Reading: Understanding intrapersonal characteristics

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The impact of intrapersonal characteristics on school performance and learner development – A reading to accompany Unit Six of the module:
Teaching and Learning Mathematics in Diverse Classrooms

South African Institute for Distance Education

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Contents

Overview

This reading is a slightly adapted version of Chapter 4 from Module Three of the Advanced Certificate in Education (LSEN), offered by the University of the Witwatersrand. Judith Inglis, who teaches the programme also developed the materials. She also participated as a team member in the development of the module, *Teaching and Learning Mathematics in Diverse Classrooms.*

Module Three of Judith's programme is entitled *Understanding Cognitive, Emotional and Motivational Differences in Development*. Within the framework of Ecosystemic Theory, the module deals with a range of reasons for learning difficulties and differences in learning development, both internal and external to the learner.

The chapter contained in this reading, Chapter 4, deals with intrapersonal characteristics that affect learning and development.

It is useful as a reading for *Teaching and Learning Mathematics in Diverse Classrooms* both because it summarizes the various theoretical perspectives for understanding inclusive education, and because it uses case studies of typical learners to illustrate how teaching and learning activities need to be adapted to ensure that all children, no matter what their background or intrapersonal characteristics do learn mathematics.

The materials are intended for independent learning, and hence we have preserved much of their original format.

References for the Reading

Butchner, J.N. and Carson, R.C. (1992) Abnormal Psychology and Modern Life (9th ed) Harper Collins, New York.

Gazda, G (1979) Human Relations Development: A Manual for Educators (2nd ed) Allyn and Bacon Inc, USA. Chapter 1.

A selection of handouts and course notes used in contact teaching sessions developed in the Discipline of Specialised Education – Educational Psychology, University of the Witwatersrand, 1990 – 2000.

1. Introduction

As you read this Chapter, think about how the Ecosystemic Theory can be used as a framework to understanding learning difficulties by encouraging educators to explore the system of the wider environment and its effects on learners.

There are three systems that form the core of the Ecosystemic Theory:

1. **The wider socio-political environment and economic status** that include the economic and family situation as well as the political situation into which the learner is born.

2. **Interpersonal relationships** that include how much support the learner receives from his/her immediate and wider family, peers, siblings, educators, or any other significant person; and

3. **Intrapersonal characteristics**, individual characteristics the learner is born with that may include physical, emotional, cognitive or motivational differences.

*In this chapter, we will be taking a look at the third system as contributing to learning differences - **Intrapersonal Characteristics.***

Before moving on let's look at the main points that relate to the first and second systems.

Contextual disadvantage, especially poverty and low income, can have a negative impact on the lives of people of all ages. A breakdown in the wider environmental system can negatively affect a learner's overall development and functioning, resulting in or contributing to learning difficulties in classroom and school settings.

Learners also need for good, **strong interpersonal relationships**, especially during times of **stressful life events**. A lack of interpersonal support can easily contribute to emotional, cognitive, motivational and even behavioural differences in learners.

An interaction between the wider environment and the immediate environment (stressful life events), together with a learner's individual capacity for coping with such external factors, can lead to learning difficulties and differences in development.

*Now it is time to see how some differences in learner's cognitive, emotional and motivational development are **inborn** to particular learners.*

STOP AND THINK!

If you were to take a quick look at the learners in your classroom, you would immediately notice that each child is physically different from the others. They may differ in colour, height, weight, and gender as well as in so many other small, yet significant ways. From observing physical differences in learners, it is common for educators to notice that different learners have different physical abilities.

As an educator, you know that no two learners are the same. And sometimes, from observing *physical differences*, you gain an understanding that different children have *different abilities*. Very often, maybe without us even realising it, the physical differences we notice amongst a diverse learner population result in us accommodating physical differences in small ways and *influencing our expectations* of different children or teenagers in our classrooms.

How about this for an example: You would not expect a short, plump and uncoordinated learner to be an active member of the soccer team, as you would understand that such a child does not have the physical characteristics needed to maintain good ball control or to become a fast runner.

Understanding and accepting physical differences is a normal human response and it is a very important response.

Imagine what would happen if learners who were physically incapable of walking were expected to take part in school athletics, or if a learner who did not have full use of her hands was expected to excel in sewing. Imagine how such learners would feel emotionally and motivationally, especially if they were punished for not excelling in these areas.
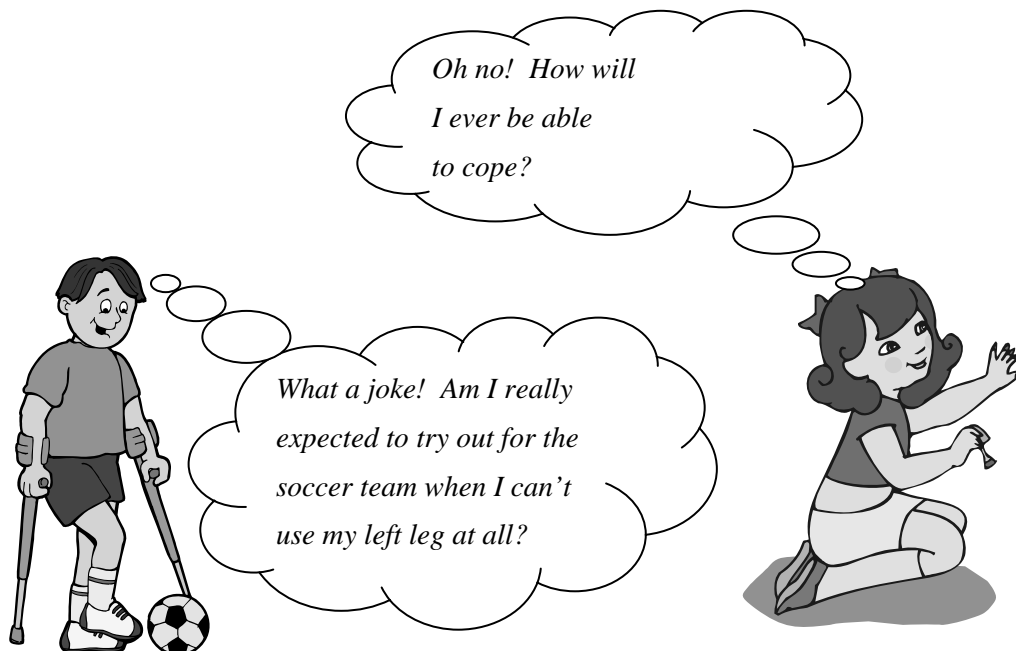
DID YOU KNOW?

> In much the same way that learners in a classroom differ physically from one another, they also differ in terms of personality and character. All children and teenagers differ *internally* from one another. They have different *personalities*, different *cognitive abilities* and different *emotions*. In order to accommodate such differences within a classroom situation, it is important that educators recognise such internal differences and understand that the different learners found within a classroom are individuals with their own specific needs and abilities. In order to be an effective educator, it is important that you are able to identify internal differences amongst learners and adapt your teaching styles and attitudes accordingly.

Oh no! The people who thought up the Ecosystemic Theory of understanding learner differences must be mad! Do they expect us to see into our learners' minds as well as find out about their environment? This is just too hard!

If this is what you are thinking … calm down!

While it is important that educators understand intrapersonal differences amongst the learners in their classrooms, the purpose of this chapter is to support you in this understanding and provide you with information and tools that will better equip you to recognise and accommodate learner differences that are often hidden in the minds and emotions of individual learners.

More importantly, because we understand how difficult it is to recognise and accommodate learner differences that are internal to individual learners, we have set out this chapter as a case study. It is our hope that by doing so, you, as an educator, will be able to identify some of the characteristics exhibited by learners who have intrapersonal differences. We also hope that you will be able to identify with the educator in the case study as she finds out about internal differences that impact on her learners and makes changes in her attitudes and teaching style in order to accommodate diversity across her classroom.

Let's begin this exciting journey towards understanding intrapersonal characteristics and learner differences!

HELP! MY LEARNERS ARE STILL NOT LEARNING!

Hi, my name is Ellie and I am an educator.
I guess you could say that I am a hard working and conscientious educator because I really work hard. I also try and find out everything I can about helping the learners in my class. I have been on lots of 'teacher courses' and I have tried out many of the support strategies and discovered that some of them work well. I am excited about the changes I have seen in my learners and in my own professional development.

However, there are still some learners I just don't understand … and a few who are driving me MAD!!!
I am especially unhappy with the learners in my class who are slow, uncooperative, messy or just plain naughty!

I have thought about whether these learners have intellectual differences, or emotional differences due to a lack of interpersonal support. I have considered their home environments and even wondered if they have a 'specific learning difference' or some kind of 'weird difference' that I know nothing about.
*I have tried to be supportive and encouraging, but I am getting tired. I don't know what the problem is with some learners but what I do know is that they are making **my** life very difficult!*

STOP AND THINK!

> ➢ *Can you, in any way, identify with the feelings described above?*

> ➢ *Are there any learners in your class, who make your life difficult because you just can't seem to get through to them?*

It is time now for you to do a short activity.

> **It is not the person with a difference who is the problem,**
> **but the inadequate reactions of the people around him.**

> ➢ *Pause a while and think about how you as an educator react to learners in your classroom who have "unspecified" differences that interfere with the way you teach and the way your learners' learn. What is your opinion of the above quote?*

> **I don't believe that there is a line that divides us, one from another. I believe that we are all the same, black or white, rich or poor, man or woman, abled or disabled. And if there are differences between us, I believe that these differences only serve to define us and not to divide us.**

> ➢ *Jot down a few common differences between people.*

> ➢ *Write a paragraph describing how you understand the idea of being **defined** by differences.*

> ➢ *Explain how you as an educator could allow differences to define the people around you.*

> ➢ *Explain what you think would happen if we allow differences to **divide** us.*

> ➢ *In a few sentences try and link the quote found above to your attitudes towards learners you do not understand or who perform poorly at school for reasons you have not discovered.*

If you as an educator are to be responsive to the diverse needs of learners in your classroom it is important that you have a good understanding of the learners you teach and a deep desire to help them achieve their full potential. Unfortunately, many educators are intolerant of learners who show signs of unspecified differences and have *negative attitudes* and *perceptions* regarding children who are continuously slow, messy, untidy, disrespectful, uncooperative, or just plain naughty.

It is so easy to fall into the trap of becoming frustrated with learners we do not understand. Sadly, our frustrations affect our attitudes towards and perceptions of 'difficult learners'. When this occurs, our reactions to learners with differences are often inadequate and may even result in a learner's barrier to learning becoming worse.

Spend some time now exploring your own attitudes towards learners who you think are difficult by completing the attitude checklist on the following page. Remember that no one is going to be looking at your responses, so you can be totally honest.

On the following page you will find an educator attitude checklist. Complete this checklist in order to determine for yourself how much of a problem you are when dealing with diversity in your classroom.

EDUCATOR ATTITUDE CHECKLIST	√
Do you consider learners who constantly make mistakes to be wasting your time?	
Do you treat the learners in your class differently from one another depending on whether you like them or not?	
Do you favour learners in your class who work quietly and well over learners who are noisy and untidy in their work?	
Do you punish learners who do not complete their work or who do not follow instructions?	
Do you get irritated with learners who constantly ask for support and confirmation of what they are doing?	

Do you dislike learners who look dirty and unkempt?	
Do you tend to pick on "naughty" learners constantly?	
Have you ever belittled a learner for not understanding a task?	
Do you distinguish between "clever" and "stupid" classes or individual learners and put more energy into teaching the "clever" ones than the others?	
Do you consider only some learners worth teaching?	
Do you punish learners who do not have the proper school equipment or uniform?	
Do you tend to ignore learners who have problems but who are well behaved?	
Do you label your learners? e.g. He has a behaviour problem .	
Have you ever said about a learner: "She has something wrong with her, there is nothing I can do, it's not my responsibility."	
Have you ever used the following words, or similar words, to describe a learner to your colleagues:	
I hate that child.	
He's so stupid.	

She's such an idiot.	
I give up.	
I can't stand _____.	
I wish he'd stop coming to school.	
She is so dumb.	

DID YOU KNOW?

*If you have answered yes to even one of these questions, **you** have a problem with **your** attitude! And this attitudinal problem may well be impacting negatively on learners who need your support and assistance. How scary!!!!*

It is so important for educators across southern Africa to build and develop classroom situations that form a welcoming community, are free of discrimination, and which provide effective education for all learners entering your classroom. In order to create such a climate of learning, educators need to shift the way they think about their function in society, the function of the curriculum, and the function of the educator within the classroom setting.

This means that as an educator, a large part of your job would be to build children up, provide love, acceptance, understanding and assistance and to help them become the best that they can be. Now, it is time to explore how learners with differences in intrapersonal characteristics can develop barriers to learning. We will begin our path to understanding internal learner differences by finding out more about the types of learners who drive Ellie 'mad'.

2. Understanding more about the learners in Ellie's classroom

I have been an educator for 8 years. I always thought that I knew what I was doing. I stuck to the curriculum and maintained good discipline in my classroom. As I mentioned previously, I attended numerous in order to better understand my learners and meet their needs.

The information and skills I have obtained from the different courses I have been on have helped me to improve my attitude towards my learners and to adjust my classroom practice to become more accommodating of individual learner differences.

I have started to enjoy teaching again and am even becoming creative – applying what I have learnt to my own situation. My life would be wonderful if it were not for a small handful of learners who I just do not understand and who I cannot seem to reach. Let me tell you a bit about these learners now.

Joseph

Joseph is a learner I simply cannot understand. He never listens in class and struggles to follow instructions or to get work done. He is always distracted, fidgety and bad tempered.

The other day, when my learners were all involved in a project making posters about HIV/AIDS and painting them, Simon accidentally spilt some water on Joseph and Martha's desk.
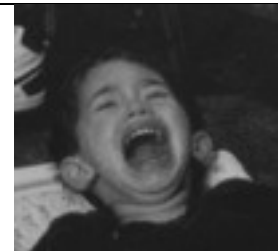
What an uproar!

While Simon quietly went and fetched a cloth to clean up the mess, Joseph went totally mad. He started crying at the top of his voice and screamed at Simon, calling him all sorts of terrible names.

Then Joseph started jumping up and down, demanding that Simon clean up the mess and replace his pens, pencils and paper. It took over an hour to calm Joseph down but nothing could be done with him for the remainder of the day as he spent the entire time glaring at Simon. Not only does Joseph react like this to any kind of change in the classroom, he also does not enjoy class activities that all the other learners seem to like. For example, when we had a guest speaker come to our class, Joseph immediately disliked him and refused to co-operate with him. I am getting annoyed with his constant bad temper and his attitude towards schoolwork. I can see that Joseph is unhappy, but he is also creating a negative atmosphere in my classroom. He upsets other learners who normally enjoy their time at school and I am really beginning to dislike him.

I have tried giving Joseph personal attention and opportunities to talk about what may be bothering him, but during these times, he fidgets and shows anger at being disrupted.

I don't know what to do with Joseph anymore. And he is not the only difficult learner in my class. There is also Thomas!

Thomas

I know that Thomas comes from a poor background and that there is very little money in the family. And I am doing everything in my power to help learners who come from impoverished backgrounds. Some of my colleagues and myself have started a feeding scheme at school to ensure that children like Thomas are fed. In addition, at the beginning of each term, I buy the learners from poor homes pen and pencil sets so that they can take part in work at school. I thought that the provision of food and school equipment would motivate Thomas in the same way it appears to motivate other learners but, it doesn't!

Thomas is frequently absent from school for no reason at all. He also comes to school dirty and smelly wearing any clothes he feels like. Over the past year, he has been caught stealing more than thirty times. His homework is never done and I have never seen his parents at school functions once, even though I have written many letters to his home.

Thomas misses out on so much schoolwork because of his absenteeism. Even when he does decide to attend class, he may as well not be there because he continues to miss out on work as he sleeps during lessons. He also "leaves" his pen and pencil at home when he does come to school so that he can't work.

I really thought he would be grateful for the food we give him and the pencils and things I provide - Oh No! *He has such an attitude!* If I speak to him, he refuses to answer and if I shout, he just doesn't come to school the next day. I have tried to be loving and nice to him but he is an impossible child. There is no motivation in him whatsoever.

Are you feeling sorry for me yet? If not, read further. There are even more difficult learners in my class.

Libuseng and Joyce

Libuseng and Joyce are the 'clever ones' in my class. When everyone is involved in cooperative learning, by doing group work activities or peer tutoring, these two sit back and watch. They seem to think that they are too good to join in any activities and they always have a disapproving look on their faces when we move from one topic to another.

Both Libuseng and Joyce think they are better than anyone else in the class, myself included.

They always want their work to be "perfect" and they spend hours getting things done. Also, they always want to work "on their own" and they take their time about it! Another thing they do that drives me crazy is that they never try to answer questions, and even if I try to encourage them, it makes no difference. It's almost as if they think the question is beneath them.

They have the attitude that "I know this, but I don't have to say it". They frown on learners who take short cuts when working, even if the short cuts taken are practical - these two always have to do things the hard way. They are so alike in so many aspects you might think that they are related, but they are not.

The only time I have ever seen these two happy is when we watch a video or a show or something. Their behaviour is unacceptable - they come to school to learn and take part in activities ... not to be entertained! I get so tired of them.

You may be thinking that what with Joseph, Libuseng, Joyce and Thomas I have enough problem learners in my classroom. You would be wrong. I have kept the most difficult learner for last. Her name is Patience.

Patience

Patience was very well named, because any educator having a learner like her in the classroom needs a lot of 'patience'. I have tried to think of a complimentary way to describe her, but the best I can come up with is 'stupid'. I know this is not a nice word to call a learner, but then, you don't know Patience. Patience has virtually no common sense at all and she is totally disorganised. Whatever is discussed in class Patience always meets it with a 'blank gaze'. She also tends to misunderstand what is going on about her - no matter what the topic. She doesn't follow instructions and seems to forget what she is supposed to be doing minutes after I have told her. I cannot count the number of times I have asked the class to line up to go somewhere and when we are about to leave, I still see Patience at her desk. When I ask her what she is supposed to be doing, she looks up, looks around the room, and sees all the other learners in a line and smiles. "Oh, I should line up," she says.

Patience never completes any activity set for her and will often sit and stare at a page for hours without reading a single word. Nobody wants her in their group for group-work or for any fun activities involving sport. It seems as though she can't make sense of the world about her and doesn't know what is expected of her no matter how many times she is told. I think it would help Patience more if she went to a special school for children with low IQ's. School for her is just like a baby-sitting session. I don't know what to do with her, nothing I have tried helps, she is constantly leaving her work at home and generally I leave her alone.

OK! So now you have heard about the difficult learners in my class and the way I think about them. I freely admit that I don't understand these learners and that in some cases actively dislike them. They make my life hard. Does this make me a bad teacher?

Unless you have been especially fortunate in your job as an educator, reading through Ellie's description of different types of learners she experiences trouble with should have reminded you of learners you have come into contact with over your teaching career. You may even have a few learners in your class right now who you think show similar attitudes and behaviours to those described by Ellie. What do you think their problems or learning differences include?

It is time for you to do an activity aimed at helping you begin to understand possible reasons behind frustrating behaviours learners in your classroom may exhibit.

Activity

On your own or with your study partner, look at the different categories of difference outlined in the table on the following page. Read the definitions of these differences and using the information you have gained from Ellie about her 'difficult learners' as well as knowledge from previous chapters in this module, try and match the learners mentioned in the case studies to the different categories of learning difference.

Once you have completed this task, move on to think about the questions that have been prepared for you to think about.

Category of Difference	Definition	Name of Learner
The Cycle of Poverty	Poverty reinforces poor education and social conditions - and ultimately more poverty - in a cycle of negative causes and effects. Poverty often goes hand in hand with absenteeism, lack of a culture of learning in the home, and a lack of motivation involving things school related.	
Cognitive Processing Differences	Learners can differ in terms of cognitive processing. Inadequate cognition can be caused by both poor mediation and by a deprived home and school environment. Cognitive differences can impact negatively on the way a learner 'processes' or understands the world around him or her. This type of difference can affect the way a learner plans, pays attention, and develops concepts or understanding about the world around them. It can also create difficulties for a learner's ability to follow instructions or complete tasks in the correct order.	
Temperament Differences	Temperament refers to the basic behavioural style in which individuals cope with different situations. Temperamental differences affect the way in which a learner focuses on a task, is distracted by disruptions in the environment, interacts with other people in the environment, or responds to different situations.	
Learning Style Differences	Not all learners learn in the same way. Some learners learn well through certain activities or approaches, while others do not. For example, some individuals prefer practical exercises and are eager to learn from their mistakes while others prefer to receive demonstration and examples before reflecting on content. Other learners rely heavily on theoretical, abstract discussion to establish thought processes and method for action and some prefer to be given information or taught skills.	

STOP AND THINK!

Think about the learners in your own class for a minute.

➢ Are there any learners in your class who could be experiencing learning difficulties relating to one or more of the categories mentioned above?

➢ *How would you know?*

➢ *What do you think you could do about it?*

You will have seen in the activity you have just completed that internal differences that can impact negatively on learners include differences in cognitive ability, temperament, individual leaning styles, as well as issues related to the cycle of poverty. In this chapter we will be focusing more on the three other types of internal differences that can impact on a learner's school performance and development: namely differences of cognitive /thinking skills, differences related to learning styles, and differences of temperament.

Before going into detail regarding these internal differences, spend some reading through the 'thought joggers'.

Thought Joggers!

One of the greatest challenges facing educators is how to treat our learners as if they are valued and important human individuals, especially when they are different from us or have barriers to learning.

When people are different, we often dwell on their differences and tend to lose sight of their potential and their greatness.

*There is a Zulu word, "**Ngiyakubon**a", which means "I see you" – I don't see you as rich or poor, abled or disabled, male or female, black or white, what you can't do in comparison to other people … it means **I see you – the human being and treat you with love, fascination and empathy.***

> ➢ *How often do you really "see" the "difficult learners that you come into contact with?*
>
> ➢ *How often do you "see" the problems and difficulties they exhibit, when you should be seeing the individual as a whole human being?*

If you as an educator are to be responsive to the diverse needs of the learners and educators in your school, it is important that you have a good understanding of your learners and a deep desire to help them achieve their full potential.

Unfortunately, as we have seen in Ellie's story, it is so easy to feel intolerant of learners who have negative attitudes, and learners who are continuously slow, messy, untidy, disrespectful, uncooperative and just plain "naughty". It is so easy to focus on the part of a learner does not work or that presents a problem to us, that we often miss out on understanding what our learners are truly capable of.

As you move through this chapter on intrapersonal differences try to focus on aspects of internal differences found in learners from the following perspective:

> 1. *NOT WHAT THEY CAN'T DO, BUT WHAT THEY CAN DO*
> 2. *NOT HOW THEY DON'T LEARN, BUT HOW THEY DO LEARN*
> 3. *NOT WHO THEY AREN'T, BUT WHO THEY ARE*

The first intrapersonal difference we will be looking at in this chapter relates to differences in learners' temperament.

3. Differences in temperament

Before going into detail about differences in temperament, reread Ellie's description of Joseph.

STOP AND THINK!

If you had a learner such as Joseph in your classroom, how would you describe his behaviour on his report card?
Write your response down.

Was your response similar to any of the following statements?

> ➢ Is a disruptive influence on other learners
>
> ➢ Does not participate positively in classroom activities
>
> ➢ Is easily distracted
>
> ➢ Does not listen in class
>
> ➢ Needs to concentrate more
>
> ➢ Does not react appropriately to situations in the classroom
>
> ➢ Needs to work harder and learn to control his temper

When we think about learners' abilities at school, educators tend to think in terms of how intelligence and concentration influences a learner's academic abilities.

Many educationalists however disagree with this and believe that temperament differences play a more powerful role in influencing a learner's academic abilities than intelligence.

DID YOU KNOW?
Research into the area of temperamental differences has concluded that there is a strong link between temperament and academic success.

TAKE NOTE!
It is important when trying to understand how temperament is related to academic success that you realise right from the start of this section that temperament has got nothing to do with intelligence or cognitive functioning.

So, what is temperament?

DEFINITION

Thomas and Chess (1984) describe temperament as "*a basic behavioural style that is innate and enduring.*" This means that temperament refers to the way in which an individual *behaves or copes in certain situations* (innate) and which *do not change over time* (enduring).

Keogh (1982) stated that temperament describes "*not so much what the child does, but the way in which he or she does it*".

STOP AND THINK!

➢ *In Ellie's description of Joseph, was Ellie describing what Joseph does, or **the way** in which he does it?*

➢ *Do you think there may be learners in your class whose ability is overshadowed by the way in which they behave?*

Temperament refers to long-term differences in behaviour role styles that influence the way we do things or react to situations. Because of this, people who have different temperaments will react very differently to different situations and may show behaviours that appear 'different to the norm'. In addition, because people are born with their own temperaments, it is extremely difficult to change a person's behaviour or reaction to changing situations. Remember ... temperament is enduring!

When speaking about temperament, we can use the words "**easy**" and "**difficult**".

A learner with an **easy temperament** is one who adjusts well to his or her surroundings and basically is easy to teach. A learner with a **difficult temperament**, such as Joseph, could have high activity levels and intense feelings about life which can result in them being much more difficult to teach.

Learners with difficult temperaments are likely to develop learning difficulties if their educators do not carefully consider their temperamental differences.

There are three main areas of temperament difference that affect learners.

They are as follows:

➢ **Task Orientation;**

➢ **Personal and Social Flexibility; and**

➢ **Reactivity.**

Let's look at each of these areas one at a time.

Task Orientation

Task Orientation is concerned with the way in which learners are likely to *approach school tasks* and can be divided into three categories. These categories include *persistence*, *distractibility* and *activity*.

Persistence	Distractibility	Activity
Persistence relates to the length of time that a learner will spend on trying to complete a task.	Distractibility means how well a learner can stay focused on a task despite distractions in the environment.	Activity refers to how much a person moves physically.
Some learners are very persistent and will not give up, even on a very difficult task.	There are usually many distractions in a classroom like noise and movement and things happening outside.	A learner with low activity will be able to sit quietly for long periods of time, while a learner with high activity levels will be constantly on the move.
Other learners, as soon as they believe a task is too difficult for them, will simply stop trying.	Learners with low levels of distractibility are able to ignore these disturbances while a learner with high levels of distractibility will be easily disturbed and interrupted by environmental distractions.	High activity learners tend to move around the class a lot and may often ask frequently to go to the toilet. When sitting down, their bodies are always moving. Sometimes their feet tap, or their legs bounce up and down and they often fiddle with things on their desks.
THINK!	THINK!	THINK!
Try to think of one learner in your class who is persistent and one who gives up easily.	Can you identify learners with both low and high levels of distractibility?	Who in your class has the highest and the lowest activity levels?
Write their names down.	How easy are distractible learners to teach?	Who amongst the educators in your school has the highest and lowest activity levels?
Now, think about yourself. Are you persistent or do you give up easily?	What about you? Are you distractible or do you focus well on tasks?	Which type of activity level do you think is most conducive to achieving in a classroom setting?

Personal and Social Flexibility

This temperament dimension is understood as the way learners are likely to *interact with people in their environment*. Personal and social flexibility can also be divided into three categories. These include *adaptability*, *approach/withdrawal* and *positive mood*.

Adaptability	Approach/Withdrawal	Positive Mood
Adaptability comes from the word "adapt" and refers to the ability to adapt to change in order to suit a new situation. Some learners accept and adapt to new situations very easily while others cannot bear a change in their routine and react badly to all changes. THINK! What type of adaptability temperament does Joseph have and how does it impact on his own learning and the way the educator responds to him? How adaptable are you? Do you enjoy change or do you prefer to stay in your own "comfort zone"?	Approach/withdrawal means whether a learner will happily and easily move into a new situation or whether a learner will withdraw from a new situation. Some learners leap happily into different and new situations while others hold back and prefer to watch an activity from the sidelines rather than participate in the activity. THINK! Which learners in your class withdraw from new situations? How do you react to these learners? Do you force them into the new situation or do you give them some time to adjust?	Positive mood simply means whether a learner is usually in a good mood and seems happy within his/her environment. THINK! How many learners in your classroom have basic positive moods? How do you respond to these learners? Do you have a positive mood?

Reactivity

Once again we find three categories within this characteristic. They include *intensity*, *threshold of response* and *negative mood*.

Intensity	Threshold of Response	Negative Mood
Intensity means how seriously a learner responds to the environment. Some learners appear to be "happy-go-lucky" and not too serious. Other learners take life very seriously. They are very intense and feel passionately about many things. THINK! Who is the most intense learner in your class? How easy is he/she to teach? How well does he/she get on with other learners?	Threshold of response refers to how much stimulus an individual needs in order to respond to a situation. A learner with a low threshold of response is slow to get angry or excited. Learners with high thresholds of response lose their temper at the slightest provocation. THINK! Which of the learners in your class get angry very quickly? How do you respond to these learners? What about you, yourself? Do you have a low or a high threshold of response?	Negative mood simply means learners who always seem to be in a bad mood and who appear constantly frustrated and irritable with their environment. THINK! How many learners in your classroom have basic negative moods? How do you respond to these learners? Do you have a negative mood?

From the work you have just covered, you should have a pretty good idea of who in your class has differences in temperament. Time now to return to the subject of 'easy' and 'difficult' learners!

TAKE NOTE!

We will now explore how temperament can influence behaviour within a classroom setting. However, before we do this, it is important that you take careful note of the statement below!

Temperamentally difficult learners are not disabled or handicapped in any way, they simply have a different way of responding to their environment from temperamentally easy learners.

Look carefully at the descriptions of temperamental differences listed below and evaluate how temperamental differences have influenced the behaviour described in the "response" column.

Temperamentally Difficult Learners

Response in the classroom	Temperamental characteristic
Gets angry easily	High threshold of response
Remains angry for a long time	High intensity/negative mood
Does not adjust well to changes	Low adaptability, withdrawal from new situations, views change negatively
Fidgety and restless	High activity and high distractibility
Unco-operative and bad tempered	Negative mood

Temperamentally Easy Learners

Response in the classroom	Temperamental characteristic
Does not anger easily	Low threshold of response
Gets over anger easily	Low intensity
Enjoys and adjusts well to changes	High adaptability, approaches new situations happily
Focused and usually finishes all work	Low activity and low distractibility
Co-operative and happy	Positive mood

STOP AND THINK!

➢ How do differences in temperament affect the way in which you as an educator respond to different learners?

➢ How do you think differences in temperament can affect a learner's learning?

➢ If you were providing support for a learner with a difficult temperament, what type of assistance would you suggest be implemented?

So far, we have looked at ways of identifying differences in temperament by providing you with information about how learners can be classified according to a list of characteristics that are reflected in their behaviour. While it is useful to be able to identify 'easy' and 'difficult' learners in your classroom, this information is not enough. You also need to understand how temperament can impact on the way a learner learns as well as how educators' attitudes towards learners with different temperaments can either enhance or obstruct learning.

THE EFFECTS OF TEMPERAMENT ON LEARNING

Research has shown that learners who have easy temperaments do better at school than learners who are temperamentally difficult.

In order to understand why this is so, we need to look more closely at the differences between temperamentally 'easy' and 'difficult' learners.

EASY LEARNERS

- Easy learners are usually high in persistence and low in distractibility and activity. This means that they are well suited to the structured nature of the classroom environment, which commonly requires learners to sit quietly and work for long periods of time.

- Because easy learners have low levels of activity and are not easily distracted, they tend to absorb more of what the educator says, are better able to follow instructions, and can sit quietly and do their work.

- In addition, easy learners are usually in a good mood and are more able to maintain their mood despite changes in the environment. Because their moods are positive and fairly stable, they are emotionally free to focus on their schoolwork.

DIFFICULT LEARNERS

- Difficult learners tend to have low persistence and high levels of distractibility and activity. This means that the common, structured classroom environment does not suit them at all. They are seen to be fidgety and restless, they struggle to concentrate for long periods of time, and they give up easily on more difficult tasks. Due to these differences, difficult learners often miss instructions that educators give and struggle to focus on and finish their work.

- Difficult learners can often be in a negative mood and can spend hours nursing their anger and frustrations. Due to such characteristics, they may have little concentration left over for their schoolwork.

If we think back to what we know about Joseph, we remember that after the incident with Simon, so much of his attention was taken up by being angry and irritable that he was unable to focus on his schoolwork.

We have seen how differences in temperament can have a substantial effect on how different learners are able to function academically within a classroom environment. We have also seen how the classroom environment is more suitable to learners with an easy temperament than to those who are born with a more difficult temperament.

Through this understanding, we begin to realise how the school environment can act as a barrier to learning for some learners. But did you know that educators' attitudes towards difficult learners could also act as a barrier to learning? Let's spend some time looking at how an educator's attitude can negatively impact on some types of learners.
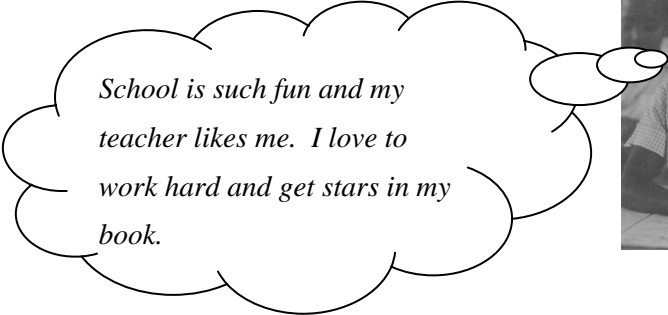
EDUCATORS' ATTITUDES AND LEARNER COMPETENCE

TAKE NOTE!

According to research, it has been found that the most important aspect of differences of temperament involve not the learner with the difference, but the educator's attitude towards learners with temperamental differences.

Barbara Keogh did a lot of research into temperament and how it influences educators' perceptions of their learners. She found extensive evidence that temperament influences educators' judgements of learners' academic competence, their evaluation of learners' performance, and decisions about assessment feedback. *Keogh's research found that **educators prefer "easy" learners**.* According to Keogh, educators usually have high academic expectations of easy learners and tend to spend more time with them. In addition, educators also respond more positively to easy learners and on the whole are more encouraging towards them. They also tend to provide easy learners with more interpersonal support.

In most classroom situations, easy learners feel liked and understood by their educators and are inclined to feel happy and confident in the classroom. Their self-confidence in turn boosts their motivation and, although they are usually "good workers" to begin with, they are spurred on to achieve even higher levels of success.

School is such fun and my teacher likes me. I love to work hard and get stars in my book.

*Keogh's research found that **educators tend to dislike "difficult" learners.***
Generally, educators struggle to get on with difficult learners and sometimes even actively dislike them. Educators often have low expectations for difficult learners and do not consider spending time with them as worthwhile. Not only do educators spend less time with difficult learners, sometimes they ignore them completely. On the whole, educators respond negatively to difficult learners and most of the interactions with these learners involve shouting at them or punishing them in some way. It is seldom that a difficult learner receives adequate interpersonal support from either his/her educator or peers. In addition, educators are normally rather negative in their feedback to difficult learners and this negative feedback, results in the already difficult learner feeling unhappy and misunderstood at school.

Difficult learners often feel worthless and different when comparing themselves to easy learners. This affects their self-esteem and confidence. A poor self-image combined with poor working habits and a lack of understanding and support within the classroom contributes to low levels of motivation in difficult learners. These factors often result in deterioration in the schoolwork of difficult learners over time.

I hate this new work! Last time I got everything wrong and my teacher shouted at me. What am I supposed to do now? I can't even remember the instructions. Oh, look at this pretty picture … I wish I could go on a camping trip like that. Maybe I can ask my mother later.

STOP AND THINK!

Think about the learners in your class.
Do you treat them differently according to their temperament?
Does your own temperament affect the way you treat different learners?

From what you understand about the importance of interpersonal support in the lives of learners, how do you think you could change your relationship with difficult learners to assist and support them in their cognitive, emotional and motivational development?

Suggestions for Supporting Learners with Differences in Temperament

Differences of temperament, while frequently ignored or misunderstood, make a powerful contribution to a learner's academic success or failure. It is therefore very important that educators be aware of the effects of temperamental differences and try to interact with difficult learners in a way that will make their schooling easier and less stressful.

We have already discovered in this module that every learner is different. Because of this, there are no blue prints for addressing difficult learners. Unfortunately this means that in your role as an educator, you will need to identify temperamental differences amongst your learners and then actively look for opportunities and ways of encouraging such learners.

But don't despair! We are not leaving you alone to try and figure out how to support difficult learners all by yourself … we will supply you with some suggestions that you can begin trying out and later adapting, modifying, or adding to.

Here are a few tips to get you started!

How to Deal with Difficult Learners:

- Difficult learners need more of your time, not less. Try not to reject or ignore them. Their behaviour will probably become worse if you do.

- Where possible, try to ignore their wrong doings and praise them for what they do well.

- Remember at all times that you are the adult in the classroom and as such it is important that you model maturity and understanding in your reactions and attitudes towards difficult learners.

- Try to always treat difficult learners with understanding, concern and fairness.

- Never allow your personal feelings towards a difficult learner to influence the way you assess or evaluate their performance.

Activity

This activity requires you to determine the temperamental characteristics of the learner you selected to work with for your final assignment. It will also contribute towards your final assignment mark. So complete this activity before reading any further or you may forget about it later.

TAKE NOTE!

You may photocopy this questionnaire to use with any of your learners for assessment purposes.

1. *Fill in the questionnaire for your learner using the information you have learned in this section and determine whether his/her temperament could be impacting on classroom behaviour and motivation to succeed.*

2. *Once you have completed the form for your learner, analyse it in order to understand your findings by following the instructions listed immediately after the questionnaire*

TEMPERAMENT QUESTIONNAIRE

Learner's name : _____			
Characteristic	**Very much**	**Not a lot**	**Very little**
High persistence Sits quietly and focuses on a task for an hour			
Low persistence Starts a task but seldom finishes it			
High distractibility Easily drawn away from work by noises			
Low distractibility Sits still when a story is being told			
High activity Has difficulty sitting still			
Low activity Can sit still for a reasonable amount of time			
High adaptability Likes to go on errands			
Low adaptability Takes a long time to get used to any change			
Withdrawing Shy when meeting new children			
Positive mood			

Learner's name : _____			
Characteristic	**Very much**	**Not a lot**	**Very little**
Negative mood			
High intensity Overreacts in stressful situations			
Low intensity Shows little or no reaction when a position is taken away			
Low threshold response Slow to get angry or excited			
High threshold response Quick to anger or get excited			

Instructions for Analysis

On a piece of paper that you attach to the temperament questionnaire, write a short paragraph in which you describe the type of temperament the learner you selected displays.
In your paragraph, include information regarding:

- *Possible differences you see in the attitudes of the learner towards schoolwork.*
- *Areas where temperament impacts either positively or negatively on academic achievement and areas of assessment.*
- *Possible areas in which your feelings and reactions towards this learner may be affecting his/her motivation to learn.*

If you find that the learner you have selected for evaluation has a difficult temperament, suggest ways of how you could provide support for this learner. Then, put your plans into action and keep a record of what you do and how effective your actions and support is in terms of improving your learner's cognitive, emotional and motivational development.

While you have covered issues relating to the cycle of poverty, it is important that you spend a short period of time reflecting on what you have learnt and applying this information to Ellie's story about Thomas. The reason for this will become clear as you move on to section 4.5 of this chapter that deals with the need for understanding and accommodating different learning styles within a classroom situation.

4. The effect of poverty on learning

In this section, we look at how the cycle of poverty can affect a learner's cognition, motivation and learning. But before we do so, turn back to section 4.2 and reread what Ellie has to say about Thomas.

Do you remember?

Poverty affects motivation

A learner who comes from an impoverished background tends to feel hungry, insecure and unsafe. *Just being provided with food, will not alleviate the feelings of insecurity and lack of safety.* Learners who do not have their basic needs met at home will have very little motivation for working at school. Learners from poverty stricken backgrounds seldom have role models of people who have benefitted and improved their lives through education. Their caregivers often have negative attitudes towards education and in many cases cannot read and write properly themselves. In addition, there is seldom a culture of learning in homes where poverty is found.

Poverty affects cognition

Learners from impoverished families backgrounds get to school inadequately equipped to deal with academic learning as their home life, on the whole, is intellectually impoverished and mediation from caregivers is minimal. In addition, learners from impoverished home environments usually have short attention spans, find it difficult to concentrate, struggle to get organised, struggle to solve problems and usually have a very limited general knowledge about the world.

STOP AND THINK!

> ➢ *Think back to what Ellie had to say about Thomas.*
>
> ➢ *Can you understand why her attempts to feed him and provide him with writing materials have failed to motivate him?*
>
> ➢ *Can you think of any possible reasons that could be causing him to be disruptive and to steal?*
>
> ➢ *What suggestions would you provide Ellie with for understanding and assisting a learner such as Thomas?*

TAKE NOTE!

Learners who come from impoverished home backgrounds need a lot of encouragement, motivation and mediation. They also need to be taught strategies for coping with academic learning.

These issues will all be covered in detail in the section that follows.

5. Understanding learning styles

In recent years, increased attention has been given to the concept of "Learning Styles".

Where did such a concept come from?

> The concept of learning styles developed from observations that individuals differ in their willingness or tendency to learn from different activities or approaches.

For example, some individuals prefer practical exercises and are eager to learn from their mistakes while others prefer to receive demonstration and examples before reflecting on content. On the other hand, some people rely heavily on theoretical, abstract discussion to establish thought processes and method for action while others prefer to be given information or taught skills.

Observations of how different individuals prefer different styles of learning have also been linked to discoveries about how the brain develops. Research has shown that experience and mediation play an important role in the development of a child's understanding of him/herself and the surrounding world. Research has also shown that when teaching styles fit with children's learning styles, optimal learning takes place.

When it comes to teaching and learning in a classroom situation, there are two words that you, as an educator, need to take to heart.

> - The first is "experience".
>
> - The second is "mediation".

Mediation

Mediation is a word that refers to the assistance provided by caregivers, educators or other people to a learner. The word "mediate" means to "come between and to negotiate". In educational terms, it means to work between the meanings and understandings that a learner has constructed or built up inside their own minds and extend or expand on these meanings to help the learner develop new meanings that are embedded in the curriculum or different learning areas. Basically, mediation involves helping a learner to use his or her own prior knowledge and extend this knowledge to a new level of understanding.

Mediation is one of the main keys available to educators that can be used to unlock learners' ability and potential!

In this section, where we explore what is needed for the brain to make meaning, you are provided with an opportunity to understand just how important mediation is for learners who experience cognitive differences as well as for learners who have been disadvantaged in terms of educational experiences.

STOP AND THINK!

➢ *Have you ever thought of a learner in your class as "brain damaged", "retarded" or "stupid" because they have been unable to understand a simple concept or answer an easy general knowledge question that you believe most three-year-olds would know the answer to?*

➢ *If you have had these thoughts, have you ever taken the time to find out why one or more learners may have found a concept difficult to grasp or understand? Have you ever tried to discover the reason behind a learner's inappropriate or limited answer to what you perceive to be an 'easy question'?*

➢ *Have you considered that unless a learner has experience of a particular situation or has had a concept properly explained to them, their ability to answer questions or grasp concepts may be impaired?*

In addition, because many of the learners who enter our classrooms come from homes where there is a lack of a good culture of learning, educators will be faced with a large number of learners who do not have experience regarding content knowledge across learning areas. Further, many of the learners in southern African schools are learning through the medium of a second or third language that frequently interferes with their understanding of explanations provided within a classroom situation. Such learners have a real need for a sensitive and informed mediator who is able to assist and guide them in their understanding of academic concepts and in their interpretation of the world around them.

Consider this!

If a learner in your class has been brought up in an inner city environment, perhaps in a block of flats in the middle of town, she may never have seen plants in her home or immediate environment. With such a background, if no one has ever told the learner stories or shown her pictures of plants, how is this child supposed to take part in any classroom activities on themes involving "plants", "forestry", "nature", "germination" etc. And if the learner does try and take part and makes a mistake, is she "stupid"?

I feel like such an idiot. Yesterday in the science lesson, my teacher asked us what plants needed to grow. She said they needed water, air and 'sunlight'. I thought she meant the dish wash called 'sunlight' that I had heard about on TV. They laughed at me when I drew a bottle of Sunlight liquid in my book and the teacher showed the class what I had done.

A learner may have been brought up in a fishing village in the Western Cape. Because nearly all the adults around him are involved in fishing in some way, he could have an excellent understanding of the sea, the weather, different types of fish, and different ways of fishing. However, if such a learner, particularly if he is learning in English rather than Afrikaans (his home language) is not asked the sort of questions that draw on his knowledge and experience, or if the vocabulary used in the questioning is unfamiliar to him, he may never be able to show his knowledge. In addition, because this learner's knowledge is related to the traditional practical art and technology of fishing, rather than formal abstract school knowledge, educators could well perceive him as unintelligent.

Today in the maths lesson my teacher said we'd be making nets in our next class. She asked us to draw a net for one of the shapes we thought we could manage. I drew a fishing net (visnet), like the ones let down from my father's boat in the sea. Everyone laughed at me when the teacher showed the class what I had done. I felt so stupid.

TAKE NOTE!

Educators, no matter how dedicated or determined to help their learners, sometimes fall into the trap of labelling a learner as "stupid". This is an extremely dangerous practice, as we do not know what goes on in the minds of our learners. When we examine how the brain functions, and how it relies as much on input as what it does on output, we may begin to rethink the way we teach.

*Let's take a look at how the brain functions right now!*

UNDERSTANDING THE WAY IN WHICH THE BRAIN FUNCTIONS IN A LEARNING SITUATION

The brain is an incredibly complex organ that constantly receives information from inside and outside of the body. As the brain receives different forms of information, it quickly analyses it and then sends out messages that control bodily functions and actions. The brain also stores information from past experiences, which makes learning and remembering possible. In addition, the brain is the source of thoughts, moods and emotions.

Because the brain is the control centre of the human body and is constantly working on a number of different things at the same time, scientists and educationalists have found it difficult to find out exactly how the brain is involved in the extraordinarily complicated process of thinking, remembering and processing information. However, scientists and educationalists have discovered that the process of learning involves three important components, namely, input, elaboration, and output.
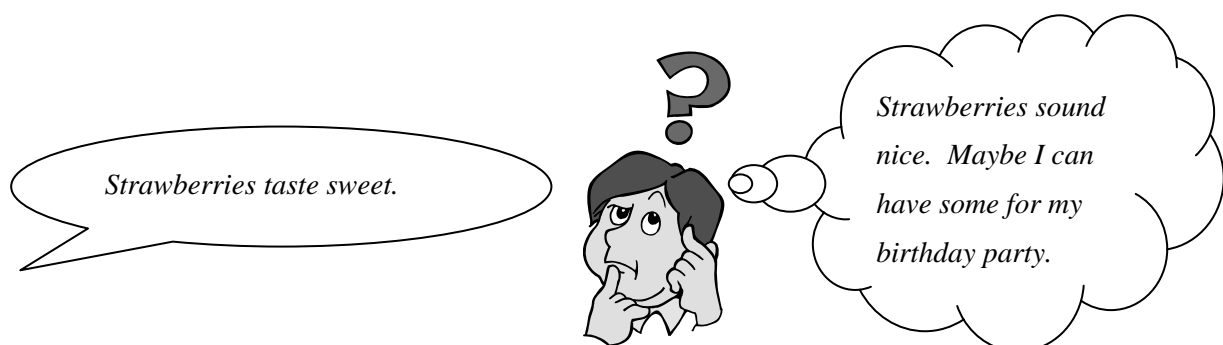
INPUT → ELABORATION → OUTPUT

Over the next few pages we will see the importance of each of these components as well as how they work together in helping learners understand and make meaning of information and experiences.
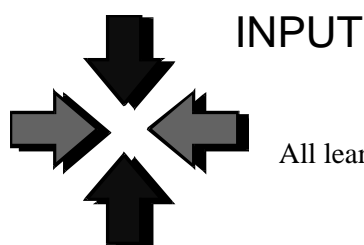
INPUT

All learning or meaning making begins through input.

➢ Input comes from the environment in the form of **stimuli** - things that individuals can see, hear, touch, smell and taste.

➢ This stimuli is transferred to the brain by complex nerves.

➢ In the brain, the information is placed into the correct section to be analysed, made sense of, and linked to concepts the learner has already built.

For example, a learner who has never seen a strawberry before may **hear** from his teacher that strawberries taste sweet. This information is transferred to the brain where it is linked to a learner's past experience of *'sweet tasting things'*. The brain analyses the information and tries to make sense of it by linking what has been heard to *past experiences of sight and taste*. In the learner's mind, the word 'strawberries' is linked to sweet tasting foods such as jam, chocolate and ice cream. Without further input such as sight and touch or an explanation that a strawberry is a fruit, the learner may fail to respond to questions asking him to provide examples of sweet tasting fruit.

Strawberries taste sweet.

Strawberries sound nice. Maybe I can have some for my birthday party.

From this example we begin to see how the brain uses input, elaboration or processing and output in the learning process.

Understanding the importance of input, let us now move on to look more closely at how the brain elaborates on and processes the information it receives.

ELABORATION OR PROCESSING OF INFORMATION

In the elaboration or processing stage, inside of a person's brain, meaning is placed on the stimuli received.

As we have seen in the previous example, accurate meaning is dependant on a learner's past experience as well as on the type of stimuli provided to a learner. Because of this, educators need to make use of different stimuli and as many concrete examples as possible when introducing new concepts or topics to learners. It is also important that educators find out about their learners' past experiences and either build on these experiences or provide new experiences that will prevent misunderstanding and allow for appropriate meaning to take place.

STOP AND THINK!

➢ *In your teaching experience, you will have come across learners who have misinterpreted or misunderstood something that you were trying to teach them. Think of an example of when this has happened.*

➢ *With a specific example in mind, think about how such a misunderstanding could have occurred.*

➢ *Using the information you have just learnt about how the brain functions, think about what you as an educator could have done to help 'confused' learners gain a better understanding of a particular topic or concept they have misunderstood.*

Right now you may be feeling quite happy about your ability to help learners process meaning through the provision of better stimuli, the use of examples, and by building on their past experiences. But before you get too excited, there is something very important that you need to understand about the elaboration or processing of information in the brain…

Not everybody processes information in the same way!

Educational psychologists believe that there are two basic ways people can process information:

- ❏ in a **top-down** manner or
- ❏ in a **bottom-up** manner.

This may sound confusing, but it really makes sense and can go a long way towards helping you understand your learners' needs. Just think for a minute about how even when you have gone to a lot of trouble to explain new work to your class, some learners understand it immediately, while others seem to battle and struggle to make sense of what is going on.

One possible reason for this type of situation is that different learners in your class process information differently and perhaps the way you have presented a lesson may be more appropriate to one way of information processing than another.

Spend some time now reading about the two ways people can process information

---

Some people are what are called "top-down processors"

This means that they are able to see things as a "whole" and understand how the different parts have created the whole. Top-down processors usually have a good understanding of concepts, however, they may experience difficulty with the smaller details of their thinking compared to other people.

Let's look at an example of the type of work 'top-down processors' may show in a classroom situation.

Matthew is a top-down processor. He understands concepts quickly and shows a good understanding in different learning areas. His marks are quite high in most of his subjects, except for mathematics. Let's take a look at one of Matthew's maths papers and find out why.

a) $47 \times 99 - 50 = 4\,603$

b) $83 \times 50 = 4\,150$

Matthew always gets the answers to difficult maths sums correct, but for this paper he only received 2 marks out of 8 because he did not show his working out. Top-down processors can often solve difficult maths problems in their heads, but not be able to write down or explain how they did it. Matthew is able to do these calculations mentally, but he is being penalised by a marking system that insists that he shows some working for his solutions. He might have done the calculations mentally by using the following strategies:

1) $47 \times 99 = 47 \times 100 - 47 = 4700 - 47 = 4653$
2) $83 \times 50 = 41{,}5 \times 100 = 4150$

Let's move on to look at another way of processing information. But as you do so, keep in mind what you have learnt about top-down processors.

> **Some people are what are called "bottom-up processors"**

"Bottom-up processors" need to see detail in everything and find it important to learn concepts in sequence, however, they often experience difficulty understanding the whole picture.

Take a look at this example:
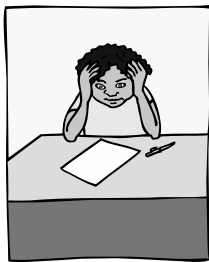
Terry is a bottom-up processor. He takes quite a while to understand new concepts taught in class and struggles to apply his knowledge across different learning areas. While he is not a 'bad' student, his marks are not very good although he sometimes does quite well at maths. Let's take a look at one of Terry's maths papers and find out why.

a) 47 × 99 − 50 =

$$
\begin{array}{r}
47 \\
99 \\
\hline
423 \\
423 \\
\hline
846
\end{array}
\qquad
\begin{array}{r}
846 \\
-50 \\
\hline
796
\end{array}
$$

When given complex sums to complete, bottom-up processors tend to start at the beginning and work out step-by-step where they are going. If they do not get the right answer, it is possible that they have missed out on learning a step that would give them the sequence or structure to obtain the whole answer.

Let's take a look at another example of how top-down and bottom-up processors differ in the way they work.

Terry and Matthew are in the same class. During a Language lesson one day, their teacher put a picture on the chalkboard and asked the learners to write a story about the picture.

Here is the picture the boys were asked to write about.

Now notice the difference in their writing:

Let's begin by looking at what Matthew wrote:

> Driving in his car on the way to work, a man heard that a young girl had been kidnapped. As he drove he noticed that in the car in front of him was a girl who appeared to be tied up. Using his cell phone, the man called the police and chased after the suspect. He followed the car along a deserted area while informing the police of his position. The kidnapper drove faster and faster, but he could not escape. Finally, the kidnapper ran out of petrol and the other man caught up with him. He punched the kidnapper and tied him up while he waited for the police to arrive. The little girl was safe and the man got a reward from the police.

Now we will see what Terry wrote.

> There is a road. The road is crooked. There are two cars on the road. One car is in front of the other. The cars have doors and windows. The cars have lights and wheels. The cars are shiny.

From the written work of Matthew and Terry, it is quite clear to see how Matthew's ability to see the 'whole picture' allows him to be creative and flexible in his work and earn good marks in learning areas where attention to detail is not required. Terry on the other hand is so absorbed with the details of the picture he is writing about that he has no real focus to his story.

It is interesting to see how learners who process information in different ways can either be advantaged or disadvantaged in their work depending on learning areas and the cognitive skills that different subjects or learning areas require.

STOP AND THINK!

Spend a few minutes thinking about different learning areas that top-down processors would do well in and the learning areas that would reward a bottom-up processor's attention to detail. Then think about subjects or learning areas that a top-down or bottom-up processor would experience difficulties in.

Now think about the subject or learning area that you are mostly involved in teaching. Which type of processor would be most likely to experience difficulty in your area of teaching? How do you think you could provide support to a learner who experiences difficulty due to a difference in the way he or she processes information?

TAKE NOTE!

No one learner is ever totally top-down or bottom-up in their processing and different learners will have strengths and weaknesses in both areas. However, research has shown that people are usually predominantly (mainly) one type of processor or the other.

Moving on, it is time for you to take a look at what happens in a person's brain after the information received from a stimulus has been processed.

Once the brain has processed the information from one or more types of stimuli and problem solving and reasoning have taken place, the individual is ready to make a decision about what to do and think next or how to answer or respond. This is called the output stage.
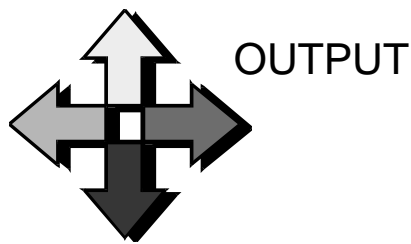
OUTPUT

Output involves things such as whole body movement (in obeying an instruction such as sitting down), language use (answering a question or asking for further information), partial body movement (writing or drawing), and more thinking.

An individual's output is very important in a school or classroom situation, as it is output that allows educators to determine whether or not a learner has understood what has been asked of him or her or where meaning may have been misinterpreted. In addition, as can be seen from the maths and writing examples of Matthew and Terry, output can also provide an indicator as to the way in which a learner processes information and where they may require extra support.

From the information in this section, we can learn some interesting facts, which should have an affect on the way you as an educator offer support and provide methods of instruction.
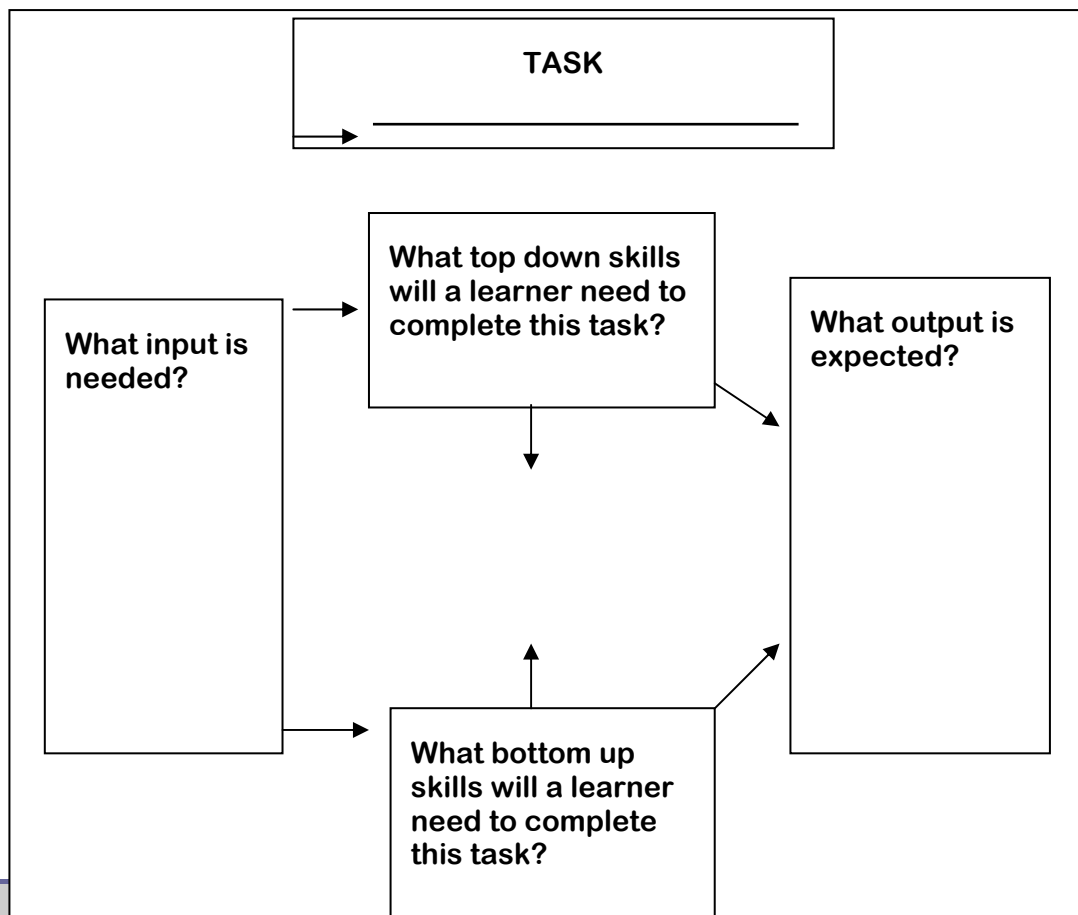
Take a good look at the information found in the fact file on the next page and then complete the activity that follows.

FACT FILE

- **Not all learners learn in the same way.**

- **Not all educators teach in the same way.**

- **Educators who learn in a particular way tend to teach in the way that they learn.**

- **Learners who learn in the same way the educator learns, frequently do better than learners who learn in a different way because the educators style of teaching doesn't suit them properly.**

- **All learners need a lot of experience and mediation to assist their understanding of new concepts and to help them link new information to their existing concept maps.**

- **Learners who come from disadvantaged backgrounds need a lot of visual (sight), tactile (touch), olfactory (smell), and gustatory (taste) stimuli to assist them in obtaining information from the world around them, especially within a classroom setting when learning about new or unfamiliar concepts is common practice.**

Spend some time thinking about a task that you are going to or have already set for your learners as part of their classroom activity. With your task in mind and using the information you have learned in this section, complete the diagram on the following page.

Remember that any task you set for learners needs clear input, and both top-down and bottom-up processing skills.

TASK
_____

What input is needed?

What top down skills will a learner need to complete this task?

What output is expected?

What bottom up skills will a learner need to complete this task?

After completing this diagram, you may want to rethink the way you present your task to your learners. You may also want to use this diagram as a means of analysing the tasks you set for your learners on a continuous basis until it becomes a natural process for you when planning classroom activities.

TAKE NOTE!

An educator who does not know the particular learner's past experience or understanding of a particular concept or knowledge should never consider learners "stupid". As an educator it is important that you accommodate different types of learning styles in your classroom in order to establish a good culture of learning.

You may well understand the importance and benefit of accommodating different learning styles in your classroom, but perhaps you are wondering just how this can be done.

The answer is found when you move from theory into practice and when you gain a deeper understanding of the different types of learning styles that can be found amongst a diverse learner population and how these learning styles can be supported.

6. Supporting learning styles in a classroom situation

In order to be able to accommodate different types of learning styles within a classroom setting, it is important that you are able to identify characteristics of various learning styles.
While the learning styles covered in this section are not the only learning styles found in educational literature, we believe that they will give you a broad idea of some of the most common learning styles found amongst a diverse learner population. In this section we will look at four learning styles developed by Honey and Mumford in 1986.

As defined by Honey and Mumford, four distinct learning styles, which can be found among learners, are:

Activist learning style

Reflector learning style

Theorist learning style, and

Pragmatist learning style

We will now spend some time looking in detail at typical characteristics of each of the above-mentioned learning styles. As you read through the information that follows, see if you can identify which learning style suits you best!

ACTIVISTS

Learners who are **Activists** enjoy classroom activities that involve their participation in the learning process. They tend to enjoy short-term problem solving as well as the challenge of new experiences. They are excited by new approaches to teaching and learning situations, but get quite bored with implementation, revision, and long-term consolidation.

Activists learn best from activities where:	**Activists learn least** from, and may react negatively against, activities where:
a) there are new or novel experiences, exercises and problems from which to learn.	a) they are in a passive role, e.g. reading, watching, or listening.
b) they can involve themselves in short "here and now" activities such as learning games, group work tasks and role-playing exercises.	b) they are required to observe and not get involved.
c) there is excitement and drama, rapid changes, or a wide range of varied activities to cope with.	c) they are required to assimilate, analyse or interpret unclear information or work they feel has no relevance to their lives.
d) they are given problem-solving activities to tackle.	d) they are given theoretical explanations.
e) they are involved with other people as part of a team and can share their ideas.	e) they must practice an activity over and over again in the form of rote learning or revision.
f) they have precise instructions to follow.	

STOP AND THINK!

> ➢ *Does your teaching style encourage or hinder this type of learner?*
> ➢ *Think about what you could do in your lesson preparation and planning to provide good learning experiences for this type of learner.*

REFLECTORS

Reflectors like to stand back and think about experiences and observe them from different perspectives. They collect information and ideas and think about them carefully before coming to any conclusion. They enjoy watching other people in action and often take a back seat when in a group situation. They tend to be cautious, especially when called on to answer a question.

Reflectors learn best from activities where:	**Reflectors learn least** from activities where:
a) they are allowed to watch and think about activities before getting down to starting them.	a) they are forced into the lime-light and have to take part in activities such as role playing in front of others.
b) they are able to stand back from things and listen or observe, e.g. observing an experiment, watching a video, etc.	b) they are thrown into situations without warning and where they must act without preparation.
c) they are allowed to think before they act, and are provided with opportunities to prepare for situations and responses.	c) they are given cut and dried instructions as to how things should be done and where they are needed to act without thinking.
d) they have the opportunity to review what has happened and what they have learnt.	d) they are expected to move rapidly from one activity to another due to time pressures.
e) they can exchange views, ideas, etc. with other people in a risk free atmosphere where they do not feel pressured to excel.	e) they are required to take short cuts or do a superficial job for practical purposes.

STOP AND THINK!

➢ *Does your teaching style encourage or hinder this type of learner?*

➢ *Think about what you could do in your lesson preparation and planning to provide good learning experiences for this type of learner.*

THEORISTS

Theorists enjoy learning about principles, theories, models and systems. They prize rationality and logic. Theorists often appear to be detached and analytical in a classroom setting and are unhappy with subjective or ambiguous experiences. They like to put ideas in order.

Theorists learn best from activities where:	**Theorists learn least** from, and may react negatively against, activities where:
a) what they are being offered is part of a system, model or theory.	a) they are forced into performing an activity which has no apparent purpose.
b) they are faced with an intellectual challenge such as being tested.	b) they have to participate in situations emphasising emotions and feelings.
c) they are involved in activities that are well structured and which have a clear purpose.	c) they are involved in unstructured activities in which uncertainty is high.
d) they are offered interesting ideas and concepts, even though these may not be immediately relevant.	d) they are asked to act or decide about something they know little about.
e) they are required to understand and participate in complex situations.	e) they find subject matter shallow or superficial.

STOP AND THINK!

> ➤ *Does your teaching style encourage or hinder this type of learner?*
>
> ➤ *Think about what you could do in your lesson preparation and planning to provide good learning experiences for this type of learner.*

PRAGMATISTS

Pragmatists positively search out new ideas and take the first opportunity to experiment with applications. They get excited about trying out new ideas in a practical manner. They also enjoy activities where they are required to solve problems or where they are provided with new experiences.

Pragmatists learn best from activities where:	**Pragmatists learn least** from, and may react negatively against, activities where:
a) they can see an obvious link between subject matter and life.	a) they can see no practical relevance or benefit in what they are doing.
b) they are introduced to ideas or techniques for doing things that have obvious practical advantages.	b) there are no clear guidelines on how to perform an activity, and no opportunity to practise an activity.
c) they have a chance to try out and practise techniques with coaching or feedback from their teacher.	c) the work they are doing on their own or in groups does not appear to be related to real-life situations.
d) they are given opportunities to implement what they have learnt.	d) they feel that they are going around in circles and not getting anywhere tangible.
e) they can concentrate on practical issues that involve planning for and then creating an obvious end product.	e) there is no apparent reward to be gained from an activity such as recognition or satisfaction.

STOP AND THINK!

> ➢ *Does your teaching style encourage or hinder this type of learner?*

> ➢ *Think about what you could do in your lesson preparation and planning to provide good learning experiences for this type of learner.*

Before moving on, take some time out to reread what Ellie had to say about Libuseng and Joyce at the beginning of this chapter.

Then discuss the questions below with your study partner.

➢ From the behaviours and characteristics Ellie used in her description of Joyce and Libuseng, what category of learning style do you think these two learners fit into?

➢ How do you think Libuseng and Joyce's particular learning style could have impacted on their learning and development in Ellie's classroom?

➢ While we do not know too much about Ellie's teaching style, there are a number of aspects revealed in the case study that indicate the types of activities and expectations Ellie has of her

learners. Can you think of any areas where there could have been a mismatch between the way in which Ellie teaches and how Libuseng and Joyce learn?

➤ How do you think Ellie could have varied her teaching style to accommodate Libuseng and Joyce?

STOP AND THINK!

> ➤ *Think about the ways in which you learn best. Can you identify the type of learner you are?* _____
>
> ➤ *Now think about the learner in your class who you have selected as a subject for your assignment. What type of learning category does he/she fall under?* _____
>
> ➤ *Is it in any way possible that your teaching style does not suit this particular learner?*
>
> ➤ *If you have answered yes to the above question, think about how you could adapt your teaching style to accommodate learning differences between your practice and the way the learner learns.*

TAKE NOTE!

From learning about the different teaching styles that different individuals respond to, you may be feeling as though you have let some of your learners down. If you are thinking these kinds of thoughts - don't.
Be positive and plan for how you can accommodate different types of learners in the future.

The activity below will give you a starting point to doing this, and lead you in the right direction.
Before moving on to the activity, spend some time reflection on the suggestions below.

It is important that as you go about the daily or weekly task of lesson preparation, you refer back to this section for guidance in planning classroom activities.

Remember too that a single lesson will never provide the best learning opportunities for ALL the different learning styles. By planning lessons ahead of time, you can look for different ways of meeting different learners' needs at different times.

Activity: *ANALYSE YOUR TEACHING STYLE*

PART 1

1. *Make a list of activities you use in your class over a three-day period.*

PART 2

2. *Using the information you have learnt on learning styles, identify the types of learners your teaching methods favour and the types of learners your teaching methods disadvantage.*

3. *Suggest four ways in which you can broaden your teaching methods in order to provide meaningful learning opportunities for the different learners in your class.*

In this chapter exploring how intrapersonal characteristics of individual learners can impact on school performance and learner development, you have covered some very interesting topics.

You have seen how differences in temperament can impact on school performance and learner motivation. You have also discovered how individual learning styles and ways of processing information can have either a positive or negative effect on a learner's school performance in ways that are directly related to educator teaching styles. In addition, you have seen (very briefly) how the cycle of poverty can create learning and motivational differences in a learner. Now it is time to move on and take a look at how **cognitive differences** internal to a learner can contribute to a learning difference within a school environment.

7. Understanding cognitive differences

We have seen in this chapter that individual learners differ in many ways. They have different temperaments, different learning styles and different ways of viewing the world. They also differ in terms of cognitive abilities.

'Cognition' refers to the way individuals think and plan and has to do with the way the mind functions. While in some ways cognition has to do with learning styles and the way individual learners process information, cognitive differences can also sometimes be observed in learners who do not display differences in any other categories.

STOP AND THINK!

Think back to what Ellie had to say about Patience at the beginning of this chapter.

Go back to the case study about Patience on page 14 and highlight parts of Ellie's description about her that show that she struggles to think and plan. Then ask yourself whether you think the differences Patience shows are just temperamental differences or if you think they may indicate something more?

*We would suggest that Patience has a temperamental difference as well as something more ... something we call **an intrinsic cognitive processing difference**. Let's find out more about cognitive processing differences right now!*

Cognitive Processing Differences

Some of the most recent information on cognitive processing differences has come from research conducted by Professor J.P Das, a professor of Educational Psychology at the University of Alberta in Canada.

Das has identified four major cognitive processes that a learner needs in order to learn academic skills such as reading, writing, spelling and maths. According to Das, these cognitive skills are also needed to be in place if a learner is to be able to follow instructions, and take part in general learning activities.

If a learner, due to poor mediation, a deprived home background and schooling environment or for any other reason, experiences a difference in one or more of the four major cognitive processes necessary for learning, s/he will experience a cognitive barrier to learning.

Professor Das developed a simple model for understanding the four major cognitive processes that a learner needs in order to learn effectively. He calls this model the **PASS** Model. And each letter of the word **PASS** represents a different cognitive function.

Planning

Attention

Simultaneous processing

Successive processing

To further assist you in your understanding of the different cognitive processes described in the PASS model, we will look at the four processes in order of their importance. We will start with attention, and then explore planning. Finally we will look at successive and simultaneous processing.

Attention

The ability to pay attention to something means being able to focus on a task from start to finish without being distracted by anything else going on in the environment or inside the individual's mind. According to researchers, the ability to attend or concentrate on a task is the most important process needed for effective education.

As you have already discovered, attention and concentration can be negatively affected by factors such as emotional difficulties, stress and anxiety or temperamental differences relating to low distractibility or high activity. Sometimes however, difficulty in concentration activities can also be due to inborn neurological (brain) processing differences.

DID YOU KNOW?

Learners with attention or concentration differences that are neurological in origin are diagnosed by neurologists and paediatricians as having **Attention Deficit Disorder** *also known as* **ADD.**

If you think back to what you learnt about the different theories of learning differences you covered in chapter 1, you will recognise that the term Attention Deficit Disorder comes from the Medical Model of assessing learners with learning differences. While other practitioners prefer to use temperament as a structure for explaining lack of attention, it is important that you as educators are aware that sometimes attention difficulties are a result of a physical or chemical difference in a learner's body. According to the Medical Model, there are two types of ADD.

ADD with hyperactivity	ADD without hyperactivity
Learners diagnosed as ADD with hyperactivity have extremely high levels of activity. Hyperactive learners are very active in class. They are out of their seats regularly and cannot sit and do work for more than a few minutes. They distract other learners and can become very aggressive and easily frustrated.	Learners diagnosed as ADD without hyperactivity are sometimes difficult to identify. They tend to be quiet and dreamy and often seem to be "off in a world of their own". Such learners seldom seem to know what to do in class, they don't appear to listen and usually only manage to complete their work with a lot of supervision.

STOP AND THINK!

➢ *Can you identify any learners in your class who you think might have attention difficulties?*

➢ *What is it about their behaviour and characteristics that make you think they could have attention problems?*

➢ *What, in your opinion, makes learners with attention problems difficult to teach?*

➢ *How do you respond to learners who show symptoms of attention difficulties?*

➢ *If you had to 'categorise' Patience, which category of Attention Disorder would you classify her under?*

A lack of attention for whatever reason, in either form, will seriously affect a child's ability to learn. Learners with attention differences are often "off task" which means that they spend large periods of time doing things that are unrelated to learning. Quite simply, learners with attention difficulties find it virtually impossible to pay attention long enough to absorb and learn new information and skills within a classroom situation.

Let's see what happens to Patience during a maths lesson.

Case Study

Patience has concentration difficulties that are interfering with her ability to learn about shapes.

Her teacher has prepared models of shapes and has cut out flat shapes which can be matched to the faces of the 3-D shapes. After spending some time matching flat shapes to the faces, she showed the class how combinations of the flat shapes could be joined together and then folded up to make the 3-D shape to which the flat shapes had been matched. She told the class that these things they had made which could be folded into 3-D shapes are called nets, and that she wanted them to make shapes using some nets that she would give to them.

Unfortunately, while Ellie was teaching her class and explaining the work to them, Patience spent some time looking at the birds outside the classroom window. She then thought about her lunch and wondered what her mother had made for her to eat. After some time, she reorganised her pencil case and sharpened her pencils. Patience also spent quite some time admiring the pretty colours on her suitcase.

When Ellie gave Patience her net, Patience had no idea what to do with it. She stared at it for a while and then built a house using her pencil case as the walls and the net for the roof.

Patience may have the ability to develop excellent reading skills, but her learning is being blocked by an inability to concentrate. Learners who have concentration difficulties are therefore very much at risk for developing all kinds of learning differences unless educators support them emotionally and adapt teaching styles to suit the learner's specific difference.

If you have learners in your class who you suspect may have attention difficulties, try out the strategies for support found on the next page and see if the learner's performance improves.

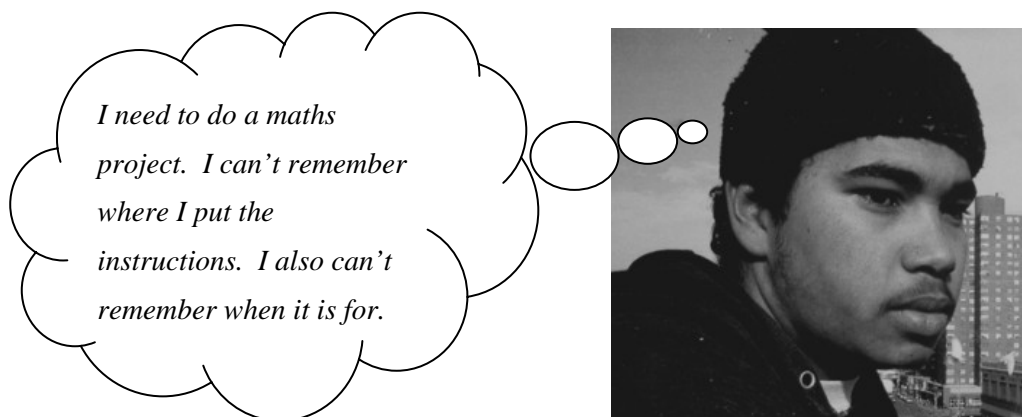## Strategies for supporting learners with attention difficulties

➤ Help the learner to calm and organise their nervous system by providing opportunities for heavy work before learning takes place. These can include scrubbing tabletops, wearing a backpack filled with books or wearing a weighted vest.

➤ Try proprioceptive input to the mouth. This means that you could encourage the learner to chew on a piece of gum or a piece of flexible rubber tubing.

➤ Minimise visual distraction by using a tabletop divider or pieces of cardboard that define a private working space.

➤ Note if the learner experiences more difficulty at one time of the day than at others. If you find this is the case, see what you can do to restructure the learning programme to accommodate maximum concentration times.

➢ Spend time ensuring that the learner knows what is going on before beginning a task.

➢ Assign a peer tutor to the learner with instructions to "check" on the learner every now and again - perhaps a signal could be designed to prompt the need to concentrate. For example, if the peer sees that the learner's concentration is wandering, he or she may gently touch the learner's shoulder in an attempt to refocus his/her concentration.

➢ Try always to match the activity you are requesting of the learner to his or her capability. If it is already difficult for a learner to attend to a task, it will be virtually impossible if the task is too hard.

➢ Plan your learners' school day so that quiet activities alternate with more active learning experiences.

It is time to move on to look at the next major cognitive process needed for learning –

Planning

Planning means asking the question "what must I do?" It also involves organising oneself in terms of where and how to start a task and how to go about successfully completing the task.

> *I need to do a maths project. I can't remember where I put the instructions. I also can't remember when it is for.*

Learners who have planning differences are often described as being disorganised. Poor planners often forget to bring the right books to school, or they forget their P.T. kit over and over again. If you read their writing, it may be muddled and senseless. They also have great difficulty planning their study or homework schedules. They can take ages to start a task because they can't decide what pen to use or where to write the date. They have no organised method of approaching a task.

As planning also involves problem solving, learners who get stuck at the beginning or middle of a task may not be able to continue because they cannot work out a plan to help them overcome their problem.

STOP AND THINK!

> ➢ *Can you identify any learners in your class who may experience planning difficulties?*

> ➢ *What in Ellie's description of Patience gives you a clue that she may be experiencing planning difficulties?*

Let's see how a difficulty with the ability to plan affects Patience's ability to learn about shapes.

Case Study

Patience has a planning problem that is affecting her growing understanding of shapes. When she is given instructions for a maths task, Patience takes a long time to begin because she can't plan how to begin this task. Sometimes she starts an activity in the middle, or at some other arbitrary place where an instruction happens to catch her eye. On the rare occasions when Patience does actually try to do the work, she sets about it very tentatively. In the net activity, she picks up a box, turns it around in her hands, puts it down, and sighs. She looks at the scissors, plays with them, holds the box, attempts to cut it and then stops. It appears that she is trying to decide what to do, but does not know where to start.

Patience does this because when she comes across an instruction that she cannot follow, she does not know how to solve the problem and so she stops the task.

Once Ellie identified that Patience has a planning difficulty, she realised that she needed to provide Patience with step-by-step instructions. Now, when the class has maths tasks to do, Ellie constantly speaks to Patience to keep her "on task". She says, "Patience, read the first instruction. What does it tell you? What are you going to do first?" When the first step has successfully been completed, Ellie continues to give prompts and ask leading questions to keep Patience going through the task. She makes sure that the tasks she sets have simple, clear instructions that lead the learners into the activity. Without these clear instructions (and additional prompts), Patience would find it difficult to even get going on the task.

The ability to be able to plan and make decisions is essential for success in school as well as in other areas of an individual's life. If you have learners in your class who you think may have planning difficulties, try out some of the support strategies suggested below and see if they make a difference in learner performance.

Strategies for supporting learners with planning difficulties

➤ When teaching a new skill, try to present a "just right" challenge by carefully breaking the activity into small sequential steps.

➤ Use themes that are of high interest to the learners when presenting them with activities where they will need to plan.

➤ Give the learner lots of verbal and physical cues to help him through an activity.

➤ Encourage the learner to tell you how she plans to approach a familiar or unfamiliar task.

➤ Assist the learners by helping them develop a few general planning skills and then help them to transfer these skills to new situations or activities.

➤ Provide the learners with the opportunity of observing other learners before beginning an activity.

➤ Help the learners with starting an activity and be on the alert for when they stop a task - this may mean that the learners have reached a problem they do not know how to overcome.

- Observe what is going on when the learner shows evidence of planning skills during activities. If the learner enjoys being next to a particular person or really enjoys a particular activity, use this information to help her become successful in other activities.

- Use direct instruction when introducing new tasks.

- Teach peer partners how to approach a learner who needs assistance with planning.

- Use a variety of reinforcers/rewards to encourage persistence during an activity.

- Initially use one-to-one instruction and gradually build up to independent work.

- Praise the learner when he accomplishes a task.

Perhaps you have a few learners in your class who you think may have a planning difficulty, but you are not quite sure. If you want to find out, you could try giving your learners the following activity to complete.

Test your learners' planning ability

Provide your learners with a piece of paper and a pencil and give them the following instructions one at a time.

Draw a rectangle at the bottom end of the page.

Draw a square above the rectangle.

Draw a triangle above the square.

Please note, instructions can be given in any language, just make sure that the learners know what the shapes are.
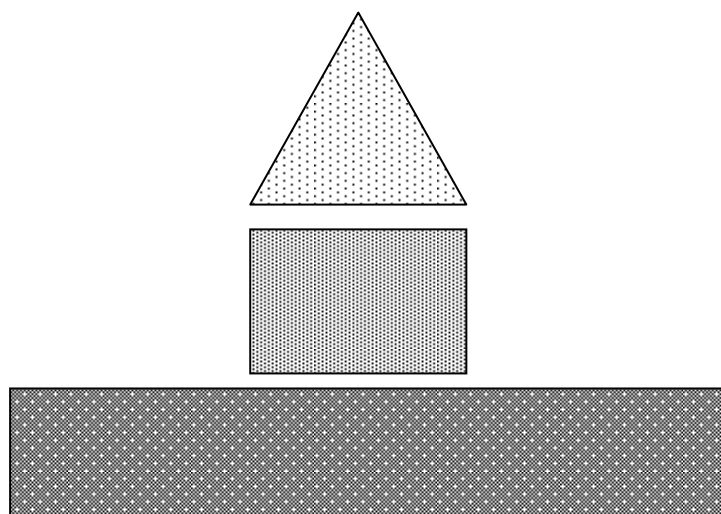
Look at the results of your learner's work. Some learners will have coped well and will have all the shapes above each other. Those who struggle to plan will have a very different looking drawing, if they even manage to do this at all.

You are moving through the different cognitive processes need for learning quite quickly. We have finished with planning and attention and now it is time to take a look at what successive processing is all about.

Successive processing

Successive processing refers to a learner's ability to process stimuli and information in the correct order. Most school-based learning whether it involves individual or group work is very successive in nature and learners with successive processing difficulties are really at a disadvantage when it comes to learning.

Successive processing happens when information moves from the eye or ear or other senses to the brain to be stored in memory.

The Palm

The Ear

The Nose
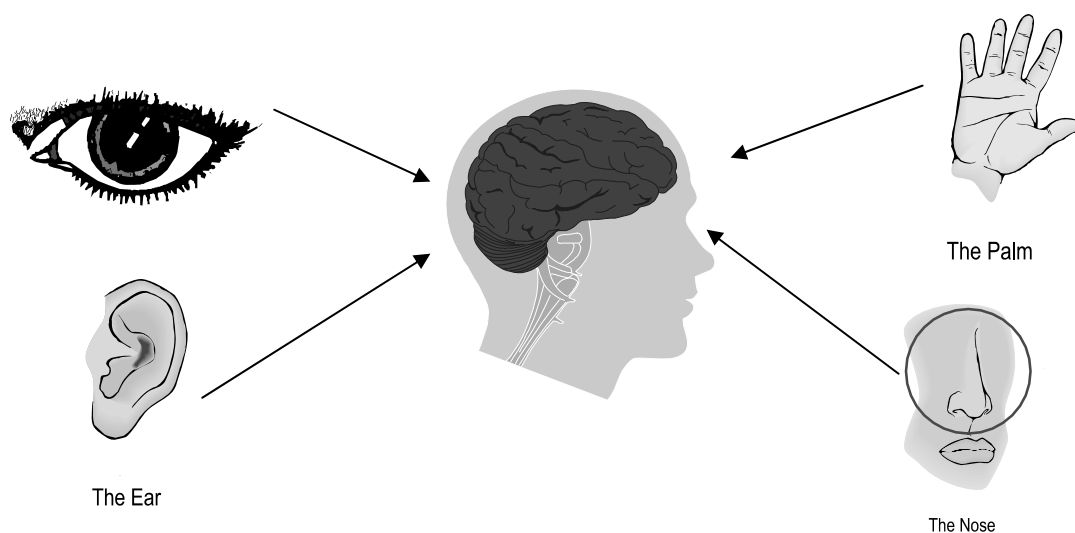
In learners with successive processing difficulties, this information either goes into the brain in the wrong order (input) or comes out of the brain in the wrong order (output). If we compare the brain to a computer this concept is more easily understood. If you type the sentence, "parebnts need to soppurt their chidlern" into a computer, the information being sent to the computer "brain" is in the wrong order. In other words, there is a problem with the input the computer receives. The computer, even though it has received incorrect input will store the mistakes and when you recall your sentence or print it out (output), it will come out in the wrong order.

parebnts need to soppurt their chidlern

In much the same way, learners who interpret information or stimuli incorrectly (input) will store the incorrect information in their brains and when required to complete a task involving output of this information will use the incorrect information in their response.

While a difficulty with successive processing can cause learning differences across all learning areas, let's take a look at how a problem with this cognitive process interferes with Patience's ability to learn about shapes.

Case Study

Poor Patience, she is really having problems!

As Ellie works with her, she discovers that Patience experiences difficulty with successive processing and that this is affecting her ability to learn about shapes.

Patience knows some names of shapes, but she struggles to relate them to each other in a meaningful way. The mistakes that she makes show that she is not able to identify shapes by putting together information that she is given about a combination of characteristics of the shape. What is important for Ellie to understand is that the information going into her brain when she reads through a page with characteristics of different shapes is not being properly interpreted or understood. Because of this, she is experiencing difficulty with her output.

With a successive processing difficulty, Patience will take longer to learn to learn about shapes than most other learners.

DID YOU KNOW?

Reading, comprehension, spelling, writing and mathematics rely heavily on successive processing and a learner with differences in this area will most certainly develop learning differences unless they receive intensive support from their educator or a remedial therapist.

On the following page you are provided with some tips for identifying learners with successive processing difficulties.

Indicators of a successive processing difficulty

➢ Young learners will have difficulty getting dressed.

➢ Learners may not know the days of the week or months of the year, despite having learnt them in class.

➢ Their concept of time is muddled.

➢ They reverse or swap letters when reading or writing. For example, saying "saw" for "was" or "on" for "no".

➢ The words in their written sentences may be in the wrong order and their stories or essays will not make too much sense and will appear "mixed up".

➢ They will not be able to follow a set of instructions or they may follow instructions in the wrong order.

➢ They struggle to learn tables and bonds and experience difficulty with more complex mathematical equations such as long division.
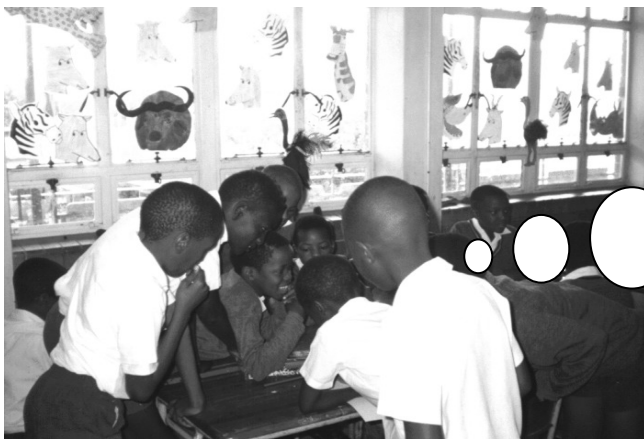
Hmm. I always wondered what the problem with Sibusiso was. Now I think he may have a successive processing difficulty. What can I do to help him?

If you have learners in your class who you suspect may have successive processing difficulties, try out the strategies on the next page and see if there is any improvement in their performance.

Strategies for supporting learners with successive processing difficulties

➢ When teaching a new skill, present a "just right" challenge by carefully breaking the activity into small sequential steps.

➢ Use themes that are of high interest to the learner when presenting them with activities where they will need to plan.

➢ Give the learner lots of verbal and physical cues to help him through an activity.

➢ Simplify tasks by reducing the number of steps, use backward chaining and plenty of modelling and cues.

➢ Incorporate structure and routine into the learner's day. Routines allow the learner to anticipate events and provide multiple opportunities to practice and repeat skills.

➢ Simplify the language you use and the instructions you give.

➢ Provide a variety of fun, stress free opportunities for the learner to practise and repeat skills that he or she is working on.

➢ Shorten activities that the learner finds difficulty with until s/he has developed strategies for coping.

➢ Use direct instruction together with whole language when teaching reading and writing.

➢ Teach the learner "shortcuts" for classroom routines and academic strategies.

Time now to look at the last major type of cognitive processing that forms part of the PASS model.

Simultaneous processing

Simultaneous processing refers to a way in which a learner is able to see the 'big picture', but not always the *parts* that make up the 'whole'. Learners who find it difficult to understand the parts of a larger concept are said to experience a simultaneous processing difficulty. (Remember what you read about Matthew and his top-down approach to learning?)

Learners who experience difficulty with simultaneous processing usually have excellent concepts about the world and when presented with many sources of information at one time, they are able to integrate this information quickly. In addition, these learners are also normally very good at problem solving and decision-making.

While you may be wondering what possible difficulty such a learner may experience within a classroom situation, you need to understand that within a school setting, learners are expected not only to provide correct answers to questions, but also to explain how they arrived at their conclusions.

Learners who are simultaneous processors start to experience problems when they are asked to explain how they arrived at a conclusion. Thinking back to the example of Matthew, many learners who are simultaneous processors can solve maths problems quickly and well, but are often unable to show the operations they used to get the answer.

Be on the look out for learners with this type of processing ability because if their cognitive differences are not understood or accommodated within a classroom situation, they may experience a drop in motivation.

Support for simultaneous processors

If you want to support learners who are simultaneous processors, you can do so by providing them with the types of activities that they will do well in and where they can excel. Refer back to the types of teaching and learning experiences that 'activists' and 'theorists' learn best from and make sure that you find opportunities to incorporate these experiences into your teaching and classroom activities.

TAKE NOTE!

Mediation and mediated teaching styles are another way of providing support for learners who experience intrapersonal differences. Issues relating to mediated teaching strategies will be provided in the Module 4 of this course specialisation in the field of Learners with Special Educational Needs.

8. Ellie's story three months later!

The prospect of meeting the needs of learners with intrapersonal differences may seem scary to you now, but it can be done.

In order to give you a glimpse of what can be achieved, let's take a look at how Ellie has begun to bring about change in her classroom after reading this chapter and implementing the suggestions for support.

Hah! Since I have a better understanding of the difficulties the "problem learners" in my class have been experiencing, I have taken some basic steps in supporting these learners and adapting my teaching style and classroom practice.

The results have been slow but there have been results. I would like to share with you how knowledge, together with a change in my attitude and teaching style has improved the teaching and learning experiences in my classroom and my motivation towards my job.

Now that I understand that Joseph has a different temperament to other learners in my class, I understand him better and try harder to accommodate him. I do not let his bad moods irritate me and I always praise him when he smiles or is kind to others. I have also established a regular class routine and if there are going to be changes to it, I try and inform Joseph ahead of time.
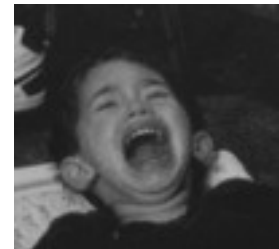
The other day, because of a family emergency, I knew that I was not going to be able to get to school on time - so I phoned Joseph at home and informed him. Joseph is still easily distracted, fidgety and bad-tempered, but with behaviour modification techniques we are working on shortening his periods of anger. Once we accomplish this, we will move on to look at other aspects of his behaviour where positive change is necessary.

While on the whole, Joseph is still fairly uncooperative, one of the learners in my class is trying to become his friend. I know that Joseph cannot be "fixed", but I am enjoying getting to know him and have found out that he actually has quite a good sense of humour. I have a number of things that I plan to do with Joseph in the future - only time will tell if they work or not.

Thomas has benefitted from the extra attention I have been paying to him. Because I now understand how difficult school is for him, I have shortened the activities that he has to do, and try and relate them to his own personal experiences. I visited his home the other day and spoke to his mother for a long time. I explained to her about the cycle of poverty and encouraged her to join a literacy class run at a local church.

Because both Thomas and his mother are now both "attending school", there has been some improvement in his school attendance. And I have spent quite a bit of time trying to find out what really interests him. This has improved his motivation to attend school and has also strengthened our relationship.

There are many things about Thomas and his motivation that I still don't know what to do about and many things that confuse me, but at least I understand the gravity of the situation he is in and I am determined to try everything in my power to keep Thomas in the school system and create opportunities for him to succeed. I don't want him to become another "drop out" and restart the cycle of poverty all over again with his own children. I have come up with one way of ensuring that Thomas comes to school as often as possible. He cleans the classroom for me everyday and runs special errands for which he is rewarded with various stationery supplies that he needs such as a little notebook, pencils, erasers, pens, rulers, etc. Thomas has also been given a "sticker book" and he is allowed to choose a sticker and place it in his book as a reward for positive behaviour during the week. In marble season, I help him add to his collection of marbles - it's not much, but it is a start.

Libuseng and Joyce are changed people – although maybe I am the changed person. To think that I thought they were arrogant when all I have to do is accommodate their learning style occasionally - and remember to set tasks that extend them.

I have found it very challenging to understand these two learners and their learning needs, but with perseverance (and some frustration), I have been able to accept them for who they are and to provide in small ways for their specific needs. Gradually they are beginning to try and take part in cooperative learning activities and that is good enough for now. My attitude towards them has changed so much!

Patience still needs a lot of patience from me. I have found out so much about her, in terms of temperament, intrapersonal or internal characteristics and the difficulties she is experiencing. I spend a lot of time with her now and have allocated a peer tutor to her to try and keep her 'on task'. Progress is very slow, but she is responding to some of the techniques and strategies I am trying out on her. Together Patience and I spend a lot of time on planning her activities and the things she needs to do during the school day. We have also devised little signs and gestures that we use to communicate with other. For example, when I scratch my head, Patience's peer tutor knows that her attention has wandered and gently touches her on the shoulder.

As I work with Patience, I keep reminding myself that while there are no quick fixes, a journey of a thousand miles begins with a single step. I have really changed in my attitude towards Patience and want to be part of her journey towards finding learning a fun and rewarding experience.

I know I will not be able to help Patience that much this year, but I am communicating with the educator who will teach her next year so that her support and development will be ongoing.

So this is my story. I am a teacher - striving to be a good one, determined to acknowledge diversity, and dedicated to finding ways of providing quality education for all who enter my classroom!

9. Conclusion

In this chapter, we have seen how characteristics internal to learners can interfere with their ability to adapt and cope at an academic level within a classroom situation. We have also seen how these intrapersonal characteristics can cause emotional, cognitive and motivational differences and difficulties in learners.

We are quite sure that as you worked through this chapter, you will have been able to identify learners who you currently teach or have taught in the past who display differences in intrapersonal characteristics that have negatively impacted on their learning. Within an inclusive education environment, it is important that you as an educator are aware of the needs of such learners and that you are able to provide some means of support to these learners that will allow them to be accommodated within the classroom setting.

Understanding how intrapersonal characteristics contribute to learning differences is an important step to understanding learners in your class who may be experiencing difficulties or barriers to learning. As a way of summarising your understanding of the issues in this chapter, do the activity below. It is based on a graphic organiser compiled by Elaine Harcombe in 1994.

Activity

Use the same learner you selected for the previous activities. Spend time with this learner and try to find out as much information as you can about his/her intrapersonal characteristics. Then read through the instructions on the following pages and complete the tasks requested of you where relevant.

a) Differences of Temperament

Using the temperament questionnaire that you completed earlier in this module, determine whether this learner has a difference of temperament that may be interfering with his or her ability to function at school. If you discover that the learner does experience a difference of temperament, write a paragraph or two describing how temperamental differences are interfering with school productivity and steps you can take to support the learner within your classroom.

b) Differences in Learning Style

Identify the type of learning style your learner has and find out whether he or she is a top-down or bottom-up processor. Once you have identified these factors, think about your teaching style and the activities you set for this learner. Write a brief report in which you describe whether there is a match or mismatch between your teaching style and the learner's learning style. If you discover that there is a mismatch between the two, provide a few practical suggestions for how you can accommodate this learner during classroom activities.

c) Cognitive Processing Differences

Think back to what you have learnt about cognitive processing differences and try and determine whether the learner you are researching exhibits any signs of this type of difference. If you discover that the learner experiences one or more cognitive processing differences, write a report in which you describe the type/s of processing differences, how you determined that such a processing difference existed, and the short and long term steps you will need to take to support this learner.