useful way of assessing the prior knowledge and experiences of learners is to use 'KWL'. KWL stands for three questions learners ask themselves when they are learning new concepts or knowledge.

- K: "What do I know?"
- W: "What do I want to know?" ('I wonder')
- L: "What did I learn?"

The first two questions are asked before the activity. The third is asked after carrying out the learning activity.

An example of KWL: Theme – Air pollution (Grade 7)

K: What do I know	W: What do I want to know	L: What did I learn
✓ factories and traffic contribute to air pollution ✓ when it is cold air pollution is worse ✓ air pollution worsens asthma and other allergic diseases ✓ USA is one of the major air polluters globally ✓ air pollution increases the 'greenhouse effect	✓ what is the contribution of different air polluters (in %)? ✓ Why cold whether makes air pollution worse? ✓ How many people in Pretoria suffer from symptoms caused by air pollution? ✓ What are the biggest air polluters globally? ✓ Why does air pollution increase the greenhouse effect? ✓ What can be done to reduce air pollution? ✓ What is Tshwane municipality's policy in reducing air pollution?	

By asking learners to reflect on their prior knowledge and what they would like to know, the educator can also use their interests (What would I like to learn?) to design activities that can address their questions. After the learning activities, learners reflect again about their own learning by filling in the third column.

Educator can facilitate the information gathering by providing background materials in different formats – written, oral, visual, etc. such as textbook chapter, article in a newspaper,

written instructions, electronic files, posters, video footage, pictures, traditional stories, etc. There are plenty of examples of other resources in the Revised National Curriculum Statement documents. Information could also be gathered from sources outside the school (e.g. community leaders, other schools, local business, home) and educator's role would be here to facilitate linking up with the different sources. Learners then gather the information for themselves using a variety of ways such as observing, reading, listening or doing.

Observing

Observing is a good means for gathering information. Traditionally 'observing' has meant that learners watch what the educator is doing and then copy or model the same. A learner-centred approach to observation would require that learners are expected to analyse their observations:

> As a part of the National Arbor Week, learners were shown how a tree is planted in the school grounds. The educator wanted his learners to observe carefully and then back in the classroom produce the information about 'planting a tree'. Before going outside to the school grounds to observe the tree planting, he guided learners' observations with the following questions: 1) Where was the tree planted? 2) Why was this place selected? 3) How did the plant look like (size, protection)? 4) What was done first? 5) What steps followed? 6) How do we need to care for the tree after the planting?

When the educator uses observation as a means of gathering information she would ensure that blind learners or learners with visual impairment are paired or grouped with learners who could describe what is happening, or that the learner with visual impairment have an access to the information in other ways. In the example of tree planning, the learner with visual impairment would work together with the person who is doing the planting, for example.

Reading

In a similar way, the educator can provide reading materials for learners and guide the information gathering with questions. The same material may cater for different aspects of the topic and learners can gather information through responding to different questions. For example, a group of learners could find out about identifying appropriate places for trees, another group could gather information about nursing and a third group could identify how and when tree planting should take place. When the reading is split into different sections of information, the educator needs to ensure that the information is eventually shared with the whole group. Collaborative learning methods (see p…?) are particularly useful in this.

When the background materials are written documents, the educator needs to ensure that the level of language is suitable. For example, she might need to simplify the language for some learners so that they could interact with the information. Some learners could be supported with pictograms or other visual cues that illustrate various aspects of the text. Furthermore, text might need to be enlarged or Brailled. Modern technology can be used where available and appropriate.

An example of simplified language

Original text	Modification 1	Modification 2
Kholiswa and Sipho have been in love since they were in the same class in Matric. Kholiswa now has a good job	Kholiswa and Sipho are in love. Kholiswa has a good job. She	Kholiswa and Sipho are in love. Kholiswa is an educator.

as an educator and earns enough money for them to get married. Sipho, however, cannot find a job. He is trying to arrange the lobola for them to get married. They have both agreed that when they have children they will bring them up with a strong sense of pride in their African culture and their roots in a long tradition. Kholiswa says that she has no problems with supporting the family while Sipho has no job. But Sipho would then have to clean the house and look after the baby. For the first time they have started fighting. Extract from 'Issues on gender in schools. ' An introduction for educators	is an educator. She earns money. Sipho cannot find a job. He tries to arrange the lobola. Sipho and Kholiswa want to get married. When they will have children they want them to be proud of their African culture and roots. Kholiswa is happy to support the family when Sipho has no job. She wants Sipho to clean the house and look after the baby. Sipho does not agree. They start to fight for the first time.	Sipho cannot find a job. Sipho and Kholiswa want to get married. Kholiswa can bring money home when Sipho has no job. She wants Sipho to clean the house and look after the baby when they are married. Sipho does not agree. They fight.

Most educators help learners to understand the text by posing questions while reading. However, questions should not only focus on the content or facts of the text but to encourage critical thinking and analysis, among other skills. Some examples of these kinds of questions you can find under the next topic.

Listening

Much of information in classrooms is passed orally. It is often called 'talk-and-chalk', meaning that educator tells about the topic and writes the key points on the chalkboard. Another version of this type of information gathering is 'question-answer session' where the educator typically poses the questions and learners respond. Often learners are passive recipients of information, rather than actively gathering information. This does not mean that oral information should be discarded. Rather, we need to find ways of making this more active and effective.

> Using the previous example of Kholiswa and Sipho, the educator could read the text to learners and help with questions that stimulate thinking rather than memorising. Questions such as How? Why? How else? Where else? Would there be another way of doing that?, etc lead learners to process the information that they are gathering.
>
> Why is it easier for Kholiswa to support the family?
> How could Sipho try to arrange the lobola?
> How can Sipho support the family?
> Why does Sipho get upset when Kholiswa asks him to take care of the house and the baby?
> Why does Kholiswa ask Sipho to take care of the house and the baby?
> How could Kholiswa and Sipho solve their argument?
>
> Learners can also listen to one another and make similar questions.

Listening does not always mean information in textbooks. Radio, TV, public speeches, principal's remarks, other learners' presentations, etc. should be used as equally important

sources of information which then would be processed into information that is required in the assignment to be undertaken. In many classes, learners prepare presentations of various themes and topics. When they make their presentations, these have a tendency to become forever forgotten instead of being used as a background for new learning activities. Learners' oral presentations could be used to boost discussion, writing of summaries, etc.

Listening certainly poses barriers to deaf learners and learners who have hard-of-hearing. In classes were there are deaf learners or learners who have hard-of-hearing, there is always a need to design alternative or additional ways of accessing oral information.

Doing

Like the example of the maths lesson or planting showed, doing is a powerful way of learning: If the blind learner planted the tree, he would have found out the steps of planting a tree by doing. He could have then produced this information in Braille or by typing. The Grade 1 learners started to count the bottle tops by lining them up but they realised that it did not work so they had to come up with another solution.

'Doing' is often characterised by 'trial and error'. Many learners would, however, need support that they will not become frustrated when they make an error. A curriculum approach that promotes exploring should acknowledge that making errors is a part of learning. If too much emphasis is put in 'passing', learners might become fearful of making errors. 'Failure' should not be regarded as a bad thing but a part of the learning process.

What learning activities learners engage in to understand the knowledge, skills and values on their own terms?

Teaching and learning methods can be roughly divided into two main groups: environmental and instructional. In most classrooms educators tend to use instructional strategies. This is probably due to the fact that teacher education traditionally emphasises these strategies. However, environmental strategies are equally important in developing inclusive education, and more so because they can eventually change our attitudes about teaching and learning.

Environmental strategies are usually related to interpersonal relationships, classroom management, use of space, design of activities and time.

Instructional strategies are plenty but here are some strategies that are very useful and work well also in large classrooms. ***Multi-level instruction*** allows learners to work at their own level of experience, and ***varying questions*** are based on learner diversity. ***Multi-level learning centres*** (stations) are areas within or outside a classroom that provide a variety of tasks based on different levels of experience, interests, backgrounds of experience or learning profiles. '***Learning contracts***' can be used in order to provide a learner with some choices about the tasks she completes. The tasks can be varied from simple to more complex and can be differentiated according to the learner's characteristics.

In the following, some examples are given how these strategies can be used.

Environmental strategies

Developing inclusive cultures

A prerequisite for inclusive education is that all learners and educators are accepted in the school community, and in their classroom. They need to be included as equal members. This is not something that just 'happens' but it requires continuous efforts from the educator to value each individual and help others to do the same. This process is often called as 'developing inclusive cultures'.

In order to start exploring diversity, educators and learners need to examine their own background, experiences and cultural patterns. We learn about others by knowing ourselves and we define ourselves in comparison to others. Learners can share knowledge about their differences and similarities, and through this sharing they will acquire an understanding of diversity and its role in their lives. With this exposure and knowledge learners also become more comfortable with difference. As every classroom is diverse – because people are different – there must be different and acceptable points of entry for different people so that they can offer equitable opportunities for learners and their families. In the example of hidden curriculum where the educator told the learner that he could not have had bananas for breakfast, the educator seemed to assume that in the learner's culture it is not customary to eat bananas for breakfast. Rather than using the learner's contribution as a resource for discussion about different customs, she effectively denied the learner's participation in the learning situation.

It is important for the educators to interrogate their own understanding of diversity, their assumptions and beliefs. Sometimes our assumptions are not correct because we have never made the effort to find out the facts. In perceived homogeneous groups, we tend to think that 'all learners' share a similar culture. However, culture is not like a stone. It is more like a stream, and although most people in the same community share the main stream of thinking and seeing their reality, there are side-streams that bring new dimensions to the culture. Factors such as family's socio-economic status, educational background, life experiences, and exposure to other cultures, individual characteristics, work and religion influence the way in which a learner might perceive cultural considerations such as time, space, dress or food, work, communication and gender roles despite the fact that they might come from the 'same' community. An educator who aims to develop inclusive practice has to be sensitive to cultural diversity.

Collaboration and co-operation

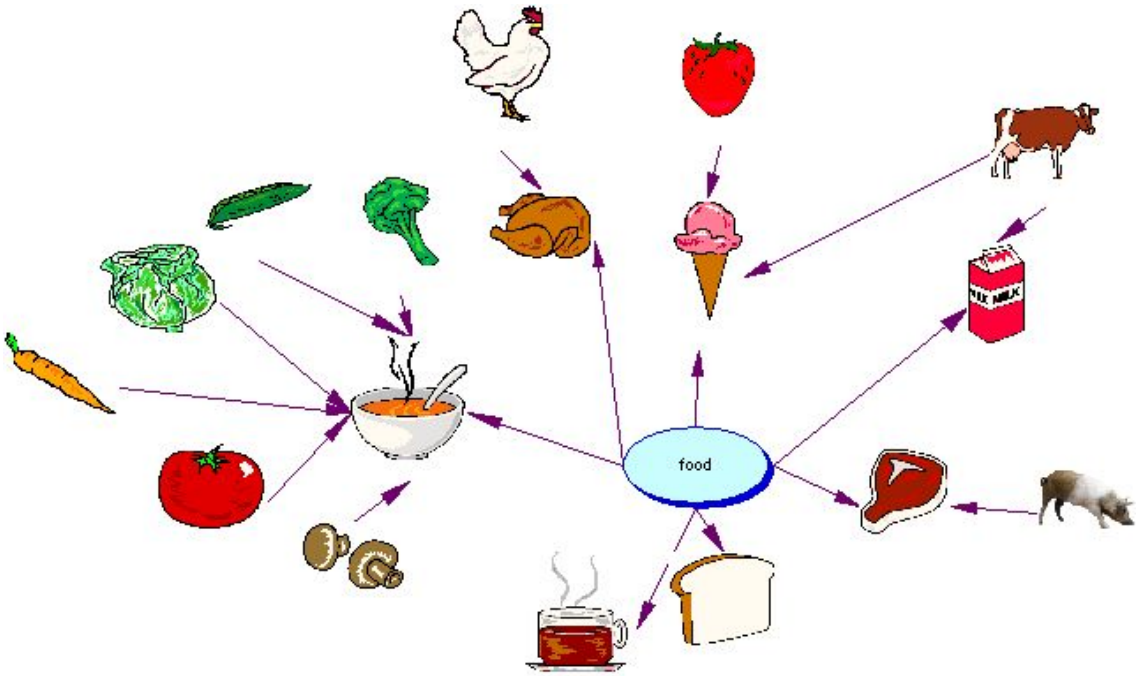
Collaboration and co-operation characterise inclusive practices. Collaboration is about working together in creating something novel through the work, whereas co-operation is about sharing the tasks, information, etc. It does not necessarily produce anything new but it is about 'rationalising' the work.

Collaboration and co-operation are more than using collaborative learning activities or group work. It is an attitude of tolerance, acceptance and integrated effort. It is about developing a school culture that encourages learners and educators to work together to achieve the common goals. It is based on learning collaboratively, not competitively. This ethos has clear implications to the ways in which we deliver the curriculum and the ways in which we learn. For example, it means that educators should learn to work together: to plan, problem-solve,

prepare and share learning materials and evaluate together. As the saying goes: “You have to live according to what you preach.”

To encourage learners to work collaboratively, they should also participate in planning and implementing collaborative strategies. Learners’ participation in the planning can help the educator to come up with interesting and meaningful learning activities. This is also highly motivational for learners as they can see that their contribution has been used as the basis of their learning.

The following mind-map was put together by a Grade 2 educator and his learners:



The mind-mapping exercise:

1. The educator asked the learners to name different types of food. Learners named milk, meat, bread, tea, soup, chicken and ice cream.
2. Learners named where the food came from or what it was made of.
3. The educator asked the learners to look at the mind-map and think what is it that they want to know. The learners wanted to know more about the following:
    - What happens between the milk comes from the cow and gets in the milk box?
    - What parts of the pig are being used for food?
    - How is ice cream made of cream and strawberries?
    - How can we make soup?
    - What do you need to do for the chicken before you can eat it?
    - How do you make bread?
    - Where does tea come from?

Based on the mind-map and learners’ questions, the educator came up with a project that involved a number of community members. As outcomes of the project, learners would be able to find information through observations, record their observations through writing and/or drawing and explain various routes of food. Various learning activities were designed: a local dairy farmer came to the class to tell about the route the milk took from the cow to the milk box, and how ice cream is made. Then the class visited the family of one of the learners where the mother showed how she made the bread. The soup was made at school in a huge

pot, and all learners were involved in chopping the vegetables which they had brought from home (each learner contributed something). One of the learners had chickens at home, so the whole class observed how the chicken was killed, and what followed then before the chicken was ready to be eaten. For learning about tea, the educator borrowed books from the library and the class learnt together where tea is being grown – these places and countries were then placed on the map.

Learners recorded all the information in an 'extended mindmap' in drawings and/or writing, i.e. they continued the mind map which was placed on the classroom wall. After the 'project' was completed, the class reviewed their questions and verified if they had all been answered and whether there were still questions that had not been answered.

High expectations

Another important factor in developing more inclusive practices is to have high expectations for all learners, regardless of their abilities or other differences. Our expectations are often based on perceived ability level or other differences. When learners are grouped according to ability or other such criterion, we have already developed expectations based on those groupings. If learners in a class are grouped together or perceived as having 'less' ability, we easily lower our expectations. As a result we water down the curriculum or give learners less to do.

Having high expectations does not mean that we have the same expectations for all learners. It means that we set appropriate learning goals for each learner. Learners should be involved in setting these goals so that they nurture high expectations for themselves as well.

A Grade 7 educator said that she has a girl, Thembi, in her class who cannot do maths and, therefore, she should do some skills development activities such as sewing. Her colleague asked her to elaborate what is it exactly that the girl cannot do. The educator said that Thembi cannot perform at the level of Grade 7 maths. The colleague insisted that then it is NOT about the girl being incapable of 'doing maths', rather it was about adapting the maths activities in such a way that the girl can learn what is important to her and participate in the learning activities in her own way. The educators worked out together the following plan:

Theme: conversions of volume and weight (revision)
Outcome: Consolidated understanding of the difference between volume and weight

Whole class activity	Thembi's activity
Compare volume and weight by investigating the following items: milk, jam, cotton wool, magnet, shoes, water, paper, etc. Write a report of your findings.	Identify which daily items are heavier and which are lighter: milk, jam, cotton wool, magnet, shoes, water, paper, etc. (Thembi would be using the same items as the other learners)
Worksheets on convertions; kgs into mgs, mgs into kgs, etc.	Identify different volumes and weights of daily packages: coffee jar, milk bottle, cream, biscuits, bread, etc. How heavy would be your shopping bag if you buy: 2 litres of milk, 3 loafs of bread and a jar of strawberry jam?

Our role as educators is to help learners identify goals and help them to reach those goals. As one principal said: "I'd rather my learners shoot for the stars and miss once in awhile than not shoot for them at all." (Perner & Edwards, 2002).

Learning environment strategies

Learning environment should provide for inclusiveness, e.g. ensuring that physical barriers are minimised, or not isolating individuals or group of learners.

> In a Grade 4 classroom, learners were seated in pairs facing the chalkboard. One learner was seated next to the educators desk, facing the whole class. The educator explained that the girl has visual impairment and uses some special equipment. Therefore, she needs to sit there. The educator continued: "It's good for my routine. I first give instructions for the whole class and then I work with her."
>
> *For reflection:*
>
> *All other learners were seated in pairs. Reflect the educator's justification for placing the girl alone at the front, facing other learners?*
> *How might the seating arrangement influence the girl's classmates' perception about her?*
> *How does this seating arrangement impact teaching and learning in the classroom? From educator's point of view / from learners' point of view?*
> *What can you say about the educator's attitude towards the girl?*

The physical set up of the classroom should be comfortable and look into matters such as seating, noise level and space, and have a sense of order (storing materials, learners' work, etc.). This is particularly challenging in many classrooms in South Africa which are crowded due to large numbers of learners, and lack of appropriate furniture. However, we could also consider whether all the activities need to be carried out at the desks – would it be possible to have half of the class to work on reading assignment without the desks while others are busy on desk work?

> Example of effective use of classroom space: Grade 1
>
> There are about 48 learners seated on the floor. They are learning the pre-reading skills in English. There are sounds/letters written on the chalkboard, as well as words with these sounds. The educator models the sounds and learners repeat. They move on writing the letters in the air and on the floor with their fingers. Then the educator divides the learners into groups according to colours.
>
> The educator hands out a worksheet and explains what learners are supposed to do in their groups. While some groups are working with the worksheets, the educator invites one group on the floor, where they build words and sentences from little cards they keep in cigar boxes - each learner seems to have his/her own box with the word cards. After completing their task they go back to the colour group, continue the worksheet and other group comes on the floor. Every now and then the educator goes around the groups and sees how they are progressing.

Classroom arrangements that are flexible can be easily modified when necessary. Often educators or schools do not have much to say about the kind of furniture in the classes, or about space available, but we should try to arrange the classrooms in such a way that they allow for flexibility. Learning environment is also about the 'sense of belonging'. Inclusive classrooms make all learners feel comfortable, respect and valued in terms of the physical, social and human space.

Collaborative learning

'Collaborative learning' refers to a range of teaching / learning approaches and strategies to match the needs of particular situations or learners. All educators use 'group work' but very often it is individual work rather than collaborative learning; learners are seated in groups but they work on their individual tasks. Sometimes they are not even allowed to talk to one another while working – how could learners work collaboratively if they cannot talk to one another? We can also observe a lot of 'group work' where one or two learners do the work and others are messing about or just remain idle.

These challenges in collaborative learning are usually due to that fact that we seem to assume that it 'just happens'. However, use of collaborative learning requires a lot of planning and support from the educator and efforts from the learners, and it might take quite a time to learn.

While you are reading the following characteristics of collaborative learning approaches and strategies (Putnam, 2001) think about your own practice and to what extend you follow these ideas when planning for group work:

Positive interdependence
The accomplishment of the group goal should depend on ALL group members – it is important that learners are concerned about the performance of each one of the group members. They should not feel successful until each member has reached the group goals as well as their individual goals.

Positive interdependence can be supported by several ways:

- Goal interdependence (mutual goal or goals for the whole team, e.g. completion of a task / coming up with a solution to a problem / demonstrating a certain behaviour)
- Task interdependence (division of the work, e.g. each learner has to learn his/her part of the text and contribute to the group / sub-groups work on a certain part of the common task)
- Resource interdependence (division and / or sharing of materials, resources, and information)
- Role interdependence (assigning various roles to learners, e.g. reader, recorder, etc.)
- Reward interdependence (giving a group reward for achieving the goal)

Individual accountability
All learners are responsible for learning the material and contributing to the group. Insisting on individual accountability discourages those learners who have a tendency to let their peers to work for them or avoid working at all.

In order to make each learner responsible for the work, the educator needs to plan carefully the task that is to be studied collaboratively. The task needs to be a complex enough to allow all group members make their contribution. At the beginning, the educator might have to think about the different steps or tasks of the assignment, as well as how they would be distributed among the group members and carried out. Later, when learners become skilled in collaborative learning, they may define the needed steps required by the task and share the individual responsibilities among themselves.

Co-operative skills
Co-operative skills need to be learnt and practiced. Firstly, the skills need to be determined at the age-level of the learners. Then, the educator needs to explain why these skills are important and demonstrate the skills (e.g. listening to peers' contributions, explaining, time management, sharing materials, paraphrasing others' contributions, considering various options). The skills need to be practiced in 'real' situations where the educator gives feedback to learners on how they are using the skills.

Face-to-face interaction
Learners should interact directly with one another when carrying out collaborative activities. They may communicate verbally or non-verbally (e.g. smiling, gesturing, using body language). Interaction needs to take place among learners, not between learners and learning materials or learners and machines (e.g. computers).

When learners are asked to work independently on a set of problems and then meet in groups to discuss the answers, they are not engaged in collaborative learning but in individualistic learning.

Learner reflection and goal setting
When collaborative learning activity is about to be terminated, learners evaluate how well their group functioned and whether their goals were achieved. Learners can do the evaluation in their small group or it can be done with the whole class, led by the educator. Learners can also fill in evaluation forms – these forms can be found in many OBE learning materials.

A learner can also serve as an observer for the group, and record designated behaviours. Learners can benefit a lot from engaging in reflective discussions and individual goal setting to improve their personal academic and social behaviours and those of the group. It is also important for learners to celebrate those things that they achieved in their group.

Grouping
Although heterogeneous groups are recommended for collaborative work, there are times when it is appropriate to group learners in homogeneous groups. All educators use different groupings, and they all have their pros and cons. Flexibility and variety in groupings should be encouraged. Learners should also have a choice from time to time to choose and change their groups. Different possibilities for groupings are summarised in the following table:

	Possible uses	Points to consider
Whole class – large group	Promotes belonging, reduces isolation ✓ Discussions and sharing information and experiences ✓ Introducing new topics, themes, units ✓ Developing new concepts, skills and understandings ✓ Developing and refining classroom expectations, rules and procedures	Physical inclusion does not guarantee instructional inclusion!
Small group instruction	Can be facilitated by the educator, a learner or the group itself ✓ Same ability/skill group can help the educator to focus on developing a particular skill; learners with specific disability could also work around certain skills in a 'same disability' group (e.g. Braille, sign language, mobility, life skills instruction) ✓ Mixed ability/skill group useful for project work, learning a new skill or practicing one recently learned, discussing an assignment, problem solving – different objectives and sub-tasks can be assigned to different learners; it promotes co-operation, peer-support and valuing individual contributions	Same ability/skill groups should not become permanent and they should not be composed of same learners all the time in order to avoid labelling and isolation. They should only be used to learn a particular skill.
Paired groups	Two learners work together: offers opportunities to enhance social and communication skills and friendships; can provide direct instruction and build self-esteem ✓ Can be formed on the basis of same/mixed skill/ability, interest, etc. Could also pair a disabled and non-disabled learner ✓ Can be same Grade mates or cross-Grade mates ✓ One learner is assigned as a 'tutor' based on the skill, ability or experience.	This way of working needs some practice so that 'tutors' will not just pass on 'correct answers'. Pairing needs to be grounded on learning for both, and the tutor should not always be non-disabled learner.
Interest group	Paired or small group where learners share the same interest.	✓ Usually highly motivational ✓ Learning outcome should be shared with other

	✓ Interest can be a topic, a learning area, a specific skill. ✓ Encourage learners to learn more about their specific interest – at their own level	learners to increase learning of all learners
Co-operative expert groups (jigsaw)	✓ All groups are given the same topic but each learner in the group is given one part of the topic to learn (according to his level, interest, etc.) ✓ It is the responsibility of each member to learn his/ her part, thus becoming 'expert' ✓ After studying individual parts, the group comes together and each learner presents his part to complement to the whole. ✓ Another possibility: A topic and its sub-topics are identified. In each group, each member is assigned with a sub-topic. New groups get together according to sub-topics. These groups are now 'experts'. In the expert groups learners study about the sub-topic. Then they get back to their original group and share what they have learned in the 'expert' group.	✓ It is important to ensure that each member gets to his/ her work done – support might be needed here ✓ Allows for individual and group activity ✓ Feedback – sharing in the groups is essential. This might require support.
Cluster groups	✓ Cluster groups are grouping of all learners within a class for small instructional groups, based on one or more learner characteristics. ✓ Usually learners stay in the cluster group for a longer period for a specific instructional reason (e.g. accelerated maths, community project, second/ third language tuition)	✓ Cluster group should not be used for anything else than for an instructional purpose. ✓ Grouping should not encourage negative labelling. ✓ Learners can belong to several clusters in different learning areas

Equal opportunity for success

All learners should have a chance to contribute to the success of the group. For learners who experience barriers to learning the educator should personalise the criteria for success and adapt the expectations or task requirements according to the learner's needs.

Time/Content Arrangements

Time and content arrangements are essential in inclusive classrooms. In order to use instructional time efficiently, the educator needs to select and/or limit content, provide engaging learning activities and pace instruction. Not all learners need to complete the same amount of work and exactly the same content: Some learners might need less learning activities to carry out, some might need more time to complete assignments. Some learners like to proceed faster while others prefer to reflect their work for a longer period. Another learner might require more depth in the topic in question white the other might study just the basic concepts.

The educator needs to plan also how much time is used for educator-led activities and how much learners are engaged in learner-centred or learner-led activities.

Instructional strategies

Curriculum can be made accessible to all learners by tailoring it to suit a range of learning styles, paces and interests.

- Skills development relates to areas whereby learners can gain new skills and/or practice, as well as to maintain, combine, refine, transfer or generalise existing skills. It might also involve reactivating skills that have been acquired previously.
- Curricular content can be chosen and paced to extend learners' access to new areas of experience, knowledge and/or understanding, based on their current strengths and learning needs. What is taught should also be flexible and relevant to the lived reality of the large majority of learners.
- Learning contexts support the learning process. Learners can be offered a variety of activities, resources and environments that are appropriate to their age, interests, strengths and prior achievements. Learning can also happen in a variety of activities outside the school through projects, work experience, volunteering, etc.
- Teaching approaches can be widened by accommodating learners' individual strengths and learning styles at different stages. Basic learning materials and equipment should be available, and teaching should be supported with appropriate aids;
- Shared learning is about providing opportunities for learners' participation in the learning process, e.g. in planning or assessment. Furthermore, assessment should take into account the content and level of content which learners have been exposed to, and should use alternative methods to accommodate learners' needs emanating from different barriers to learning and development;
- Language (medium of instruction) needs to be accessible to learners; and
- The participation and involvement of care givers and families are essential and needs to be valued.

(Dept. of Education, Draft Guidelines for the Implementation of Inclusive Education, 2002)

The following strategies are but some to put the broad principles in practice.

Multi-level activities

Multi-level activities refer to learning activities that provide an opportunity for learners to work at their own level of experience through integrating assessment and instruction. The focus is always on a key knowledge, skill, attitude or value but the educator can use varied approaches, teaching and learning models and levels within a lesson. Multi-level activity can also be designed for a particular learner, based on his prior knowledge and experiences and then build on those.

To develop a multi-level activity, the educator needs to identify the purpose of the activity (learning outcome). Then she proceeds to plan a variety of tasks

1. At different levels of difficulty or complexity
2. With different numbers of steps
3. With different ways for students to learn the concept or skill
4. With a choice of 'products' that allow learners to show how they understand the concept.

Example 1: Multi-level activity – individual work, Grade 3

About 45 learners are seated in mixed ability groups. They are doing individually a reading exercise. Because the learners are at different levels of reading skills the educator has designed the following tasks:

- ✓ Flashcards with words: the learners have to use the words to write sentences where they use the given word. On the other side of the flashcard there is an example of a sentence where the word is being used if the learner has a difficulty in creating his/her own sentence.
- ✓ Readers: There are a number of readers available for learners. Learners read the books alone or together with a peer.
- ✓ Word lists: The educator has copied a sheet of paper for learners to practice sound / letter distinction (such as hat, bat, sat)
- ✓ Alphabet: Learners name alphabet.

Some 10 learners work with the flashcards, about 10 learners read the books, 15 learners go through the word lists and 10 learners are working with the alphabet. In each group, learners are working on different tasks. The educator goes around the groups, and follows that each learner is on task. She stops to listen and observe each learner, and gives some more attention to those learners who are working on the alphabet.

In the above example the educator designs activities to be carried out individually, according to learners' reading ability. Although the activities were intended to be individual, the educator allowed learners to work together in reading.

Example 2: Multilevel activity – group work, Grade 3

In a rural school, the educator divided her learners in groups. One group consisted of learners who could not read and write yet, the other groups were of mixed ability.

The educator explained to the other groups that they were supposed to come up with words with three different letter combinations in Zulu language. The letter combinations were written on the chalkboard and read aloud before starting the assignment. While the groups were working on this assignment, the educator was seated with the non-reading group supporting these learners in their basic reading skills.

After some time, the educator went around to see how the other groups had progressed and asked them now to use the words in full sentences. The groups continued their work and seemed to enjoy the exercise. The educator returned to the non-reading group and assigned different writing tasks for these learners. She made sure that learners understood the task. While this group was busy writing, the educator went around the other groups again, and helped learners with spelling and coming up with the sentences.

This example is about engaging all learners in one activity at their own level:

- by reading aloud the letter combinations, the educator gave a possibility to all learners to come up with words with the same sound although they might have had difficulties in spelling
- the activity was made more difficult by asking the learners to use the words in a sentence – again all learners had the possibility to come up with a sentence
- the good writers helped in the group by writing down the group members' contributions
- learners helped one another in spelling
- the educator helped learners with spelling and coming up with the sentences rather than just marking correct or incorrect

- The educator worked with the 'non-reading' group (about 7 learners) – each of them was at a different level is their skills. She provided individual support and assigned individual tasks according to their level.

Varying the complexity of questions

Varying the complexity of questions is a strategy whereby the educator varies the level of questions asked of individual learners, and based on each learners' characteristics. On any given topic, the educator can use e.g. Bloom's taxonomy on cognitive development to assist her to develop questions / tasks at different levels of difficulty. Although Bloom's taxonomy has been criticised of presenting cognitive development as a step-by-step process, it offers a useful tool for educators in showing the kinds of cognitive processes we need to engage in.

Area	**Definition**	**Examples of questions**	
Knowledge*	Recalling information	What does 'recycling' mean?	What grammatical elements make up a sentence?
Comprehension	Understanding information	Explain 'recycling' in your own words.	What are the minimum grammatical elements required for a full sentence?
Application	Using information	How can you 'recycle'?	Formulate two sentences: one with the minimum grammatical elements, and one with the same content but including also other elements.
Analysis	Breaking down information into parts	Give reasons why recycling is important in South Africa.	What are the purposes of the highlighted grammatical elements? **A** fat cat scared my mother **while** she was doing the laundry.
Synthesis	Putting information together to form a new whole	Design a programme on improving recycling at school and at home.	Use a text of your choice. Indicate in the text the different grammatical choices made to express time, means, consequence, and actor.
Evaluation	Judging the value of the information	Evaluate the benefits of the recycling programme at school and at home.	Use different texts of your choice. Discuss how grammatical choices impact on the style of the text.

* In Bloom's taxonomy, the term 'knowledge' refers to 'information acquisition'

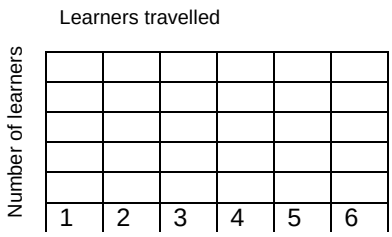
The educator does not need to use all the levels in all lessons – but there should always be possibilities for several levels of cognitive skills. The next example combines some of the levels:

The learners in the Grade 5 wanted to find out how many learners in each Grade travelled during the holiday. They took a survey and tallied the results shown in the table below:

Grade	Travelled	Numbers
1	𝍸 IIII	
2	𝍸 𝍸 II	
3	𝍸 𝍸 𝍸 𝍸 III	
4	𝍸 𝍸 𝍸 𝍸 𝍸 IIII	
5	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 I	
6	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 II	

'Knowledge' level activity: Mark the tally in numbers
'Comprehension / application' level activity: Explain the result in your own words to your peer.

'Analysis / synthesis ' level activity: Use the data to construct a graph on the grid below:



'Evaluation' level activity: Write one or two sentences that tell what you have learnt from the graph.

Example adapted from Darling-Hammond & Falk (1997) Supporting Teaching and Learning for All Students: Policies for Authentic Assessment Systems.

Bloom's taxonomy could be also used to help developing various multi-level activities or 'learning games', such as quizzes. Quiz can be used for revision of a topic.

The educator prepares the quiz on flash cards or on sheets of paper with several questions at different levels of difficulty related to the topic which is being studied, e.g.:

	Topic: Food
Red	Which food is healthier: potato or hamburger?
Yellow	What makes hamburger not being so healthy?
Purple	If you want to eat healthy food, what kind of food you should eat?
Green	What happens to the healthiness of vegetables when they are cooked? Why?
Blue	How should you prepare your meals in order to maximise their healthiness.
Black	Evaluate the pros and cons for healthy food and junk food.

Each learner can participate in the quiz on his/her turn. S/he chooses her/his topic and colour (according to the presumed difficulty). The educator or a learner who is the 'quiz master' poses the question – the educator deems if the answer is adequate. If the learner cannot

answer the question posed s/he can choose whether s/he will take an easier question or whether s/he would pass. S/he can take an easier question for twice, then s/he must pass. If s/he passes the next learner in turn can only have one attempt to respond to the question at the original level chosen by the learner who passed. If s/he fails, s/he cannot choose an easier question but must proceed to his 'own' question by defining the topic and the colour. When a learner gets a correct answer, s/he marks the 'score' according to the colours, so that the questions can be then 'reused' – however, not at the same level than the previous respondents chose (in this way, each question can be 'reused' for six times). At the end, all scores in different colours are counted – the learners can agree before the quiz what is the criteria for 'winning' (scores in each colour, three scores in blue, etc.)

Again, a word of caution: The educator should not use the taxonomy to categorise or setting ceilings to learners. It should help educators to develop activities at different levels of difficulty for application, analysis or evaluation, for example.

Multi-level learning centres or ***stations***

Learning centres or stations are organised areas in the classroom that provide materials providing a variety of tasks for learners to engage with. Often they are used to enrich or reinforce what has been learnt before. The activities can and should be modified to accommodate learner diversity by using, for example, the idea of multi-level instruction, varying the complexity of questions or multiple intelligences. Learning centres help learners to participate in activities that are aligned with their skills, prior knowledge, interests and needs. Different colours in tasks could indicate the level of difficulty and help learners to decide what are the activities they should engage with. Learning centres can be used for individual or small group tasks – learners proceed from one centre to the next either according to their individual pace or after completing a group assignment.

Learning centres can be arranged around different learning areas or around a topic in one learning area ('South African cultures' in AC).

Learning centres should have:
- ✓ easy-to-understand instructions so that learners can work independently
- ✓ all the materials needed to complete the assigned tasks
- ✓ work that is directly related to the learning objective
- ✓ a statement of the purpose of the task
- ✓ assessment criteria for the work being completed.

Before starting to work in the learning centres, instructions for each centre should be reviewed with the whole class. While learners work in the learning centres, the educator goes around the class and facilitates learning as necessary. This allows the educator to provide some individual support as well. Again, some learners might work in all centres while others could complete tasks only in selected centres, all depending on what individual learners are expected to learn.

The idea of multiple intelligence is used here in designing the following learning centre activities for Grade 2 and Grade 9:

Grade 2:
Outcome: The learner gets to know her/his body and values its uniqueness. Learners will understand that each person is unique.

Learning Centre / Learning area	**Activities**	**Related intelligence**
Mathematics and Mathematical Literacy	Counting the body parts individually, counting the total number of body parts in the group / in the whole class	Mathematical/logical intelligence
	Measuring the size of the classroom by using different body parts, short or long steps, jumping, crawling, etc.	Kinesthetic intelligence, mathematical intelligence
Language, Literacy and Culture	Naming the body parts by writing	Linguistic intelligence
	Talking about learners' family in groups (customs, hobbies, parents' jobs, etc.)	Interpersonal intelligence, linguistic intelligence
Life Skills	Drawing a one-to-one size picture of oneself by lying on a big sheet of paper – a peer draws the outline and the learner completes the picture	Visual intelligence, intrapersonal intelligence
	Singing and dancing along the 'body parts song'	Musical intelligence

The periods after lunch break during three days would be dedicated for working in the learning centres. Learners would be divided in six heterogeneous groups, two groups working at the same time in one centre. Learners would move from one centre to another as a group. The singing and dancing activity would be done with the whole class after the completion of all the other activities as it is noisier than the other activities. The educator prepares instructions for the centres in writing (supported by drawings), as well as reporting cards for the results in MML. Each centre would be equipped with the necessary drawing, writing, cutting, etc. materials.

Grade 9 learning centres around 'recycling'
Outcome: Learners are more aware of the importance of recycling, they develop some business thinking and use their creativity.

The activities were planned and to be facilitated by the learning area educators who decided to arrange their work in such a way that rather than having periods, they would work in clusters of periods, each learning area educator working in the related learning centre. Learners from three different classes were to be working in learning centres, situated in different classes, in their own pace over a period of a month, two times a week, after the lunch break.

Before starting working on the learning centres, the learners go individually around the school and collect different kinds of garbage. They come back to their own class and discuss in groups about what they found and how that particular item could be recycled or reused. Then they proceed to the learning centres:

Learning Centre	Activities	Related intelligence
Technology	Examine the composition of the material of your 'item'. What has it been used for? Write a report.	Mathematical/logical intelligence, linguistic intelligence
	Brainstorm with your peer new uses for your 'item'. Record all your ideas, select one to be worked on. Motivate why you rejected / accepted the ideas.	Mathematical/logical intelligence, Linguistic intelligence
	Construct / modify / adapt / build your 'item' for its new use. Make a presentation of the process you undertook.	Kinesthetic intelligence, visual intelligence, linguistic intelligence
Mathematics, Natural Sciences, Language, Literacy and Culture	Find out how much the school is producing garbage over a year / month. What type of garbage is it? What could be recycled?	Linguistic intelligence, mathematical/logical intelligence
	Pair with your peer and design a recycling awareness campaign at school. Prepare an oral presentation for the campaign to be shared with your classmates.	Interpersonal intelligence, linguistic intelligence, Kinesthetic intelligence, Visual intelligence
Language, Literacy and Culture , EMS	Come up with a business idea for recycling or marketing your recycled item you developed in technology centre. Write your business plan using the computer.	Visual intelligence, intrapersonal intelligence, Linguistic intelligence, Mathematical/logical intelligence
	Design an imaginary web-site for your business.	Visual intelligence, Linguistic intelligence Spatial intelligence

Some of the activities were to be adapted for learners who experience barriers to learning by providing alternative methods of reporting (learning centre 1 - instead of a written report, an oral report to the educator, etc.), or adapting the depth of the topic (learning centre 2 - e.g. identifying the type of garbage that the school is producing).

The advantage of learning centres is that they will 'liberate' the educator from the chalkboard to engage in activities with individual learners or with groups. As the centres have clear instructions for the work, as well as materials available, learners will be independent in their work. The disadvantage of the centre is that it requires a lot of preparation from the educator – and perhaps time adjustments in terms of duration of periods. In schools where there is a lack of reference materials, learning centres might be more challenging to arrange. However, it is not impossible, as our examples have shown.

Learning contracts

A learning contract is an agreement between the learner and the educator to provide the learner with some choices about the tasks she engages with. Usually we educators 'assign' tasks for learners – contract is an agreement of an assignment to be carried out. Contracts often include some choices made by learners.

The contract tasks can vary from simple to more complex and can be differentiated based on the learner's characteristics. Learning contract can include both skills and content components, and they work well in classrooms because all the tasks on the contract are aimed at achieving the same outcome but the tasks themselves are differentiated according to individual learner's needs. It is also a good way to promote learner's responsibility of his own learning. Learning contracts can be developed for weekly homework, or they can be used during certain periods of the week at school, e.g. by allocating two - three periods each day for working on the contract work.

The contract can be comprised of:

1. Skills
   - ✓ Based on the tasks to be completed
   - ✓ Developed and chosen based on learners experience and background
   - ✓ Are incorporated into activities that are appropriate for the learner and to be competed at her own pace.

2. Curriculum connections
   - ✓ Assignments based on background of experience, interests and/or learning profiles
   - ✓ Activities or 'product' that allow learner to show how he has created the meaning (reconstruct the information) of what he is supposed to study
   - ✓ Can be extension, enrichment and/or reinforcement of key concepts

3. Time component
   - ✓ Agreed between the educator and the learner so that both are accountable for the learner's work as it is completed
   - ✓ Deadlines set by the educator
   - ✓ Allows learner to select the order of completion of the tasks.

4. Contractual component
   - ✓ Choice: the educator agrees that the learner may choose the order to complete each task.
   - ✓ Responsibility: the educator is responsible for checking work as it is completed while the learner is responsible to complete work and use time correctly.
   - ✓ Criteria: the contract spells out what the learner is expected to do for each aspect of the contract
   - ✓ Consequences: Learner understands what will happen if he does not use his time responsibly or does not complete the work within the time limit.

There is not set format for a learning contract. It can be designed across learning areas or just for one learning area. It can be for short period of time or expand for a week or a month. It can be a chart, written assignment in learner's exercise book or instructions on the chalkboard.

Example 1: 'Chalkboard' contract for Grade 3

Educator has written the following tasks on the chalkboard:

By the end of the day:

- Read the story of Rita in the textbook. Write the story in your own words / Draw the events of the story.
- Revise your times tables. Choose at least 3 and ask your peer to check.

- Give instructions for healthy food for Rita. You can write / make a poster / use play-dough.

The educator asks learners to think and decide in which order they want to complete the tasks, and how they want to carry them out. After learners have reflected this, she goes around the class and asks learners to tell her what they have planned to do. They agree on the plan. She allocates five periods for the work – in each period learners work in different tasks.

If the learner has not completed the assigned tasks by the deadline, the educator discusses with him/her why this happened – whether it was poor planning of time or using time for messing around. Then they come up with some ideas how to improve on those aspects in future.

Example 2: Grade 7

The educator has designed a set of activities across three learning areas for the whole class. The sheet is copied to each learner and she marks with **X** the tasks that the individual learner is supposed to carry out. When the educator hands out the contracts, she asks learners to go through their individual tasks and see if the agree with those. She then goes around and discusses the tasks with the learners. Sometimes the choice of tasks is reviewed after the discussion, and some learners want to undertake more tasks than assigned. If learners do not complete their contract, they were not allowed to negotiate tasks in the next contract but they had to agree with the educator's proposal.

Name: _____
Learning areas: LL, MMLS, A&C
'My community'
You are expected to carry out tasks marked with **X** before end November.

Name of the community Interview your elders about the name of the community. Make a poster of your findings.	**Locations** Draw a map of the community. Indicate all important places.	**Past** Find out about the history of the community. Who lived in the community first? How did it change? What have been the important events? Share your information through a medium of your choice.
Ordinary day Select one person in the community that you will interview about his/her day. Produce a poster / write a story / tape the interview	**Economics** Use materials from the district office and try to investigate: What is the main income of the community? How many people are employed, how many unemployed? How much the district spends in education and health? Show your findings in charts.	**Culture** What are the customs of the community? Choose one and find more about it. You can present your findings in posters, writing, performing, etc.
My ordinary day Describe one of your ordinary days: What do you do? Why you do what you do? What makes your ordinary day a special day? You can write / draw / make a collage or come up with another way of presentation.	**Important people** Who are the important people in your community? Why are they important? What do they do? Make a presentation of one of the important people in your community.	**Most beautiful place** What is the most beautiful place in your community? Draw or paint a picture on a large sheet of paper. You can also write why you think this place is beautiful and reflect on how it makes you to feel.

In this contract, the educator gives learners a number of possibilities for carrying out the tasks. There is also a strong thread of the idea of 'multiple intelligences' embedded in the

contract. This kind of contract works well in big classes: the educator can even ask learners to choose a certain minimum amount of work and then verify with each learner that their choices are appropriate.

Learning contracts can be designed at different levels of difficulty – and learners can be asked to choose a certain minimum number of tasks. The educators responsibility is to verify that learners choose tasks that are challenging enough as well as to provide support for those learners who want to try out their chances with more difficult tasks.

The advantage of the learning contract, like learning centres, is that it liberates the educators from the chalkboard and facilitate learning. Learning contracts are highly motivational to learners as they feel that it is really their responsibility to fulfil the agreement. The educator's responsibility relates to facilitating the learning – helping learners to plan their work, set reasonable timelines and make sure that all the materials are available for the learners. The educator also needs to set aside time for the 'contract work', e.g. allocate some periods every day for learners to work on the contract tasks of their choice. Some educators find contracts rather stressful at the beginning as they feel that they take the 'control' out of their hands. When learners are kept responsible for their own learning, educators should not breathe on their neck all the time insisting that they are 'on the task' all the time – it should be the learner's choice how s/he uses the time for the task. At the beginning it might also take some time to get used to a situation where learners are working on different tasks during the same period but as the time goes on, this makes learning and teaching very exiting.

How learners show understanding of what they are learning or have learned?

> *Assessment that is responsive to the being who is coming into the classroom, the individual that each being represents, can't be a narrow, paper-and-pencil, limited way of looking at children. Watching is* the *important part for me in terms of assessment – I have to watch, I have to look carefully, I have to look constantly, I have to listen, and I have to always be making immediate decisions about what to do or not to do next… To me, assessment is constant and ongoing because my decisions aren't based on what is generally appropriate for the child. There is no "the child". There are these particular children, that particular child in my classroom, who, from the first day he or she walks in I begin to develop a sense of – and that takes lots and lots and lots of time. Assessment means coming to know children well and, based on that understanding, inviting them in.*
> Yvonne Smith, an African-American educator (in: Goodwin, 1997)

Assessment is an integral part of the teaching and learning process, and can be of different formats. It can be 'casual' like the educator's account reveals above, or it can be more formal continuous assessment as promoted in the Curriculum 2005. Whatever is the format of assessment, it is essential for us in order to provide curriculum access to all learners, according to their needs and potential. Assessment is NOT for picking up what learners do not know but it is for providing the framework for the activities in which learners can show their understanding of the knowledge they have reconstructed.

We need to assess learners to:

- ✓ Identify the needs of learners
- ✓ Plan learning and to decide where learning programme should start
- ✓ Track learner progress
- ✓ Diagnose the source of learning difficulty (refer to all possible barriers to learning).
- ✓ Help learners to improve their work
- ✓ Adjust focus and pace of teaching and learning
- ✓ Provide evidence of learners' level of performance / achievement
- ✓ Judge the effectiveness of the learning programmes
- ✓ Assess and reflect our own teaching.

(Department of Education (2002) Draft Guidelines for the Implementation of Inclusive Education.)

In planning for how a learner can demonstrate their understanding, the educator needs to identify the outcomes that the learner should achieve and consider the evidence of achievement that would demonstrate the extent to which the outcome has been achieved. This needs to be done already when the educator is planning the learning activity. The Revised National Curriculum Statement documents give a number of examples on how learners can show their understanding of the knowledge, skills, attitudes or values. Therefore, more hints for assessment tasks should be sought in these Guidelines.

> How can I assess learning if the learner cannot write properly? The first thing to do is to keep in mind what is the outcome of the learning activity – what is it that the learner is supposed to achieve? Is it understanding, is a skill, is it an expression of creative thinking? For example, if the learner is to understand what 'recycling' involves, you have to think about what is the kind of activity through which s/he can show that s/he understands – if the learner cannot write, what else could s/he do in order to show her/his understanding? By making a poster, composing a song, producing a play?

When assessing the learner, the educator should keep in mind the following questions:

- What concept, skill, or knowledge am I trying to assess?
- What should my learners know?
- At what level should my learners be performing?
- What type of knowledge is being assessed: reasoning, memory, or process?
- Are all learners treated fairly, particularly those who experience barriers to learning?
- Are my assessment practices non-discriminatory?
- Are my assessment practices aimed at increasing learning and participation and minimising exclusion?
- Are my assessment approaches an attempt to minimise categorisation of learners?

(Department of Education (2002) Draft Guidelines for the Implementation of Inclusive Education.)

After reflecting these basic questions the educator can decide what would be the appropriate assessment strategy. The following table summaries some assessment strategies.

Method	**Description**	**Advantage**
Self-assessment	Learner is asked to assess her/himself against the given outcomes, e.g. 'My essay was good because…' or 'In the group work I contributed to the work in the following ways…"	Learner begins to recognise her/his behaviour, factors that contribute to the success or limitations of her/his work. S/he is involved in the assessment process, understands it and is more likely to learn from it.
Peer assessment	Learners give their own opinion of their group's performance compared to the outcomes they should have reached. They can also assess the work / behaviour / contribution of their peers in the process.	Learners are involved in the assessment process and do not feel threatened by it. They are more likely to learn in this process.
Portfolio assessment	These are files or folders of learner's work that s/he has done over a period of time. They can contain of various kinds of work: 'best work', plans, drafts, self-evaluation, as well as feedback from peers and educators. The kind of support the learner has received should be also documented in the portfolio.	This allows for continuous assessment. Learners are not assessed on a once-off performance
Tests	Tests are linked to specific outcomes within the curriculum. They are usually used to assess the development of skills and knowledge.	Criterion-referenced tests describe learners' performance and the results can help in planning tasks for individual learners.
Diagnostic assessment	Provides information on learner outcomes and will allow educator to identify gaps in skills, knowledge or understanding, as well as to provide support for learners.	Enables educator to obtain details information by focusing on explicit aspects of difficulties the learner is experiencing.

Modified from RTF Teacher Development Course 2000

From these strategies, the educator can decide what would be the range of activities that could provide the best opportunity for the learner to show where s/he is in the learning.

Learning Area	Minimum of 5 forms of assessment *The task and its activities will have to be adapted to address barriers to learning

LO	Projects	Design and Making	Written task/ test	Practical demonstrations	Action research	
EMS	Projects	Tests	Simulation	Presentations	Choice/ Electives	
MLMLS	Projects	Tests/ exams	Assignments	Class work/ Homework	Investigations	
HSS	Map reading/ Analysis	Tests/	Data Handling	Research	Creative response	Contextual Analysis
NS	Projects/ investigations	Assignments	Tests/ exams	Presentations/Performances	Translation task	
LLC	Creative writing	Functional writing	Spoken language	Investigation	Response to text	
TECH	Research	Assignment	Case studies	Projects	Test/s	
A & C	Test/ Oral/ Questionnaires and essays	Performances/ displays/ exhibitions/ field trips and interview	Research tasks Assignment Projects Investigation	Art processes and products using different art forms/ media/ methods	Observations/ journals/ scripts/ sketch books personal narratives	

Reproduced from Assessment Guidelines for Inclusion (2002)

How do I get started?

The most difficult part of trying out new things is to get started – to take the first step. But unless you take the first step, nothing will change.

The first step can be very different: some educators like to take one step at the time; some prefer to take small steps and then reflect their experiences and some educators like to take it all at once. What your first step looks like depends on you – because we are all different, it is impossible to say which is the right way of doing things. We have different preferences and we have to find our own way of developing our teaching practices.

Here are some hints that you might find useful:

- Plan what you want to do and how do you want to do it. Maybe you want to plan a truly collaborative activity for one period and try that out first. Or maybe you want to try out the idea of giving learners a choice of activities during one period. Perhaps you want to structure your MML activity around the idea of multi-level instruction. Whatever you want to try out, put it into action, reflect your experiences of it and develop it further.

- Work with your colleague. Discuss your ideas together, plan something new together and do it together. It is usually not so frightening to try out something new when you are doing it together with your colleague. After implementing your plan, discuss it with your colleague – what was easy, what was difficult, what went alright, what did not work out?

- Ask for help – this is not a sign of incompetence but a sign of your willingness to learn more. In some schools there are school-based support teams that help educators in their work. A school reported the following:

  > *The school-based support team involves different educators who study new areas and then pass their knowledge to other educators. The team reports that the biggest change in the school has been in attitudes – from the fear of unknown they are now busy learning new things and discussing challenges, and sharing their ideas. The school also welcomes educators from neighbouring schools to observe lessons and see what the school is doing.*

- Don't be afraid of making mistakes – we all make mistakes and we learn from the mistakes.

- Don't be discouraged if something does not work out immediately. When you are learning a new skill, it takes some time to practice to become a part of your repertoire. If it doesn't work today, try it again next week.

- Learners need time to learn new ways of working. If learners have been used to learn according to certain routine for years, it takes time to learn to do things differently.

- Ask feedback from learners – what did they like about the new ways of doing things and what did they dislike? Most of the time learners seem to like things which are not 'the same things than every day' – use this as your encouragement.

- Think that teaching is about learning. No educator can have all the answers – the more we teach and interact our learners, the more we can learn. The worst day of our lives would be the one when we stop learning.

  "We don't know all but we can be creative and solve our problems" said a deputy head of a school that has been involved in developing inclusive education.

- Celebrate the work that you are doing in your classroom. When you have carried out an interesting project with your learners, used a new strategy or managed to engage learners in a truly independent work, give a room for a celebration – whatever it is; dancing, singing; having soda and biscuits, etc.

- Appreciate the work you do. You are working with the future!

"We don't complain but see what we can do and keep on going."
An educator

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Examples have been developed from Sai Väyrynen's classroom observations in a number of South African schools, as well as by educators who attended the SCOPE project 'Managing curriculum' workshops during November 2002 – April 2003.