

UNDERACHIEVEMENT – The Unnecessary Disease Learning Styles ARE the Cure!

Barbara Prashnig



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by Barbara Prashnig

Learning Styles ARE the Cure!

One phenomenon, more than anything else, seems to puzzle teachers and parents alike: Why do some children begin to fail when they enter primary school?

Why do many survive into intermediate / junior high school but experience severely decreased learning motivation?

Why are even more high school students frustrated and utterly bored?

Why do they find it extremely difficult to achieve good marks in several subject areas? And why do finally give up, convinced school and learning is not for them?





Such inability to succeed in school is often accompanied by behavioural problems in class and at home, which often leads to truancy, in the worst case to alcohol problems, drugs, criminal records, involvement with gangs or extremist groups, and antisocial behaviour towards others and themselves.

As this particular problem is growing worldwide, we have to examine why these young people become at-risk students, special education candidates or drop-outs, and what can be done to help them.



Preventing Underachievement



There are many Learning Style theories and research in **Learning Styles** as well as case studies from Learning Style schools from around the world suggest that educators can alter and prevent this negative pattern of underachievement by understanding style differences and teaching with matched instructions.

However, the most comprehensive assessment tool is the Dunn & Prashnig Learning Style Analysis (LSA) for students from age 5 onwards.



All instruments are created through online questionnaires and reveal in-depth learning preferences. Some questionnaires have been shortened significantly and the wording of the questions simplified, so that generation Y and Z would find the assessment process more fun and appealing. Yet the results are equally comprehensive.

The LSA instruments assess 49 individual elements in the following six areas which are represented as layers of the pyramid model. The first four of these layers can be described as biologically/genetically determined and the last two conditioned or learned:

1. LEFT/RIGHT BRAIN DOMINANCE:

showing **sequential** or **simultaneous** brain processing strategies, **reflective** or **impulsive** thinking styles, and overall **analytic** or **holistic/global** learning styles

2. SENSORY MODALITIES:

including **auditory** (hearing, talking, inner dialogue), **visual** (reading, seeing, visualising), **tactile** (manipulating, touching), and **kinesthetic** (doing, feeling) preferences

3. PHYSICAL NEEDS:

identifying needs for **mobility** (preferences for moving or being stationary), **intake** (eating, nibbling, drinking, chewing, etc), and **time of day** preferences (personal biorhythm)

4. ENVIRONMENT:

revealing preferences for **sound** (needing music/sound or wanting it quiet), **light** (needing bright or dim lighting), **temperature** (needing cool or warm), and **work area** (wanting formal or informal/comfortable design)

5. SOCIAL GROUPINGS:

including preferences for working **alone**, in a **pair**, with **peers**, or in a **team**, and **authority** (wanting to learn with a teacher or a parent)

6. ATTITUDES:

showing **motivation** (internally or externally motivated for learning), **persistence** (high, fluctuating, or low), **conformity** (conforming or non-conforming/rebellious), **structure** (being self-directed or needing directions, guidance from others), **variety** (needing routine or changes/variety)

LEFT/RIGHT BRAIN DOMINANCE

Information Processing

Reflective thinkers like time to consider everything before they make a decision, whereas impulsive thinkers make quick decisions based on little information.

Analytic

left-brain dominant people prefer logical, step-by-step information, concentrate well on details and are highly sequential in taking in new information.

Holistic

'right-brain' dominant people prefer to see the 'big picture' when learning new things, are not interested in details and process information simultaneously.

SENSES

Auditory

Some people remember things they hear, they are good listeners, like verbal instructions and/or prefer to discuss new information.

Visual

Some people remember much of what they read and prefer instructions to be written, others remember and understand best when shown pictures, others use their imagination and many a combination of these modalities.

Tactile

People with this preference have a strong need to manipulate things and use their hands while listening or concentrating.

Kinesthetic

Some people like to be actively, physically involved in work projects and remember best through their own experiences; others have a strong intuition and need to feel good to understand and remember easily.

PHYSICAL

Mobility

Some people find it hard to sit still and need to move around a lot, especially when they are working or concentrating hard. Others prefer to stay put and avoid getting up when they work on something difficult.

Intake

Some people work better when they nibble, eat or drink while concentrating, while others find it distracting when working on difficult tasks.



ANALYTIC



HOLISTIC



AUDITORY



VISUAL



TACTILE



KINESTHETIC



MOBILITY







Time

People have different peak times when their brains are most active and then they can concentrate most easily. For some it's the early or late morning, for a few it's the afternoon and for many others it's the evening.

ENVIRONMENT

Sound

Some people need it quiet when working on something difficult, others prefer sound or music in the background.

Light

Some people prefer bright light while others work far better in low light situations - too much light disrupts their concentration.

Temperature

Some people like warm temperatures when working but others concentrate better when it's cool.

Work / Study Area

Straight back chairs with desks suit a formal working style. Lounge chairs

or lying on the floor when concentrating suit people with an informal learning and working style.

SOCIAL ASPECTS

Alone

Some people concentrate best when allowed to work on their own.

Pair

Some people prefer to have another person to work with.

Peers

Some people perform best when they can share their ideas and work within a group of like-minded people who are all at a similar level.

Team

Some people love to be part of a team (sometimes as leader) and work most easily with others.

Authority

Some people accept authority and need very regular feedback, while others prefer not to have authority figures present, and don't need supervision.











TEMPERATURE



WORK AREA

















ATTITUDES

Motivation

Some enjoy work, are self-starters and high achievers. Others can lose motivation easily, like incentives and need all other preferences matched to improve their work motivation.

Persistence

Some people always finish what they begin while others stop when they lose interest and need frequent breaks and lots of encouragement to complete tasks.

Conformity

Some people need rules and regulations and always like to do what's 'right'; others follow their own rules and like doing unconventional things, often going 'against the stream'.

Structure

Some people need clear guidelines and a framework to work within; others prefer to work independently without needing instructions.

Variety

Some people like change, variety and challenges, hardly ever doing the same thing twice. Others work better under routine and like predictability and steadiness in their work.



Parents can also contribute to a more positive school development of their children by really understanding their natural learning needs, supporting them accordingly, especially when doing homework or exam preparations.

Through knowing how learning works best for their children, they can communicate with teachers on a very different level and making sure that their teenagers don't get in with the wrong crowd.









STRUCTURE



Analytic vs. Holistic Styles



Analytic students with a *left-brain processing style* learn very differently from the way students with a *right-brain processing style* tend to learn. Analytics learn sequentially, stepby-step, building details into the process and often prefer a quiet learning environment, bright light, formal seating arrangements and tend to continue their tasks until they have been completed. This makes them generally more successful in traditional school systems which are based on analytical, logical, academic teaching approaches, reinforced at home in similar ways.



Holistic students however, have a right-brain dominant, more feeling-based thinking style, learn holistically and compared to analytics often 'backwards'. They need the big picture, an overview first, without details, and once they understand the concept, then they are able to concentrate on details. They prefer learning with what most teachers and parents would describe as distractions: background music or noise, conversation, soft illumination, informal seating, snacks, social interaction and lots of body movements.



Scatterbrains and multi-taskers

In addition, holistic learners often are not persistent, it is not their way to focus on one thing until they reach understanding - they function much more like a 'scatterbrain'.



Only if something makes sense to them, they can concentrate on details, they also get easily bored and need frequent breaks. Usually they return to their homework or assignment, work on it for a short period of time and then need another break. In addition, holistics don't like working on one thing at a time. Instead, they prefer to work on multiple tasks simultaneously and enjoy them most when permitted to choose their own sequence and the time frame.

There is a lot of information about multitasking on the Internet as well as quite a few websites which offer strategies for getting better organized and manage time better.



Right-brain dominance

The younger children are, the more right-brain dominant they are. Therefore they need more holistic, right-brain teaching methods because their analytical information processing skills are not yet developed. Interestingly, in many adults holistic information processing remains the preferred thinking style throughout life - research estimates approximately two thirds of the Western population. Most people have learned to analyse and can apply analytical thinking processes if they have to, but this makes learning harder and information intake much more difficult for them.

However, school systems, based on traditional, analytical teaching methods, force young people to do all their learning analytically because this is the preferred teaching style, especially in academic subjects in most of the high schools around the world. The result is that such systems set up students for failure - especially those whose information-processing style is strongly holistic, as seems to be the case with many teenage boys and native people in many countries.



Mismatch between teaching and learning styles

Another factor which contributes to the mismatch between teaching and learning styles is the well-researched fact that teachers are strongly analytical in their approaches, more so in high schools than in primary schools (and even more in tertiary education). They cannot imagine that their specific subject area could be studied and presented holistically, in a more right-brain way. It is just not in their thinking! Such teachers also seem to have great difficulties in accepting that there is more than one way to learn anything, because due to their own sequential left-brain thinking processes, analytics believe 'their' way is the best and the only one.

And that false belief causes **holistic students** to fail, mainly in analytical subjects such as mathematics, science, economics, etc. which causes boredom and frustration, as well as having a negative effect on their overall performance. This seems to be the main reason for learning and behaviour problems, which then often leads to the above mentioned social problems among young adolescents.



Although it is a proven fact based on research findings that traditional teaching methods only reach a small proportion of students in any class and that interactive strategies are much more successful, many students still have to suffer through frontal teaching. Learning Styles would make applying new, student-friendly approaches effective for all concerned.

Learning styles of underachievers and drop-outs





Our Education System

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid."

- Albert Einstein

Apart from the basic differences between holistic and analytic learners, international research findings and studies in the United States have clearly shown that the learning styles of underachievers and drop-outs were significantly different from those students who remained in school. There are eight learning style elements which statistically differentiated these learners.

The eight strong needs in drop-out students are:

- 1. Mobility at frequent intervals;
- 2. A variety of instructional resources from which to learn matching students' low auditory and low visual modalities and their strong preferences for tactile/kinesthetic learning (hands-on activities) and their strong need for variety rather than routines and patterns;
- 3. Preferring to learn difficult content at other times, not in early morning classes;
- 4. Recognition of their high motivation despite their inability to learn through conventional methods, positive feedback instead of put-downs;
- 5. Collegial rather than authoritarian teachers;
- 6. Resources which introduce new and difficult information through multi-sensory methods (kinesthetic, tactile, visual, auditory) to make learning easier and more appealing;
- 7. Informal seating arrangements in classrooms to respond to their inability to sit on plastic or wooden chairs for more than 10-12 minutes and their strong need for mobility;
- 8. Soft illumination because fluorescent lights in classrooms make them agitated.

From our international work with Learning Styles we know that the same features apply to underachievers everywhere. They inevitably become at-risk students and drop-outs when their learning needs are not matched over longer periods of time. If schools had their students' learning styles assessed, trained their teachers to become more aware of diversity in the classroom and teach with matched instruction methods, as well as educate parents in their children's true learning needs, fewer students would experience frustration and the inability to succeed in academic classes.

In an article, written about 10 years ago, I pointed out

10 FALSE BELIEFS ABOUT LEARNING Cause HIGH STRESS in TEACHERS

Emeritus Professor Barbara Prashnig, M.A., world traveller in education, author of "The Power of Diversity", "Learning Styles in Action" and the "Pocket PAL" is Director of Creative Learning Systems (CLS) in Auckland, New Zealand, and creator of the Learning Style Analysis (LSA) instruments describes how important it is for educators to understand learning and teaching from the perspective of human diversity.

Traditional teaching methods and educational practices have made the school system in New Zealand strong and successful over the first half of this century and brought world recognition for achievements particularly in the primary school sector. The mainstream secondary system was also quite adequate for the needs of the time. These days, however, the same system has to service such a diverse group of students like never before and unfortunately is no longer that successful.

Only 45 years ago, high divorce rates and drug abuse were uncommon in most western societies, violence in primary schools was unheard of, and discipline and academic achievement was much better in high schools worldwide.

Today it is generally accepted that unless we educate every single child and his or her parents, the whole society suffers. At-risk students and school dropouts put society at risk by what they do to us, the citizens of every nation, to our children, our property, our social and our educational system.

Discipline problems in class, negative attitudes towards school in general, and so-called learning disabilities can be eradicated, as research shows, if teaching methods are being used that make young people more responsive. These student-centred methods based on a knowledge of Learning Styles are particularly useful for students who cannot learn and retain information in ways traditional education provides.

Unfortunately, there are still too many traditional educators who cannot imagine that students can learn successfully in many different ways and learning is made unnecessarily difficult for students who have a non-academic learning style. It is my hope that the following **10 False Beliefs about learning** will bring about a new way of thinking and ultimately more flexible teaching approaches. It is my intention to provoke educators by these facts and findings, so that a new discussion can begin about what constitutes "good" teaching and learning.

False Belief No 1:

Students learn best when seated upright at a desk or table. Research shows that many human beings perform better in an informal environment. Almost all classrooms have wooden or plastic chairs and desks for students. When a person sits on a chair constructed from those materials, approximately 75% of the total body weight is supported by only four square inches of bone. The resulting stress on the tissues of the buttocks often causes fatigue, discomfort, and the need for frequent postural change. Making youngsters sit upright on their seats does not necessarily make them more responsive to learning. Studies on high school students in the USA have shown significant improvement in maths and English when taught and tested while seated on pillows, lounge chairs and small carpets, if informal design was their preference.

False Belief No 2:

Students learn best in well-lit areas and damage their eyes when they read in low light. Research shows many students perform significantly better in low light environments, and bright light makes them restless, fidgety and hyperactive. Low light calms these youngsters down and helps them relax and think clearly. The younger children are the less light they seem to need! They only need that amount of light for reading in which they feel comfortable, but their need for light seems to increase every five years. Teachers who permitted students with low light needs to sit and work in low light corners were surprised by their improved behaviour, attention and grades within six weeks. It was particularly good for underachievers!

False Belief No 3:

Students learn more and perform better in an absolutely quiet environment.

Research shows that many adults think and remember best when studying with music and 20% of one elementary population scored significantly higher in reading in a noisy environment. As there are also a few students who need absolute silence while they are learning, each classroom should have quiet sections for those who cannot concentrate with noise and should also have areas where students can learn with music in the background.

False Belief No 4:

Students learn difficult subjects best in the early morning when they are most alert. Students who do learn well in the morning are those we call "early birds" - but what about the "night owls" and "afternoon learners" of the population? When a student is on-task, the time preference is likely to be far more important than the subject or the amount of time spent on it! Research has shown that when students were allowed to learn at their preferred time of the day, their behaviour, motivation and maths scores improved. When they're allowed to take tests at their preferred time when their energy level is highest, their scores are significantly higher.

False Belief No 5:

Students who do not sit still are not ready to learn. Many students need mobility when they learn. One American study revealed that half of one school's seven grade students needed extensive mobility while learning. When they were allowed to move from one instructional area to another while learning new information, they achieved statistically better than when they had to remain seated. Most students who are actively involved are likely to learn more, pay closer attention, and achieve higher test marks than when they just sit and listen!

False Belief No 6:

Eating, chewing should not be permitted in classrooms. Many students concentrate better when they can eat, nibble, drink, chew, or bite while learning. What they really need, particularly when they are bored, frustrated or tackle difficult tasks is mouth stimulation! One study showed that students who were allowed to eat while taking a test scored significantly higher than those who needed intake but were denied it.

False Belief No 7:

Truancy is related to poor attitudes, lack of motivation, home problems, and other factors which have nothing to do with students' preferred learning time. A study of secondary school truants revealed that when their learning time preferences were matched to their academic schedules, their learning motivation and attendance improved dramatically. Their attendance also increased when they were given a teacher different from the one with whom they had been truant!

False Belief No 8:

Effective teaching requires clearly stated objectives followed by detailed, step-by-step, logical, sequential explanations until all students understand what is being taught. While holistic learners grasp large concepts and then deal with the related facts and details, analytical learners pay attention to the facts that finally build up to the concept. Holistic and analytic students learn equally well but achieve higher scores when taught in the correct style for them. Many, probably most, teachers use an analytical style, others teach only holistically. Teachers should include elements of both styles in their teaching.

False Belief No 9:

Whole group instruction is the best way to teach. The best way to teach is to allow for the variation in sociological preferences among students. Some students work well in teams or groups, but many prefer to work in pairs, and others cannot work with colleagues present. Gifted students tend to prefer to work alone. Some students prefer to work with adults rather than peers. The small percentage who cannot concentrate with others present yet do not have the skills to work independently may work well with media rather than people.

False Belief No 10:

Generally, *the older the students the easier it is for them to adapt to their teacher's style*. While older students require less teacher authority and less structure, they continue to learn differently from one another, and have varying needs. They do tend to need more independence, as they grow older, so giving them options for completing assignments and for learning required objectives is appropriate. However, their biological style features become more distinct and cannot be easily changed at will.

Research findings worldwide challenge these 10 popular, but old-fashioned beliefs. When teachers respond to students' individual learning styles as seen in the LSA pyramid, it takes as little as six to eight weeks to see positive results: a big decrease in discipline problems and increased academic achievement. As many practitioners around the world have experienced, even at-risk students begin to learn and feel better about themselves, and teachers no longer despair having them in their classes.

And here are some of the many examples about failures of famous people. Their problems in school or early jobs are legend, and it seems they all share similar learning style features which didn't fit 'The System'. They all were suffering from this unnecessary disease – **underachievement** – despite high intelligence and abilities in other fields than school learning, severely misjudged by their teachers and bosses.

Nevertheless, they made it because they never gave up!

How much easier it would be for all those who struggle through school every day if teachers and parents just understood their learning needs and would let students learn in their OWN way? Just imagine.....

FAMOUS FAILURES

www.framednetwork.com

MICHAEL JORDAN

After being cut from his high school basketball team, he went home, locked himself in his room, & cried.

STEVE JOBS

At 30 years old, he was left devastated & decompressed after being unceremoniously removed from the company he started.

OPRAH WINFREY

She was demoted from her job as a news anchor because she "wasn't fit for television."

WALT DISNEY

He was fired from a newspaper for "lacking imagination" and "having no original ideas."

THE BEATLES

Rejected by Decca Recording studios, who said "We don't like their sound" & "They have no future in show business."

ALBERT EINSTEIN

He wasn't able to speak until he was almost 4 years old, and his teachers said he'd "never amount to much."

"IF YOU'VE NEVER FAILED, YOU'VE NEVER TRIED ANYTHING NEW."

Learning Styles could well be the cure for underachievement....

Readers who are interested in helping underachieving students learn more successfully in academica subjects will find a wealth of information combined with practical examples and case studies in Barbara Prashnig's book *"Learning Styles in Action"*, Continuum Press.

With the help of Learning Styles students will go from frustration to success.



From this:



to that: