

DMI – St. Eugene University

Institute of Virtual and Distance Learning

Module Code : 770ED 45

Module Name : Expressive Arts- II
Programme :

770 ED 45 EXPRESSIVE ARTS – II

Aim:

This course is designed to master the art of expressive arts and practice the same.

Objective:

At the end of the course, student should be able to:

1. Understand work on all the components of expressive arts
2. Acquire adequate knowledge about the music and techniques related to that.
3. Understand the sequence and perspectives of the arts and design
4. Adequately trained with physical education and fitness.
5. Display different methodologies of expressive arts.

	UNIT I: Composition and Application of Fundamental Elements in Expressive Arts I • First Aid and safety Education • Functional Human Anatomy • Outdoor pursuits, recreation and leisure • Sports administration and management • Sports facilities, equipment design and management • Nutrition and human performance • Sports pedagogy • Sports and games, convectional games(netball, volleyball, football, basketball, rugby, handball, cricket) indoor games (badminton, table tennis, chess) • Administration of sports and games	
	UNIT II: Composition and Application of Fundamental Elements in Expressive Arts • Music forms • Melodic phrases • Types of forms in music • Binary form/ternary form • Composing techniques • Orchestrating techniques	

	• Make musical instruments • Applied music	
	UNIT III Historical and theoretical perspective of Expressive Arts • The scope of Art and design • Aims and objectives of arts and design • Stages of art development • Challenges of teaching art and design in Zambia • Experiments with colour	
	UNIT IV Theory And Practice of Expressive Arts • Training and fitness • Concept of physical fitness(metabolic, morphological, bone integrity/ cardio vascular fitness/ fitness test) • Aerobics and gymnastics • History and philosophy of physical education • Biomechanics analysis of performance in individual sports • Active health and wellness/ exercise physiology	

	• Aerobics and lifesaving • Sports in Zambian society • Swimming II and Athletics II • Nutrition and human performance • Adapted P.E and sports • Curriculum development in P.E	
	UNIT V: Teaching methods in Expressive Arts • Teaching techniques in art and design • Teaching methods • Classroom management • Peer and micro teaching -	
	References	

UNIT I:

Composition and Application of Fundamental Elements in Expressive Arts I

Objectives

Explain first aid and safety education

Describe sports pedagogy

First Aid and safety Education

First aid is the assistance given to any person suffering a sudden illness or injury, with care provided to preserve life, prevent the condition from worsening, and/or promote recovery. It includes initial intervention in a serious condition prior to professional medical help being available, such as performing CPR while awaiting an ambulance, as well as the complete treatment of minor conditions, such as applying a plaster to a cut. First aid is generally performed by the layperson, with many people trained in providing basic levels of first aid, and others willing to do so from acquired knowledge. Mental health first aid is an extension of the concept of first aid to cover mental health.

There are many situations which may require first aid, and many countries have legislation, regulation, or guidance which specifies a minimum level of first aid provision in certain circumstances. This can include specific training or equipment to be available in the workplace (such as an automated external defibrillator), the provision of specialist first aid cover at public gatherings, or mandatory first aid training within schools. First aid, however, does not necessarily require any particular equipment or prior knowledge, and can involve improvisation with materials available at the time, often by untrained persons.

Early history and warfare

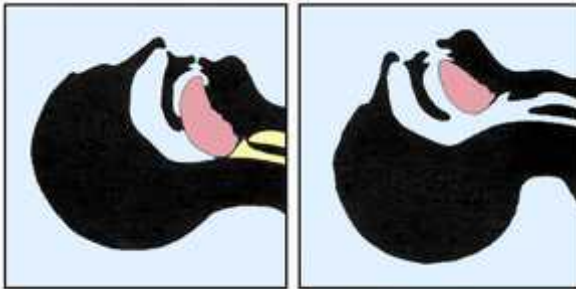
Skills of what is now known as first aid have been recorded throughout history, especially in relation to warfare, where the care of both traumatic and medical cases is required in particularly large numbers. The bandaging of battle wounds is shown on Classical Greek pottery from circa 500 BCE, whilst the parable of the Good Samaritan includes references to binding or dressing wounds. There are numerous references to first aid performed within the Roman army, with a system of first aid, supported by surgeons, field ambulances, and hospitals. Roman legions had the specific role of *capsarii*, who were responsible for first aid such as bandaging, and are the forerunners of the modern combat medic.

Further examples occur through history, still mostly related to battle, with examples such as the Knights Hospitaller in the 11th century CE, providing care to pilgrims and knights in the Holy Land

The key aims of first aid can be summarized in three key points, sometimes known as 'the three P's':-

- **Preserve life:** the overriding aim of all medical care, including first aid, is to save lives and minimize the threat of death.
- **Prevent further harm:** also sometimes called **prevent the condition from worsening**, or **danger of further injury**, this covers both external factors, such as moving a patient away from any cause of harm, and applying first aid techniques to prevent worsening of the condition, such as applying pressure to stop a bleed becoming dangerous.
- **Promote recovery:** first aid also involves trying to start the recovery process from the illness or injury, and in some cases might involve completing a treatment, such as in the case of applying a plaster to a small wound.

Key skills



In case of tongue fallen backwards, blocking the airway, it is necessary to hyperextend the head and pull up the chin, so that the tongue lifts and clears the airway.

Certain skills are considered essential to the provision of first aid and are taught ubiquitously. Particularly the "ABC"s of first aid, which focus on critical life-saving intervention, must be rendered before treatment of less serious injuries. ABC stands for Airway, Breathing, and Circulation. The same mnemonic is used by all emergency health professionals. Attention must first be brought to the airway to ensure it is clear. Obstruction (choking) is a life-threatening emergency. Following evaluation of the airway, a first aid attendant would determine adequacy of breathing and provide rescue breathing if necessary. Assessment of circulation is now not usually carried out for patients who are not breathing, with first aiders now trained to go straight to chest compressions (and thus providing artificial circulation) but pulse checks may be done on less serious patients.

Some organizations add a fourth step of "D" for Deadly bleeding or Defibrillation, while others consider this as part of the Circulation step. Variations on techniques to evaluate and maintain the ABCs depend on the skill level of the first aider. Once the ABCs are secured, first aiders can begin additional treatments, as required. Some organizations teach the same order of priority using the "3Bs":

Breathing, Bleeding, and Bones (or "4Bs": Breathing, Bleeding, Brain, and Bones). While the ABCs and 3Bs are taught to be performed sequentially, certain conditions may require the consideration of two steps simultaneously. This includes the provision of both artificial respiration and chest compressions to someone who is not breathing and has no pulse, and the consideration of cervical spine injuries when ensuring an open airway.

Preserving life

In order to stay alive, all persons need to have an open airway—a clear passage where air can move in through the mouth or nose through the pharynx and down into the lungs, without obstruction. Conscious people will maintain their own airway automatically, but those who are unconscious (with a GCS of less than 8) may be unable to maintain a patent airway, as the part of the brain which automatically controls breathing in normal situations may not be functioning.

If the patient was breathing, a first aider would normally then place them in the recovery position, with the patient leant over on their side, which also has the effect of clearing the tongue from the pharynx. It also avoids a common cause of death in unconscious patients, which is choking on regurgitated stomach contents.

The airway can also become blocked through a foreign object becoming lodged in the pharynx or larynx, commonly called choking. The first aider will be taught to deal with this through a combination of 'back slaps' and 'abdominal thrusts'.

Once the airway has been opened, the first aider would assess to see if the patient is breathing. If there is no breathing, or the patient is not breathing normally, such as agonal breathing, the first aider would undertake what is probably the most recognized first aid procedure—

cardiopulmonary resuscitation or CPR, which involves breathing for the patient, and manually massaging the heart to promote blood flow around the body.

Promoting recovery

The first aider is also likely to be trained in dealing with injuries such as cuts, grazes or bone fracture. They may be able to deal with the situation in its entirety (a small adhesive bandage on a paper cut), or may be required to maintain the condition of something like a broken bone, until the next stage of definitive care (usually an ambulance) arrives.

Training



First aid scenario training in progress

Basic principles, such as knowing to use an adhesive bandage or applying direct pressure on a bleed, are often acquired passively through life experiences. However, to provide effective, life-saving

first aid interventions requires instruction and practical training. This is especially true where it relates to potentially fatal illnesses and injuries, such as those that require cardiopulmonary resuscitation (CPR); these procedures may be invasive, and carry a risk of further injury to the patient and the provider. As with any training, it is more useful if it occurs before an actual emergency, and in many countries, emergency ambulance dispatchers may give basic first aid instructions over the phone while the ambulance is on the way.

Training is generally provided by attending a course, typically leading to certification. Due to regular changes in procedures and protocols, based on updated clinical knowledge, and to maintain skill, attendance at regular refresher courses or re-certification is often necessary. First aid training is often available through community organizations such as the Red Cross and St. John Ambulance, or through commercial providers, who will train people for a fee. This commercial training is most common for training of employees to perform first aid in their workplace. Many community organizations also provide a commercial service, which complements their community programmes.

Symbols

Although commonly associated with first aid, the symbol of a red cross is an official protective symbol of the Red Cross.



Safety is the state of being "safe" (from French *sauf*), the condition of being protected against physical, social, spiritual, financial, political,

emotional, occupational, psychological, educational, or other types or consequences of failure, damage, error, accidents, harm, or any other event that could be considered non-desirable. Safety can also be defined to be the control of recognized hazards to achieve an acceptable level of risk. This can take the form of being protected from the event or from exposure to something that causes health or economical losses. It can include protection of people or of possessions.

THE IMPORTANCE OF SAFETY EDUCATION

Injuries are the leading threat to a child's health. There are more preventable deaths to children from bicycle accidents, automobile accidents, burns, drownings, falls, chokings and poisonings than from all contagious diseases combined. "By nearly every measure, injury ranks as one of the nation's most pressing health problems." A summary from the National Center for Health Statistics showed that injuries disproportionately strike the young. Statistics showed that 44% of the deaths to children from 1 to 4 years old were injury related. The percentage of deaths attributed to injuries for 5 to 14 year old children was 52%, and 63% for the age group of 15 to 24 years old. With respect to children, one problem is a lack of safety education.

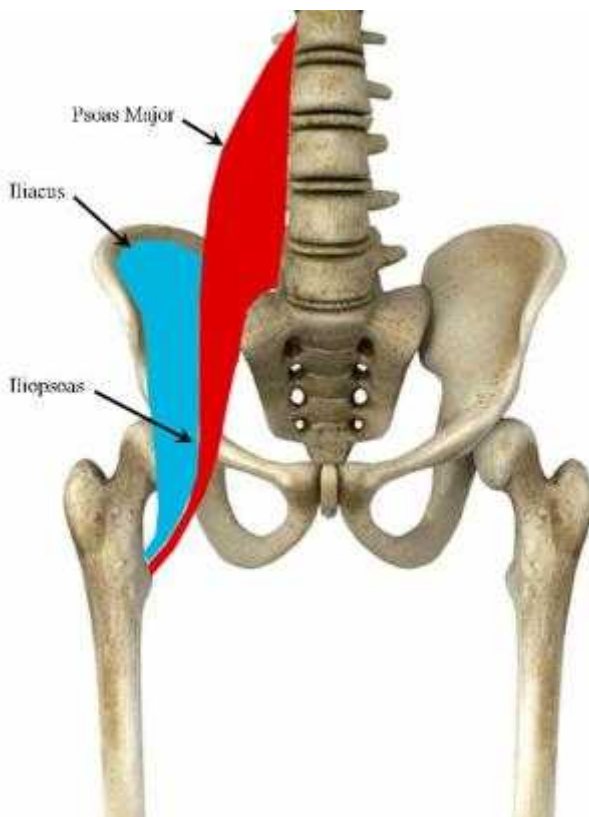
The costs to society for childhood injuries are enormous. These include health care costs, loss of parent productivity while parents worry about and care for their child, costs to the legal system, and strains on schools. There is also the societal loss of unrealized future contributions by children who suffer fatal or brain damaging injuries. Worse are the effects on the quality of life for the children and their parents: unnecessary physical and emotional pain, stress, financial pressures, and negative effects on the child's education and development.

Functional Anatomy

Understanding anatomy is the first step in understanding function. Why is it so important? The human body is this incredible machine that relies on muscles to perform everything from moving joints to breathing to seeing. Moving joints is how the body moves from point A to point B. The nervous system within our body relies on a large kinetic chain of muscles contracting and relaxing to flex, extend and rotate joints. If you don't take the time to understand the details of muscle function, you will never understand the body's function.

Many times as clinicians we got caught up in all of the latest modalities and tools, but at the end of the day, all we're trying to do is restoring function in an injured athlete. And, if you are looking to prevent injury, the key is finding dysfunction and restoring it. Muscles which are inactive, overactive, or tight will eventually cause tissue breakdown.

Anyone can look at a basic anatomy book or look at a simple muscle function chart in an attempt to memorize what a muscle does. But, there's more to understanding function than just memorizing the major movement of the muscle. It's not hard to remember that the Iliopsoas (hip flexor) flexes the hip.



But it isn't until you look at the details that you realize that it also externally rotates the hip and the Psoas portion of the muscle can assist in lumbar extension. This is because the Psoas originates on the lumbar spine, moves anteriorly towards the front of the body where it joins with the Iliacus and finally inserts on the lesser trochanter of the femur.

So, if you are treating an athlete for low back pain and you aren't looking at the Iliopsoas, you aren't adequately restoring their function.

Muscle function is simple...when you know the origin and insertion of each muscle. Spend your time brushing up on the start and end points

of each muscle, and you've got it! People get confused by muscles, but at the end of the day, keep in mind that when a muscle contracts, it simply shortens. When it relaxes, it will likely lengthen (at least partially). So, if you know the exact start and finish points for each muscle, you understand all of it's actions, simply by understanding that muscle only shortens when it contracts.

Major Muscle groups to focus your attention on:

- Hip Flexors
- Hamstrings
- Glutes
- Piriformis
- Abdomen and core
- Rotator Cuff
- Scapular Stabilizers
- Lower Leg and Calf

Outdoor pursuits, recreation and leisure

Outdoor recreation or outdoor activity is leisure pursuits engaged in the outdoors, often in natural or semi-natural settings out of town. Examples include adventure racing, backpacking, cycling, camping, canoeing, canyoning, caving, discgolf, fishing, hiking, horseback riding, hunting, kayaking, mountaineering, photography, adventure park, rock climbing, running, sailing, skiing, surfing and sports. Outdoor recreation may also refer to a team sport game or practice held in an outdoor setting.

Beneficial use is related to the physical and social rewards that goal-directed activity instills in individuals or groups. Some outdoor goal-directed activities are: backpacking, canoeing, canyoning, caving, climbing, hiking, hill walking, hunting, kayaking, and rafting. Arguably broader groupings of goal-directed outdoor activities would

include water sports, snow sports, and horseback riding. Goal-directed outdoor activities are predominately physical, though they may also be mentally, emotionally, and spiritually rewarding. The outdoors as a physical or social setting may meet the needs of physical health, self-sufficiency, risk-taking, the building of social ties (including teambuilding), and the needs of achievement (such as practicing, enhancing and challenging skills, testing stamina and endurance, and seeking adventure or excitement). The outdoors can be an environment in which people "show what they can do".

Pleasurable appreciation encourages experiences of being "let in on nature's show". Enhancement of inner perceptual and/or spiritual life may be experienced through outdoor activities and outdoor-related activities such as nature study, aesthetic contemplation, meditation, painting, photography, archeological or historical research, and indigenous culture among others. These activities may also be physically rewarding.

Many people in modern civilizations believe that the value of nature is found only in its "utilitarian value" (beneficial use). They would discount the inner perceptual and/or spiritual benefits of the "intrinsic value of nature" that may be experienced during pleasurable appreciation.

Outdoor activities may also be pursued for the purposes of finding peace in nature, enjoying life, and relaxing.^[3] They are alternatives to expensive forms of tourism. Outdoor activities are also frequently used as a medium in education and teambuilding.

Trekking



Trekking is about enjoying a great walking holiday. Treks can be day hikes, overnight or extended hikes. An example of a day trek is hiking during the day and returning at night to a lodge for a hot meal and a comfortable bed. Trekking can be more enjoyable when undertaken while being generally physically fit. Physical preparation for trekking includes cycling, swimming, jogging and long walks. To ensure the safest experience possible it is generally a good idea to have some form of experience with basic survival skills, first aid, and orienteering when going for extended hikes or staying out overnight. It's also expected that backpackers leave no trace while enjoying the outdoors.

Mountain biking



Mountain biking is about steering a mountain cycle over rocky tracks and around boulder-strewn paths. To tackle the trails, the requirements are physical strength, stamina and a strong mountain cycle. Mountain bikes or ATBs (all-terrain bikes) feature a frame and fork that are rugged. Their frames are often built of aluminum so they are lightweight and stiff, making them efficient to ride. There are many styles of mountain biking that are practiced. These styles include: all mountain, downhill, trials, dirt jumping, trail riding, and cross country. While there are many different styles of mountain biking, cross country and trail riding are the most common.

Balance, core strength, and endurance are all physical traits that are required to go mountain biking. In addition to this, riders need to possess bike handling skills as well as the ability to make basic repairs to their bikes if needed. Advanced mountain bikers often attempt technical descents as well as some of the more intense styles of mountain biking such as downhill and freeriding.

Canyoning



Canyoning is an activity which involves climbing, descending, jumping and trekking through canyons. The sport originates from caving and involves both caving and climbing techniques. When people mention canyoning they are typically referring to descents that involve rope work, down-climbing, or jumps that are technical in nature. Canyoning is frequently done in remote and rugged settings and often requires navigational, route-finding and other wilderness skills.

Recreation is an activity of leisure, leisure being discretionary time. The "need to do something for recreation" is an essential element of human biology and psychology. Recreational activities are often done for enjoyment, amusement, or pleasure and are considered to be "fun".

Prerequisites to leisure

Humans spend their time in activities of daily living, work, sleep, social duties, and leisure, the latter time being free from prior commitments to physiologic or social needs, a prerequisite of recreation. Leisure has increased with increased longevity and, for many, with decreased hours spent for physical and economic survival, yet others argue that time pressure has increased for modern people, as they are committed to too many tasks. Other factors that account for an increased role of recreation are affluence, population trends,

and increased commercialization of recreational offerings. While one perception is that leisure is just "spare time", time not consumed by the necessities of living, another holds that leisure is a force that allows individuals to consider and reflect on the values and realities that are missed in the activities of daily life, thus being an essential element of personal development and civilization. This direction of thought has even been extended to the view that leisure is the purpose of work, and a reward in itself, and "leisure life" reflects the values and character of a nation. Leisure is considered a human right under the Universal Declaration of Human Rights.

Sports administration and management

Sport managers and administrators run sports teams, recreational programs, ski areas, sports governing bodies, college sports departments, and so on. They are business people specializing in sports organizations.

On the one hand, sport management/administration jobs can vary widely. A community recreation director is going to have different responsibilities than a minor league general manager who's going to have different responsibilities than a high school athletic director.

On the other hand, most sport managers/administrators are similar in that they work with staffs, establish and oversee budgets, and are aware of, and possibly develop, marketing plans. A general manager of a minor league baseball team, for example, concerns himself or herself not only with ticket sales, but also whether or not the club controls concessions, how much to charge for parking, and whether to book a band after the game

Sport management is a field of education concerning the business aspects of sports and recreation. Some examples of sport managers include the front office system in professional sports, college sports

managers, recreational sport managers, sports marketing, event management, facility management, sports economics, sport finance, and sports information.

Sports facilities, equipment design and management



A **sport venue** is a building, structure, or place in which a sporting competition is held.

Types of sports venues

Arena

- Baseball park
- Billiard hall
- Bullring
- Gym
- Ice hockey arena
- Motorsport venues (autodrome)
- Horse racing venues (hippodrome)
- Shooting range
- Speed skating rink
- Stadium
- Swimming pool

- Velodrome

Sports equipment is any object used for sport or exercise. Examples of sports are listed below.

Balls

Balls are used for ball games, including footballs.

Exercise equipment

Examples for exercise include swiss balls, weights, chin-up bars, equipment for the gym. Also protective equipment such as weight lifting belts and bench shirts for weight training and powerlifting.

Flying discs



Flying disc

Flying discs are used for various games such as freestyle, disc golf and ultimate.

Footwear



Cleats

Footwear for sports includes:

- Boards for surfing, skateboarding, wakeboarding and snowboarding
- Skates for sports like roller skating, ice skating
- Skis for skiing and water skiing
- Football boots and separate Soccer cleats (Outdoor soccer cleats have studs but indoor soccer shoes have a flat bottom)
- Cricket spikes
- Golf shoes
- Track cleats
- Prosthetics like the Cheetah Flex-Foot running blade
- Running shoes

Goals



A soccer goal

In many games, goals are at each end of the playing field, there are two vertical posts (or uprights) supporting a horizontal crossbar. In some games, such as association football or hockey, the object is to pass the ball or puck between the posts below the crossbar, while in others, such as those based on Rugby, the ball must pass over the crossbar instead.

Nets

Nets are used for tennis, volleyball, football, basketball and badminton. A different type of net is used for various forms of fishing.

Protective equipment

Protective equipment is often worn for sports including motor sport and contact sports, such as ice hockey and American football or sports where there is a danger of injury through collision of players or other objects. Protective equipment includes:

- Football helmet
- Jock strap
- Mouthguards
- Shin pads
- Ski suits

Racquets

Racquets are used for racquet sports such as tennis, squash, and badminton.

Rods and tackle



An angler on the Kennet and Avon Canal, England, surrounded by his tackle

Fishing rods and fishing tackle are primarily used for fishing and sport fishing.

Sticks, bats and clubs

Sticks are used for sports such as hockey and lacrosse. Bats are used for sports such as baseball and cricket. Clubs are used mainly for golf (Golf club)

Vehicles

Vehicles (sometimes specialized) are used as equipment for some sports, including motor sport, cycling, aeronautics, sailing and hot air ballooning.

Wickets and bases

Wickets and bails for cricket. Bases are for baseball.

Managing facilities

A well-managed facility is pivotal to providing sport and recreational opportunities for local communities.

Amidst a backdrop of increasing demands on government budgets, sport and recreation facilities are being asked to become increasingly financially self-sufficient. Business plans, feasibility studies, life-cycle cost plans, design aspects, construction processes and the operational asset management of facilities are being placed under more scrutiny than ever before. This applies to both local government owned facilities and community based facilities.

The management of a facility plays a crucial role in its continued successful operation. Management planning will impact significantly on design, administrative and financial considerations and occurs in the initial concept stages of planning for a facility. The two most crucial factors in successful management are financial control and effective service delivery to ensure a smooth operation.

In order to remain relevant and to be an ongoing success, managers of recreation facilities need to plan ahead, anticipating change and modifying services accordingly. Without a management plan in place, organisations run the risk of being ineffective, vulnerable to changing trends and wasting valuable resources. A management plan is designed to deliver a project - not only during the set-up phase, but also for the lifetime of the project.

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resources. A management plan is designed to deliver a project — not only during the set-up phase, but also for the lifetime of the project.

Your management plan is a resource that everyone involved in the facility can work to. However, there are a number of key principles that should be considered. The information provided in this guide will assist facility managers to achieve efficient management practices, which will ultimately increase the likelihood of a successful facility.

What is a management plan?

A management plan is a formal planning tool that aims to design the future operations of the facility. It is a written document that outlines:

- the aims and objectives of the facility — what are we trying to achieve?
- the strategies used to meet the objectives — how will we achieve it?
- the evaluation methods used to measure performance — how will we know if we are achieving it?

A good management plan will improve the effectiveness and efficiency of your facility. It identifies who your clients are, what services are on offer and why. It will provide you with short and long term goals, improve the quality of your services and products and enable you to manage a more successful operation.

Specific outcomes of a good management plan include:

- **Identification of corporate direction**

How the facility fits into the broader corporate direction of the parent organisation.

- **Systematic forward thinking**

Management is forced to evaluate the consequences of alternative strategies and tactics.

- **Identification of customers and competitors**

Services and products are tailored to meet customer needs. New opportunities and competitive advantages are discovered.

- **Formation of realistic goals**

A clear statement of what the organisation/facility does and where its key stakeholders want it to be.

- **Co-ordination of action and resources**

The amount of human and financial resources needed to launch or operate a facility (previously identified in the Feasibility Assessment) is reviewed and finalised.

- **Production of financial forecasts**

The financial requirements for any capital works, and for all operational activities are detailed. Cash flows and balance sheets are projected for the next 1–5 years.

- **Risk minimisation**

Potential problems and risk associated with managing the facility are identified and ways of overcoming or mitigating them are detailed.

- **Formation of Performance Indicator**

Ways of measuring and evaluating the effectiveness of the facility are established.

Nutrition and human performance

Nutrition is the science that interprets the interaction of nutrients and other substances in food (e.g. phytonutrients, anthocyanins, tannins, etc.) in relation to maintenance, growth, reproduction, health and disease of an organism. It includes food intake, absorption, assimilation, biosynthesis, catabolism and excretion.

The diet of an organism is what it eats, which is largely determined by the availability, the processing and palatability of foods. A healthy diet includes preparation of food and storage methods that preserve nutrients from oxidation, heat or leaching, and that reduce risk of food-born illnesses.

Registered dietitian nutritionists (RDs or RDNs) are health professionals qualified to provide safe, evidence-based dietary advice which includes a review of what is eaten, a thorough review of nutritional health, and a personalized nutritional treatment plan. They also provide preventive and therapeutic programs at work places, schools and similar institutions. Certified Clinical Nutritionists or CCNs, are trained health professionals who also offer dietary advice on the role of nutrition in chronic disease, including possible prevention or remediation by addressing nutritional deficiencies before resorting to drugs. Government regulation especially in terms of licensing, is currently less universal for the CCN than that of RD or RDN. Another advanced Nutrition Professional is a Certified Nutrition Specialist or CNS. These Board Certified Nutritionists typically specialize in obesity and chronic disease. In order to become board certified, potential CNS candidate must pass an examination,

much like Registered Dietitians. This exam covers specific domains within the health sphere including; Clinical Intervention and Human Health.

Poor diet may have an injurious impact on health, causing deficiency diseases such as blindness, anemia, scurvy, preterm birth, stillbirth and cretinism; health-threatening conditions like obesity and metabolic syndrome; and such common chronic systemic diseases as cardiovascular disease, diabetes, and osteoporosis. A poor diet can cause the wasting of kwashiorkor in acute cases, and the stunting of marasmus in chronic cases of malnutrition.

Sports pedagogy

Sport Pedagogy is the academic field of study, which is located at the intersection between sport and education. As a discipline, sport pedagogy is concerned with learning, teaching and instruction in sport, physical education and related areas of physical activity. Whilst sport pedagogy is mostly regarded as a sub-discipline of sport science (in North America frequently referred to as kinesiology), its theoretical grounding is also underpinned by the general education sciences. As a scientific subdiscipline sport pedagogy is therefore allied to both fields, sport science and education.

.Sport Pedagogy offers an essential starting point for anyone who cares about sport, education and young people. It offers invaluable theoretical and practical guidance for studying to become an effective teacher or coach, and for anyone who wants to inspire children and young people to engage in and enjoy sport for life. The book also focuses on you as a learner in sport, prompting you to reflect critically

Sport Pedagogy is about learning in practice. It refers both the ways in which children and young people learn *and* the pedagogical knowledge and skills that teachers and coaches need to support them

to learn effectively. Sport pedagogy is the study of the place where sport and education come together.

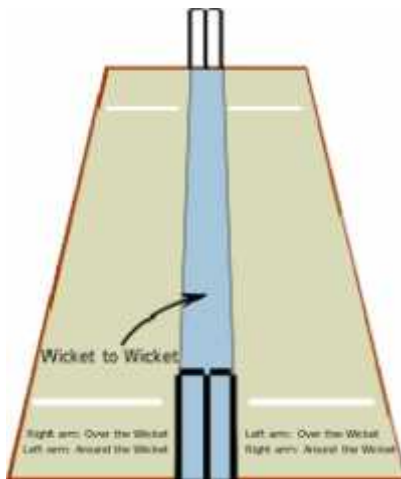
Etymology and Context

In its original meaning the word pedagogy, and therefore also sport pedagogy, relates to the purposeful development of children and young people. The word pedagogy derives from the Greek (pais='child'; agogein='to lead'; 'to instruct' and implies the purposeful art of leading, educating or teaching young people. In recognition of the fact that humans are lifelong learners and also potentially engaged in lifelong physical activity, current definitions of sport pedagogy favour a broader view of the context in which sport pedagogy is located. To reflect this, the term sport pedagogy is used more holistically to include pedagogies that relate to adult learning and participation in sport and physical activity across all age ranges.

Sports and games, convectional games(netball, volleyball, football, basketball, rugby, handball, cricket) indoor games (badminton, table tennis, chess)

Field handball (also known as outdoor handball or grass handball) was the original form of what is now handball and was played at the 1936 Summer Olympics in Berlin.

The sport is played on a grass field (similar to an Association football field) between 90 and 110 meters long, 55 to 65 meters wide. The field has two parallel lines 35 metres from the goal line, which divides the field into 3 sections; each section can have up to 6 players of each team. The goal area is a semicircular line with a 13-metre radius, and the penalty mark at 14 metres from the goal. The goal is 7.32 meters wide and 2.44 meters high.



A perspective view of the cricket pitch from the bowler's end. The bowler runs in past one side of the wicket at the bowler's end, either 'over' the wicket or 'round' the wicket.

A football pitch (also known as a football field or soccer field) is the playing surface for the game of football. Made of turf (grass) or artificial turf, its dimensions and markings are defined by Law 1 of the Laws of the Game, "The Field of Play".

1. rugby

noun

a team game played with an oval ball that may be kicked, carried, and passed from hand to hand. Points are scored by grounding the ball behind the opponents' goal line (thereby scoring a try) or by kicking it between the two posts and over the crossbar of the opponents' goal.

Badminton is a recreational sport played by either two opposing players (singles) or two opposing pairs (doubles), that take positions on opposite halves of a rectangular court divided by a net. Players score points by striking a shuttlecock with their racquet so that it

passes over the net and lands in their opponents' half of the court. Each side may only strike the shuttlecock once before it passes over the net. A rally ends once the shuttlecock has struck the floor, or if a fault has been called by either the umpire or service judge or, in their absence, the offending player, at any time during the rally.

The shuttlecock is a feathered or (mainly in non-competitive matches) plastic projectile whose unique aerodynamic properties cause it to fly differently from the balls used in most racquet sports; in particular, the feathers create much higher drag, causing the shuttlecock to decelerate more rapidly than a ball. Shuttlecocks have a much higher top speed, when compared to other racquet sports. Because shuttlecock flight is affected by wind, competitive badminton is played indoors. Badminton is also played outdoors as a casual recreational activity, often as a garden or beach game.

Since 1992, badminton has been an Olympic sport with five competition/events: men's and women's singles, men's and women's doubles, and mixed doubles, in which each pair consists of a man and a woman. At high levels of play, especially in singles, the sport demands excellent fitness: players require aerobic stamina, agility, explosive strength, speed and precision. It is also a technical sport, requiring good motor coordination and the development of sophisticated racquet movements.

The Laws of Badminton

1. COURT AND COURT EQUIPMENT

1.1. The court shall be a rectangle marked out with lines 40 mm wide as shown in Diagram A.

1.2. The lines marking out the court shall be easily distinguishable and preferably be coloured white or yellow.

1.3. All the lines shall form part of the area which they define.

1.4. The posts shall be 1.55 metres in height from the surface of the court and shall remain vertical when the net is strained as provided in Law 1.10.

1.5. The posts shall be placed on the doubles side lines as in Diagram A irrespective of whether singles or doubles is being played. The posts or its supports shall not extend into the court beyond the side lines.

1.6. The net shall be made of fine cord of dark colour and even thickness with a mesh of not less than 15 mm and not more than 20 mm.

1.7. The net shall be 760 mm in depth and at least 6.1 metres wide.

1.8. The top of the net shall be edged with a 75 mm white tape doubled over a cord or cable running through the tape. This tape shall rest upon the cord or cable.

1.9. The cord or cable shall be stretched firmly, flush with the top of the posts.

1.10. The top of the net from the surface of the court shall be 1.524 metres at the centre of the court and 1.55 metres over the side lines for doubles.

1.11 There shall be no gaps between the ends of the net and the posts. If necessary, the full depth of the net at the ends shall be tied to the posts.

Chess is a two-player sport played on a chessboard, a checkered gameboard with 64 squares arranged in an eight-by-eight grid. Chess is played by millions of people worldwide in homes, urban parks, clubs, online, correspondence, and in tournaments. In recent years, chess has become part of some school curricula.

Each player begins the game with 16 pieces: one king, one queen, two rooks, two knights, two bishops, and eight pawns. Each of the six piece types moves differently. The most powerful piece is the queen and the least powerful piece is the pawn. The objective is to 'checkmate' the opponent's king by placing it under an inescapable threat of capture. To this end, a player's pieces are used to attack and capture the opponent's pieces, while supporting their own. In addition to checkmate, the game can be won by voluntary resignation by the opponent, which typically occurs when too much material is lost, or if checkmate appears unavoidable. A game may also result in a draw in several ways.

Chess is believed to have originated in India, some time before the 7th century; the Indian game of chaturanga is also the likely ancestor of xiangqi and shogi. The pieces took on their current powers in Spain in the late 15th century; the rules were finally standardized in the 19th century. The first generally recognized World Chess Champion, Wilhelm Steinitz, claimed his title in 1886.

Netball (formerly known as Women basketball but now played by both males and females), a limited-contact team sport in which two teams of seven try to score points against one another by placing a ball through a high hoop.

Tennis is played on a rectangular, flat surface, usually grass, clay, or a hardcourt of concrete, asphalt, or acrylic; occasionally carpet is used for indoor play. The court is 78 feet (23.77 m) long, and 27 feet (8.23 m) wide for singles matches and 36 ft (10.97 m) for doubles

matches. Additional clear space around the court is required in order for players to reach overrun balls. A net is stretched across the full width of the court, parallel with the baselines, dividing it into two equal ends. It is held up by either a metal cable or cord that can be no more than 0.8 cm (1/3 inch). The net is 3 feet 6 inches (1.067 m) high at the posts and 3 feet (0.914 m) high in the center. The net posts are 3 feet (0.914 m) outside the doubles court on each side or, for a singles net, 3 feet (0.914 m) outside the singles court on each side.

Table tennis, also known as **ping pong**, is a sport in which two or four players hit a lightweight ball back and forth across a table using a small, round bat. The game takes place on a hard table divided by a net. Except for the initial serve, players must allow a ball played toward them only one bounce on their side of the table and must return it so that it bounces on the opposite side. Points are scored when a player fails to return the ball within the rules. Play is fast and demands quick reactions. Spinning the ball alters its trajectory and limits an opponent's options, giving the hitter a great advantage. When doing so the hitter has a better chance of scoring if the spin is successful.

Equipment

Ball



Assortment of 40 mm table tennis balls

The international rules specify that the game is played with a sphere having a mass of 2.7 grams (0.095 oz) and a diameter of 40 millimetres (1.57 in). The rules say that the ball shall bounce up 24–26 cm (9.4–10.2 in) when dropped from a height of 30.5 cm (12.0 in) onto a standard steel block thereby having a coefficient of restitution of 0.89 to 0.92. The ball is made of plastic as of 2015, colored white or orange, with a matte finish. The choice of ball color is made according to the table color and its surroundings. For example, a white ball is easier to see on a green or blue table than it is on a grey table. Manufacturers often indicate the quality of the ball with a star rating system, usually from one to three, three being the highest grade. As this system is not standard across manufacturers, the only way a ball may be used in official competition is upon ITTF approval (the ITTF approval can be seen printed on the ball).

The 40 mm ball was introduced after the 2000 Summer Olympics. However, this created some controversy at the time as the Chinese National Team argued that this was merely to give non-Chinese players a better chance of winning since the new type of ball has a slower speed (a 40 mm table tennis ball is slower and spins less than the original 38 mm one, and at that time, most Chinese players were playing with fast attack and smashes). China won all four Olympic gold medals and three silvers in 2000, and have continued to dominate.

Administration of sports and games

Sport management is a field of education concerning the business aspects of sports and recreation. Some examples of sport managers include the front office system in professional sports, college sports managers, recreational sport managers, sports marketing, event management, facility management, sports economics, sport finance, and sports information.

The administration is responsible for a number of areas. They are:

- Creating a national sports framework
 - Providing development in the sports industry and promoting sports development in rural regions.
 - Promote physical activity and exercise participation in Schools, regional and local communities.
 - Organizing athletic and national sports events
 - Enforcement of drug use and anti-competitive measures
 - Liaising and cooperating sports
 - Organizing international sport events in Support and fund research into the development of sports
 - Implementing regulation governing the sports industry, market and best practice
-
- The essential business skills sports organizations seek when interviewing new employees
 - Successful promotions used by sports organizations and collegiate properties
 - Legal aspects of sports administration
 - Financing non profit sports
 - Facility, pitch, field, stadium, and arena management
 - Event and Game Management
 - Sports Commissions
 - Sport Governance
 - Web based scheduling and organization
 - Steps to successful policies and procedural decisions
 - Managing budgets and allocating resources effectively
 - Successful personnel hiring and firing procedures
 - Dealing with boards and executive directors
 - Understanding of front office operations and positions
 - Sports Marketing as it relates to athletic organizations

- Identify successful revenue streams available to sports groups through corporate sponsorships
- High tech e-marketing revenue and marketing campaigns
- Community relations programs, Facilitating Fan Etiquette
- Organizing Youth Sports parents, coaches, officials and volunteers for success
- Career Advice and strategies for advancing within sports organizations

- REFERENCES

- Almond, L. (1986). Primary and secondary rules. In R. Thorpe, D. Bunker, & L. Almond (Eds.), Rethinking games teaching (pp. 38-40). Loughborough: University of Technology, Loughborough.
- Booth, K. (1986). An introduction to netball - An alternative approach. In R. Thorpe, D. Bunker, & L. Almond (Eds.), Rethinking games teaching (pp. 27-31). Loughborough: University of Technology, Loughborough.
- Buck, M., & Harrison, J. (1990). An analysis of game play in volleyball. Journal of Teaching in Physical Education, 10, 38-48.
- Caine, R., & Caine, G. (1994). Making connections: Teaching and the human brain. New York: Addison-Wesley Innovative Learning Publications.
- Curtner-Smith, M. (1996). Using games invention with elementary children. JOPERD, 67(3), 33-37.
- Ellis, M. (1983). Similarities and differences in games: A system for classification. Paper presented at the AIESEP conference, Rome, Italy.
- Hopper, T. (1994). Can we play the game? RUNNER, 32(2), 21-22.
- Kirk, D. (1982). Theoretical guidelines for 'teaching for understanding'. BAALPE, 18(1), 41-45.

- Pigott, B. (1982). A psychological basis for trends in games teaching. BAALPE, 18(1), 17-22.
- Rovegno, I., & Bandhauer, D. (1994). Child-designed games - experience changes teachers' conceptions. JOPERD, 65(6), 60-63.
- Schmidt, R. A. (1976). The Schema as a Solution to Some Persistent Problems in Motor Learning Theory. In G. E. Stelmach (Eds.), Motor Control: Issues and Trends (pp. 41-65). New York: Academic Press.
- Spackman, L. (1983). Invasion games: An instructional strategy. British Journal of Physical Education, 14(4), 98-99.
- Thorpe, R. (1983). An "understanding approach" to the teaching of tennis. BAALPE, 19(1), 12-19.
- Thorpe, R., & Bunker, D. (1989). A changing focus in games teaching. In L. Almond (Eds.), The place of physical education in schools (pp. 163-169). London: Kogan/Page.
- Thorpe, R., Bunker, D., & Almond, L. (Ed.). (1986). Rethinking games teaching. Loughborough: University of Technology, Loughborough.
- Varela, F., Thompson, E., & Rosch, E. (1991). The embodied mind. Cambridge: The MIT Press.
- Werner, P., Thorpe, R., & Bunker, D. (1996). Teaching games for understanding: Evolution of model. JOPERD, 67(1), 28-33.

UNIT II:

Composition and Application of Fundamental Elements in Expressive Arts

Music forms

The term **musical form** (or **musical architecture**) refers to the overall structure or plan of a piece of music, and it describes the layout of a composition as divided into sections. In the tenth edition of The Oxford Companion to Music, Percy Scholes defines musical form as "a series of strategies designed to find a successful mean between the opposite extremes of unrelieved repetition and unrelieved alteration."

According to Richard Middleton, musical form is "the shape or structure of the work." He describes it through difference: the distance moved from a repeat; the latter being the smallest difference. Difference is quantitative and qualitative: how far, and of what type, different. In many cases, form depends on statement and restatement, unity and variety, and contrast and connection.

The founding level of musical form can be divided into two parts:

- The arrangement of the pulse into accented and unaccented beats, the cells of a measure that, when harmonized, may give rise to a motif or figure.
- The further organization of such a measure, by repetition and variation, into a true musical **phrase** having a definite rhythm and duration that may be implied in melody and harmony, defined, for example, by a long final note and a breathing space. This "phrase" may be regarded as the fundamental unit of musical form: it may be broken down into measures of two or three beats, but its distinctive nature will then be lost. Even

at this level, the importance of the principles of repetition and contrast, weak and strong, climax and repose, can be seen.

Thus, form may be understood on three levels of organization. For the purpose of this exposition, these levels can be roughly designated as passage, piece, and cycle.

Melodic phrases

A **phrase-group** is, "a group of three or more phrases linked together without the two-part feeling of a period," or, "a pair of consecutive phrases in which the first is a repetition of the second or in which, for whatever reason, the antecedent-consequent relationship is absent."

Phrase rhythm is the rhythmic aspect of phrase construction and the relationships between phrases, and "is not at all a cut-and-dried affair, but the very lifeblood of music and capable of infinite variety.

Discovering a work's phrase rhythm is a gateway to its understanding and to effective performance." The term was popularized by William Rothstein's *Phrase Rhythm in Tonal Music*. Techniques include overlap, lead-in, extension, expansion, reinterpretation and elision.



A **phrase member** is one of the parts in a phrase separated into two by a pause or long note value, the second of which may repeat, sequence, or contrast with the first.

The act of shaping a phrase during performance is called musical phrasing and considered an art.

Musical phrasing



Phrasing refers to an expressive shaping of music, and relates to the shaping of notes in time. Phrasing relates to the manner of playing the individual notes of a particular group of consecutive notes and the way they are weighted and shaped relative to one another. It does not refer to the idealized note values/durations as represented in sheet music, but to the multitude of deviations that the performer needs to make from sheet music if it is to be expressive in a particular style and culturally aware. An example may be an acceleration of a group of notes, but there are many more. This shaping of notes is creatively performed by the musician with the aim of expressing (feelings), and can be distinguished by the listener – not only factually, but in music,

Being an expressive activity of creative musicians, the question of how to shape a group of notes in time cannot be (and is not) exactly specified. Giuseppe Cambini had this to say about violin playing:

The bow can express the affections of the soul: but besides there being no signs that indicate them, such signs, even were one to invent them, would become so numerous that the music, already too full of indications, would become a formless mass to the eyes, almost impossible to decipher. I should consider myself fortunate if I could

only get a student to hear, through a small number of examples, the difference between bad and mediocre, mediocre and good, and good and excellent, in the diversity of expressions that one may give to the same passage.

Usually, the shaping of notes in time is such that meaning ("affections of the soul") is expressed. In general, particular musical thoughts appear in a group of notes following each other, forming a phrase: a particular part of a melody. These notes belong together and the melodic phrase is then shaped expressively: tension can be built up by accelerating; particular expressive pivot points or emphasis can be shaped by holding notes longer (fermata); slowing down can be used to end phrases; rubato, etc.

Phrasing is sometimes also taken to include aspects of musical shaping, other than the timing of melodies, such as articulation and dynamics, etc.

It can also be influenced by lyrics on the song in relation to the piece of musical phrase in sheet music.

Intuitive versus analytical approach to phrase/phrasing

There are two ways/manners in which phrase/phrasing can be approached: intuitive, or analytical.

There are two schools of thought on phrasing, one more intuitive, the other more analytical. The intuitive school uses a verbal model, equating the function of phrasing with that of punctuation in language. Thus, said Chopin to a student, "he who phrases incorrectly is like a man who does not understand the language he speaks."

The question how far the analytical and critical study of a work of art aids or hinders the appreciation of its more emotional and spiritual factors is one that has been asked over and over[...]

Often the analytical method is more theoretical and related to the term phrase (analysing a phrase), while the intuitive approach is more related to the term phrasing.

Problems linked with an analytical approach to phrase, occur particularly when the analytical approach is based only on the search for objective information, or (as is often the case) only concerned with the score:

The reliance on the score for information about temporal structures reflects a more profound analytical difficulty. Structural information gleaned from the score is visually apprehended and as such is predisposed to visualist models of structure. These models are premised on symmetry and balance and on a timeless notion of "objective" structure. [...] Temporal and aurally-apprehended structures are denied reality because they cannot be said to "exist" in the way that spatial and visually apprehended structures do. [...] Musical investigations exhibit the Western prejudice toward visualism in the dependence on visual symmetry and balance. Information about structure from listening experience is suspect because it is considered "subjective" and is opposed to "objective" information from the score.

The smallest level of construction concerns the way musical phrases are organized into musical sentences and "paragraphs" such as the

verse of a song. This may be compared to, and is often decided by, the verse form or meter of the words or the steps of a dance.

For example, the twelve bar blues is a specific verse form, while common meter is found in many hymns and ballads and, again, the Elizabethan galliard, like many dances, requires a certain rhythm, pace and length of melody to fit its repeating pattern of steps. Simpler styles of music may be more or less wholly defined at this level of form, which therefore does not differ greatly from the loose sense first mentioned and which may carry with it rhythmic, harmonic, timbral, occasional and melodic conventions.

In the analysis of musical form, any components that can be defined on the time axis (such as sections and units) are conventionally designated by letters. Upper-case letters are used for the most fundamental, while lower-case letters are used for sub-divisions. If one such section returns in a varied or modified form, a numerical digit or an appropriate number of prime symbols appears after the letter. Even at this simplest level, there are patterns that may be re-used on larger timescales. For example:

The following verse is composed of two differently-rhymed couplets (**AABB**), and thus its organization is binary or "twofold".

Twinkle, twinkle, little star,
How I wonder what you are.
Up above the world so high,
like a diamond in the sky.

However, in the verse below, there is a rhyme repeated in the second line, then a variant in the third line, two half-lines sharing a new rhyme, followed by a final return to the first arrangement in the last

line (**AABA**), and thus its organization is song form. Ternary form or "threefold" is (**ABA**).

There once was a fellow from Leeds

Who swallowed a packet of seeds.

In less than an hour he burst into flower

And he died trying to pull up the weeds.

However, as music educator Stewart Macpherson stated, there is a preference at all levels of musical organization for groupings of two, four, eight over other divisions, so that even a ternary form is often extended by repetition of the first subject into a "fourfold" structure. Composers can be on guard against excessive "squareness

Pieces

The next level concerns the entire structure of any single self-contained musical piece. If the hymn, ballad, blues or dance alluded to above simply repeats the same musical material indefinitely then the piece is said to be in strophic form overall. If it repeats with distinct, sustained changes each time, for instance in setting, ornamentation or instrumentation, then the piece is a theme and variations. If two distinctly different themes are alternated indefinitely, as in a song alternating verse and chorus or in the alternating slow and fast sections of the Hungarian czardas, then this gives rise to a simple binary form. If the theme is played (perhaps twice), then a new theme is introduced, the piece then closing with a return to the first theme, we have a simple ternary form.

Great arguments and misunderstanding can be generated by such terms as 'ternary' and 'binary', as a complex piece may have elements of both at different organizational levels¹ A minuet, like any Baroque

dance, generally had simple binary structure (**AABB**), however, this was frequently extended by the introduction of another minuet arranged for solo instruments (called the trio), after which the first was repeated again and the piece ended—this is a ternary form—

ABA: the piece is binary on the lower compositional level but ternary on the higher. Organisational levels are not clearly and universally defined in western musicology, while words like "section" and "passage" are used at different levels by different scholars whose definitions, as Schlanker and others point out, cannot keep pace with the myriad innovations and variations devised by musicians.

Types of forms in music

List of musical forms by era

This is a **list of musical forms and genres** organized according to the eras of Classical music. The form of a musical composition refers to the general outline of the composition, based on the sections that comprise it or on specific details that are unique to a certain type of composition. For example, a rondo is based on alternation between familiar and novel sections (ABACA); a mazurka is defined by its meter and rhythm; a nocturne is based on the mood it creates, required to be inspired by or evocative of night. This list summarizes these broadly defined forms and genres within the musical periods that they arose or became common.

There is also folk, rubato, operas, and rando. Thies types of music are Romantic types,

-made by Ulysses del Pino

1 Medieval

- **2 Renaissance**

- 3 Baroque
- 4 Classical and Romantic
- 5 20th and 21st Century

Medieval

- Ballata
- Estampie
- Gregorian Chant
- Madrigal (Trecento)
- Motet
- Organum
- Saltarello

Renaissance

- Ballade
- Canzona
- Carol
- Chanson
- Fantasia
 - Chromatic fantasia
- Galliard
- Intermedio
- Laude
- Madrigal
- Madrigal comedy
- Madrigale spirituale
- Mass
 - Cyclic mass
 - Parody mass
 - Paraphrase mass
 - Cantus firmus mass
- Motet

- Motet-chanson
- Opera
- Pavane
- Ricercar
- Tiento
- Toccata

Baroque

- Allemande
- Canon
- Cantata
- Chaconne
- Concerto
 - o Concerto grosso
 - o Solo concerto
- Courante
- Fugue
- Gavotte
- Gigue
- Mass
- Minuet
- Opera
 - o Opera buffa
 - o Opera seria
- Oratorio
- Partita
- Passacaglia
- Prelude
- Sarabande
- Sinfonia
- Sonata
 - o Flute sonata

- o Trio sonata
- Suite

Classical and Romantic

- Bagatelle
- Ballade
- Ballet
 - o Classical ballet
- Carol
- Concerto
 - o Cello concerto
 - o Clarinet concerto
 - o Double bass concerto
 - o Flute concerto
 - o Oboe concerto
 - o Piano concerto
 - o Trumpet concerto
 - o Viola concerto
 - o Violin concerto
- Étude
- Impromptu
- Intermezzo
- Mass
- Mazurka
- March
- Music hall
- Nocturne
- Opera
 - o Ballad opera
 - o Opera buffa
 - o Opéra comique
 - o Opera seria

- o Operetta
 - o Overture
 - Concert overture
 - Symphonic poem
 - o Singspiel
 - o Zarzuela
 - o Concert Aria
- Oratorio
- Polonaise
- Prelude
- Quartet
 - o Piano quartet
 - o String quartet
 - o Oboe quartet
- Quintet
 - o Piano quintet
 - o String quintet
- Requiem
- Rhapsody
- Rondo
- Scherzo
- Serenade
- Sinfonia concertante
- Sonata
 - o Piano sonata
 - o Violin sonata
 - o Viola sonata
 - o Cello sonata
 - o Flute sonata
 - o Clarinet sonata
 - o Bassoon sonata
- Symphony
 - o Program symphony

- o Choral symphony
- Suite
- Waltz

20th and 21st Century

- Ballet
 - o Neoclassical ballet
 - o Contemporary ballet
- Burlesque
- Cabaret
- Children's music
- Circus music
- Concerto for Orchestra
- Film score
- Modern dance
- Musical theatre
- Opera
- Soundtrack
- Swing
- Vaudeville

Binary form/ternary form

Binary form is a musical form in two related sections, both of which are usually repeated. Binary is also a structure used to choreograph dance. In music this is usually performed as A-A-B-B

Binary form was popular during the Baroque period, often used to structure movements of keyboard sonatas. It was also used for short, one-movement works. Around the middle of the 18th century, the form largely fell from use as the principal design of entire movements

as sonata form and organic development gained prominence. When it is found in later works, it usually takes the form of the theme in a set of variations, or the Minuet, Scherzo, or Trio sections of a Minuet and Trio or Scherzo and Trio movement in a sonata, symphony, etc. Many larger forms incorporate binary structures, and many more complicated forms (such as sonata forms) share certain characteristics with binary form.

Most strictly, a piece in binary form is characterized by two complementary, related sections of roughly equal duration, which come up frequently. The first section will start in a certain key, and will usually modulate to a related key:

- compositions in major keys will typically modulate to the dominant, the fifth scale degree above the tonic
- compositions in minor keys will typically modulate to the relative major, the major key centered on the third scale degree above the tonic; alternatively the first section could close in the dominant minor, or with an imperfect cadence in the original key.

The second section of the piece begins in the newly established key, where it remains for an indefinite period of time. After some harmonic activity, the piece will eventually modulate back to its original key before ending. More often than not, especially in 18th-century compositions, the A and B sections are separated by double bars with repeat signs, meaning both sections were to be repeated.^[2]

Binary form is usually characterised as having the form AB, though since both sections repeat, a more accurate description would be AABB. Others, however, prefer to use the label AA'. This second designation points to the fact that there is no great change in character between the two sections. The rhythms and melodic material used will generally be closely related in each section, and if the piece is written

for a musical ensemble, the instrumentation will generally be the same. This is in contrast to the use of verse-chorus form in popular music—the contrast between the two sections is primarily one of the keys used.

A piece in binary form can be further classified according to a number of characteristics:

Simple vs. rounded



Occasionally, the B section will end with a "return" of the opening material from the A section. This is referred to as **rounded binary**, and is labeled as ABA'. In rounded binary, the beginning of the B section is sometimes referred to as the "bridge", and will usually conclude with a half cadence in the original key. Rounded binary is not to be confused with ternary form, also labeled ABA—the difference being that, in ternary form, the B section contrasts completely with the A material as in, for example, a minuet and trio. Another important difference between the rounded and ternary form is that in rounded binary, when the "A" section returns, it will typically contain only half of the full "A" period, whereas ternary form will end with the full "A" section.

Sometimes, as in the keyboard sonatas of Domenico Scarlatti, the return of the A theme may include much of the original A section in the tonic key, so much so that some of his sonatas can be regarded as precursors of sonata form.

Rounded binary form is sometimes referred to as small ternary form.

Rounded binary or **minuet form**:

A :||: B A or A'
I(->V) :||: V(or other closely related) I

If the B section lacks such a return of the opening A material, the piece is said to be in **simple binary**.

Simple:

A->B :||: A->B
I->V :||: V->I

Slow-movement form:^[5]

A' A"
I->V I->I

Many examples of rounded binary are found among the church sonatas of Vivaldi including his Sonata No. 1 for Cello and Continuo, First Movement, while certain Baroque composers such as Bach and Handel used the form rarely

Sectional vs. continuous



If the A section ends with an Authentic (or Perfect) cadence in the original tonic key of the piece, the design is referred to as a **sectional**

binary. This refers to the fact that the piece is in different tonal sections, each beginning in their own respective keys.

If the A section ends with any other kind of cadence, the design is referred to as a **continuous binary**. This refers to the fact that the B section will "continue on" with the new key established by the cadence at the end of A.

Symmetrical vs. asymmetrical

If the A and B sections are roughly equal in length, the design is referred to as **symmetrical**.

If the A and B sections are of unequal length, the design is referred to as **asymmetrical**. In such cases, the B section is usually substantially longer than the A section.

The asymmetrical binary form begins to be more common than the symmetrical type from about the time of Beethoven onwards, and is almost routine in the main sections of Minuet and Trio or Scherzo and Trio movements in the works of many composers from Beethoven onwards. In such cases, occasionally only the first section of the binary structure is marked to be repeated.

Although most of Chopin's nocturnes are in an overall ternary form, quite often the individual sections (either the A, the B, or both) are in binary form, most often of the asymmetrical variety. If a section of this binary structure is repeated, in this case it is written out again in full, usually considerably varied, rather than enclosed between repeat signs.

Balanced binary

Balanced binary is when the end of the first section and the end of the second section have analogous material and are organized in a parallel way.

Ternary form

Ternary form, sometimes called **song form**, is a three-part musical form where the first section (A) is repeated after the second section (B) ends. It is usually schematized as A–B–A. Examples include the da capo aria "The trumpet shall sound" from Handel's Messiah, Chopin's Prelude in D-Flat Major (Op. 28) and the opening chorus of Bach's St John Passion.

Simple ternary form

In ternary form each section is self-contained both thematically and tonally (that is, each section contains distinct and complete themes, and ends with an authentic cadence. The B section is generally in a contrasting but closely related key, usually a perfect fifth above or the parallel minor of the home key of the A section (V or i); however, in many works of the Classical period, the B section stays in tonic but has contrasting thematic material. It usually also has a contrasting character; for example section A might be stiff and formal while the contrasting B section would be melodious and flowing. Da capo arias are usually in simple ternary form.

Commonly, the third section will feature more ornamentation than the first section (as is often the case with da capo arias). In these cases the last section is sometimes labeled A' or A1 to indicate that it is slightly different from the first A section.

Compound ternary or Trio Form

In a trio form each section is a dance movement in binary form (two sub-sections which are each repeated) and a contrasting trio movement also in binary form with repeats. An example is the Minuet and Trio from the Haydn's Surprise Symphony. The Minuet consists of one section (1A) which is repeated and a second section (1B) which is also repeated. The trio section follows the same format (2A repeated and 2B repeated). The complete Minuet is then played again at the end of the Trio represented as: [(1A–1A–1B–1B) (2A–2A–2B–2B) (1A–1A–1B–1B)]. By convention in the second rendition of the minuet, the sections are not repeated with the scheme [(1A–1A–1B–1B) (2A–2A–2B–2B) (1A–1B)]. The trio may also be referred to as a double or as I/II, such as in Bach's Polonaise and double (or Polonaise I/II) from his second orchestral suite and his Bouree and Double (or Bouree I/II) from his second English suite for harpsichord.



Diagram of a minuet and trio

The Scherzo and Trio, which is identical in structure to other trio forms, developed in the late Classical period. Examples include the Scherzo and Trio (second movement) from Beethoven's Symphony No. 9 and the Scherzo and Trio in Schubert's String Quintet. Another name for the latter is "composite ternary form. Trio form movements (especially scherzos) written from the early romantic era sometimes include a short coda (a unique ending to complete the entire movement) and possibly a short introduction. The second movement of Beethoven's Symphony No. 9 is written in this style which can be diagrammed as [(INTRO) (1A–1A–1B–1B) (2A–2A–2B–2B) (1A–1B) (CODA)]

Ternary form within a ternary form

In a complex ternary form each section is itself in ternary form in the scheme of [(A–B–A)(C–D–C)(A–B–A)] By convention each part is repeated and only on its first rendition [(A–A–B–B–A)(C–C–D–D–C)(A–B–A)] . An example are the Impromptus (Op. 7) by Jan Voříšek.

- Composing techniques

Musical composition



Musical composition can refer to an original piece of music, the structure of a musical piece, or the process of creating a new piece of music. People who practice composition are called composers.

Although today composition is considered to consist of the manipulation of each aspect of music (harmony, melody, form,

rhythm, and timbre), according to Jean-Benjamin de Laborde (1780, 2:12):

Composition consists in two things only. The first is the ordering and disposing of several sounds...in such a manner that their succession pleases the ear. This is what the Ancients called melody. The second is the rendering audible of two or more simultaneous sounds in such a manner that their combination is pleasant. This is what we call harmony, and it alone merits the name of composition.

Musical compositions

A piece of music exists in the form of a composition in musical notation or as a single acoustic event (a live performance or recorded track). If composed before being performed, music can be performed from memory, through written musical notation, or through a combination of both. Compositions comprise musical elements, which vary widely from person to person and between cultures. Improvisation is the act of composing musical elements spontaneously during the performance.

Piece is a "general, non-technical term [that began to be] applied mainly to instrumental compositions from the 17th century onwards....other than when they are taken individually 'piece' and its equivalents are rarely used of movements in sonatas or symphonies....composers have used all these terms [in their different languages] frequently in compound forms [e.g. Klavierstück]....In vocal music...the term is most frequently used for operatic ensembles..."

Composition as musical form

In discussing the structure (or organization) of a musical work, the composition of that work is generally called its musical form. These

techniques draw a parallel to art's formal elements. Sometimes, the entire form of a piece is through-composed, meaning that each part is different, with no repetition of sections; other forms include strophic, rondo, verse-chorus, or other parts. Some pieces are composed around a set scale, where the compositional technique might be considered the usage of a particular scale. Others are composed during performance (see improvisation), where a variety of techniques are also sometimes used. Some are used from particular songs which are familiar.

Important in tonal musical composition is the scale for the notes used, including the mode and tonic note. In music using twelve tone techniques, the tone row is even more comprehensive a factor than a scale. Similarly, music of the Middle East employs compositions that are rigidly based on a specific mode (maqam) often within improvisational contexts, as does Indian classical music in both the Hindustani and the Carnatic system.

Indian tradition

In the music tradition of India there are many forms of musical compositions which to some degree is on account of many musical styles prevalent in different regions of the country, such the Hindustani music, Karnatic music, Bengali music and so forth. Another important influence in the compositions is its link with folk music, both indigenous and also from musical culture of Arabia, Persia and Bengal.

In the Hindustani musical tradition, Drupad (originally in Sanskrit and later adaptations in Hindi and Braj Bhasha) is among one of the ancient compositions and had formed the base for other forms in this music tradition such as khyal, thumri and raga. In the Karnatak music tradition the compositions are in the form of Kriti, varanam and padam.^[4]

Composing music



People composing music

People who practice composition are called composers. Compositional techniques are the methods used to create music. Useful skills in composition include writing musical notation, music theory, instrumentation, and handling musical ensembles (orchestration). Other skills include extended techniques such as improvisation, musical montage, preparing instruments, using non-traditional instruments, and other methods of sound production.

Methods

One method to compose music is starting with a chord progression. These chords could be selected arbitrarily or with specific purpose to reflect the tone of the emotion being conveyed. For example, selecting a minor key, but with mostly major chords (i.e. III, VI, VII) might convey a hopeful feeling. Once the series of chords is selected, additional lines are added to embellish, adding depth to the music. Usually this includes at least a lead melody line and often one or more harmony lines. Popular music is often written this way (see: Song structure) where a selected series of chords forms the structure of each

of a particular section of the song (ex. Verse, Chorus). The melody line is often dependent on the writer's chosen lyrics and can vary in detail from verse to verse.

Another method involves free playing of your desired instrument. For example, a pianist might simply sit and start playing chords, melodies, or random notes that come to mind in order to find some inspiration, then build on the discovered lines to add depth.

Structure

Composers may decide to divide their music into sections. In classical music, one common form used in pieces is sonata form. This form involves an exposition, development, and recapitulation. The end speaks to the beginning, concluding things while the development allows for deviations from the norm of the exposition. Many contemporary songs are organized into sections as well. These sections are usually alternating verse and chorus, often with a bridge before the last chorus. The differing verses will share chord progressions while the chorus is often exactly the same throughout¹

Orchestrating techniques

Orchestration is the study or practice of writing music for an orchestra (or, more loosely, for any musical ensemble) or of adapting for an orchestra music composed for another medium. Only gradually over the course of music history did orchestration come to be regarded as a compositional art in itself.

Orchestration as practice

The term orchestration in its specific sense refers to the way instruments are used to portray any musical aspect such as melody or harmony.

For example, a C major chord is made up of the notes C, E, and G. If the notes are held out the entire duration of a measure, the composer or orchestrator will have to decide what instrument(s) play this chord and in what register. Some instruments, including woodwinds and brass are primarily monophonic and can only play one note of the chord at a time. However in a full orchestra there is generally more than one of these instruments, so the composer may choose to outline the chord in its basic form with clarinets or trumpets. Other instruments, including the strings, piano, harp, and pitched percussion are polyphonic and may play more than one note at a time.

Additionally in orchestration, notes may be placed into another register (such as transposed down two octaves for the basses), doubled (both in the same and different octaves), and altered with various levels of dynamics. The choice of instruments, registers, and dynamics affect the overall tone color. If the C major chord was orchestrated for the trumpets and trombones playing fortissimo in their upper registers, it would sound very bright; but if the same chord was orchestrated for the celli and string basses playing *sul tasto*, doubled by the bassoons and bass clarinet, it might sound heavy and dark.

Note that although the above example discussed orchestrating a chord, a melody or even a single note may be orchestrated in this fashion. Also note that in this specific sense of the word, orchestration is not necessarily limited to an orchestra, as a composer may orchestrate this same C major chord for, say, a woodwind quintet.

Orchestration as adaptation

In a more general sense, orchestration also refers to the re-adaptation of existing music into another medium, particularly a full or reduced orchestra. There are two general kinds of adaptation: transcription, which closely follows the original piece, and arrangement, which

tends to change significant aspects of the original piece. In terms of adaptation, orchestration applies, strictly speaking, only to writing for orchestra, whereas the term instrumentation applies to instruments used in the texture of the piece. In the study of orchestration – in contradistinction to the practice – the term instrumentation may also refer to consideration of the defining characteristics of individual instruments rather than to the art of combining instruments.

In commercial music, especially musical theatre and film music, independent orchestrators are often used because it is difficult to meet tight deadlines when the same person is required both to compose and to orchestrate.

Frequently, when a stage musical is adapted to film, such as *Camelot* or *Fiddler on the Roof*, the orchestrations for the film version are notably different from the stage ones. In other cases, such as *Evita*, they are not, and are simply expanded versions from those used in the stage production.

Most orchestrators often work from a draft (sketch), or short score, that is, a score written on limited number of independent musical staves. Some orchestrators, particularly those writing for the opera or music theatres, prefer to work from a piano vocal score up, since it is required to start rehearsing a piece long before the whole is fully completed. That was, for instance, the method of composition of Jules Massenet. In other instances simple cooperation between various creators are utilized, as when Jonathan Tunick orchestrates Stephen Sondheim's songs, or when orchestration is done from a lead sheet. In the latter case, arranging as well as orchestration will be involved.

.Process

Most films require 30 to 120 minutes of musical score. Each individual piece of music in a film is called a "cue". There are roughly

20-80 cues per film. A dramatic film may require slow and sparse music while an action film may require 80 cues of highly active music. Each cue can range in length from five seconds to more than ten minutes as needed per scene in the film. After the composer is finished composing the cue, this sketch score is delivered to the orchestrator either as hand written or computer generated. Most composers in Hollywood today compose their music using sequencing software (e.g. Digital Performer, Logic Pro, or Cubase). A sketch score can be generated through the use of a MIDI file which is then imported into a music notation program such as Finale or Sibelius. Thus begins the job of the orchestrator.

Every composer works differently and the orchestrator's job is to understand what is required from one composer to the next. If the music is created with sequencing software then the orchestrator is given a MIDI sketch score and a synthesized recording of the cue. The sketch score only contains the musical notes (e.g. eighth notes, quarter notes, etc.) with no phrasing, articulations, or dynamics. The orchestrator studies this synthesized "mockup" recording listening to dynamics and phrasing (just as the composer has played them in). He or she then accurately tries to represent these elements in the orchestra. However some voicings on a synthesizer (synthestrations) will not work in the same way when orchestrated for the live orchestra.

The sound samples are often doubled up very prominently and thickly with other sounds in order to get the music to "speak" louder. The orchestrator sometimes changes these synth voicings to traditional orchestral voicings in order to make the music flow better. He or she may move intervals up or down the octave (or omit them entirely), double certain passages with other instruments in the orchestra, add percussion instruments to provide colour, and add Italian performance marks (e.g. Allegro con brio, Adagio, ritardando, dolce, staccato,

etc.). If a composer writes a large action cue, and no woodwinds are used, the orchestrator will often add woodwinds by doubling the brass music up an octave.

The orchestra size is determined from the music budget of the film. The orchestrator is told in advance the number of instruments he or she has to work with and has to abide by what is available. Sometimes a composer will write a three-part chord for three flutes, although only two flutes have been hired. The orchestrator decides on where to put the third note. After the orchestrated cue is complete it is delivered to the copying house (generally by placing on a server) so that each instrument of the orchestra can be extracted, printed, and delivered to the scoring stage.

The major film composers in Hollywood each have a lead orchestrator. Generally the lead orchestrator attempts to orchestrate as much of the music as possible if time allows. If the schedule is too demanding, a team of orchestrators (ranging from two to eight) will work on a film. The lead orchestrator decides on the assignment of cues to other orchestrators on the team. Most films can be orchestrated in one to two weeks with a team of five orchestrators. New orchestrators trying to obtain work will often approach a film composer asking to be hired. They are generally referred to the lead orchestrator for consideration.

At the scoring stage the orchestrator will often assist the composer in the recording booth giving suggestions on how to improve the performance, the music, or the recording. If the composer is conducting, sometimes the orchestrator will remain in the recording booth to assist as a producer. Sometimes the roles are reversed with the orchestrator conducting and the composer producing from the booth.

Compositional instrumentation

The task of adapting a composition for musical instruments/ensembles, called arranging or orchestrating, may be undertaken by the composer or separately by an arranger based on the composer's core composition. A composition may have multiple arrangements based on such factors as intended audience type and breadth, musical genre or stylistic treatment, recorded or live performance considerations, available musicians and instruments, commercial goals and economic constraints.

Based on such factors, composers or arrangers must decide upon the instrumentation of the original work. Today, the contemporary composer can virtually write for almost any combination of instruments. Some common group settings include music for full orchestra (consisting of just about every instrument group), concert band (which consists of larger sections and greater diversity of woodwind, brass, and percussion instruments than are usually found in the orchestra), or a chamber group (a small number of instruments, but at least two). The composer may also choose to write for only one instrument, in which case this is called a solo.

Composers are not limited to writing only for instruments, they may also decide to write for voice (including choral works, operas, and musicals) or percussion instruments or electronic instruments. Alternatively, as is the case with *musique concrète*, the composer can work with many sounds often not associated with the creation of music, such as typewriters, sirens, and so

Arranging

Arranging is composition which employs prior material so as to comment upon it such as in mash-ups and various contemporary classical works. The process first requires analysis of existing music,

and then rewriting (and often transcription) for an instrumentation other than that for which it was originally intended. It often (but not always) involves new supporting material injected by the arranger. Different versions of a composed piece of music is referred to as an arrangement.

Make musical instruments

Children love music as much as they enjoy making things. Why not join these two creative forces and make one or all of these fun and



easy musical instruments to encourage play and creativity **MARACAS (SIMPLE) & SHAKERS**

Pre-K-8

Maracas were originally made from the dried shells of gourds with beads or beans inside. This lesson shows you how to make maracas using paper cups.



OCEAN DRUM PreK and up

An ocean drum is filled with small round objects that, when tilted back and forth, sound remarkably like the waves at the seashore. Find out how to make an ocean drum here. From: Daria Marmaluk-Hajioannou.



RAINSTICKS K and up

Legend has it that the Chilean Indians invented the rainstick to make rainy weather. You can make a rainstick using materials you can find around the house.



SISTRUM K and up
A sistrum is a hand-held percussion instrument that dates back to Ancient Egypt. Make your own with items from around the house.
From: Daria Marmaluk-Hajioannou. **[read more]**

STICKER

SHAKERE

A shakere is a beautiful musical instrument made from a dried gourd that is shaken, tossed or moved from hand to hand creating wonderful rhythms and songs. Find out how to make one using a recycled milk carton. From: Daria Marmaluk-Hajioannou.

Applied music

Definition of APPLIED MUSIC

: vocal or instrumental musical performance subject to instruction in college or school as contrasted with musical theory and literature — called also practical music

References

- How to Understand Music: A Concise Course in Musical Intelligence and Taste (1881) by William Smythe Babcock Mathews
- What we hear in music; a course of study in music history and appreciation (c. 1921) by Anne Shaw Faulkner
- Aspects of phrasing in the context of singing (The American history and encyclopedia of music; 1908; William Lines Hubbard)
- The Art of Phrasing (Dwight's Journal of Music; 1878) (altern.: 1, 2)
- Phrasing from Lessons in vocal expression by Samuel Silas Curry

UNIT III

Historical and theoretical perspective of Expressive Arts

What is the scope of graphic design

Art is a form of communication using text and/or images to create an effective message in the design of logos, graphics, brochures, newsletters, posters, signs, and any other type of visual expression. In graphic design, “the essence is to give order to information, form to ideas, expression and feeling to artifacts that document human experience.” This formation of ideas is cultivated into the field of advertising art. Graphic Design

graphic arts “Arts represented by drawing or imposing on a flat surface an image that communicates a message; (PRINT MAKING) Graphic Design- The word “graphic” literally means, “of writing” but the term graphic design “includes an arrangement of works, shapes, or images or a combination thereof.” Secondly, all graphic design has a purpose or a function.” ..to sell something, the intention to say something, to inform and influence your choices and your actions.

Ways of Seeing Perception- interpret our unique experience of the world through our five senses (memory and sensation) Visualization – a journey we can follow in our minds through mental images Imagination - the ability to see images in the form of dreams, fantasies, fairy tales and or ideas. Creativity 5 Forces Behind Creativity Inspiration : is that creative fire which offers light, energy and a source of excitement Motivation : is the immobilizing energy which moves you to reach a desired goal Frustration : a feeling of disorganization which can be positively refocused into a creative solution

Intuition: an immediate sensation of an answer, a feeling or a direction (hunch) Curiosity: is an eagerness to question further, and to explore beyond the initial idea

the machines and devices that make our lives more efficient are ever increasing. we need to teach technology and how to use it effectively. Teenagers today are well versed in cell phone use, text messaging, myspace, wiki and internet blogging, to name a few. Why Teach Graphic Design:

Digital imaging is no longer a futuristic possibility. Youth today are in love with their technology and cannot envision life without it. But having and using the technology is a major issue. So how do we harness that form of technology into the classroom?

Today, employers expect designers to be familiar with both PC and MAC computer graphics software. Designers must continually develop their skills with updated software, either through software training programs or self-education.

Industry demands a student with verbal and writing skills coupled with a strong visual design element.

Graphic designers must be creative and able to communicate their ideas quickly and effectively. Designers need to be well read, open to new ideas and influences, and quick to react to changing trends. Problem-solving skills, paying attention to detail, the ability to work independently

People in this field need self-discipline to start projects, budget time, and to meet deadlines/production schedules. Good

business sense and sales ability are also important, especially for those who freelance or run their own business.

What do Graphic Designers do? analyze create visual solutions to communication problems. Decide the most effective way of getting a message across in print, electronic, and film media using a variety of methods such as color, type, illustration, photography, animation, and various print and layout techniques. Develop the overall layout and production design of magazines, newspapers, journals, corporate reports, and other publications. Produce promotional displays, packaging, and marketing brochures for products and services, design distinctive logos for products and businesses, and develop signs and signage systems—called environmental graphics—for business and government. Develop material for Internet Web pages, interactive media, and multimedia projects. Produce the credits that appear before and after television programs and movies.

Graphic Design Careers: Creative / Art Director: Art directors, or creative directors are in charge of a creative team that produces artwork to be displayed in magazines, on television, on billboards, on the web, or on products. Layout Artist: A layout artist deals with the structure and layout out of images and text in a pleasing format for printed media. Brand Identity Design: Brand identity design is concerned with the visual aspects of a company or organization's brand or identity. Logo Designer: A logo is a sketched or graphically designed symbol, set in a specific typeface or font, and arranged in a unique way, with distinct colors, shapes, and designs to represent a company, product, organization, agency, or service.... Flash Designer: Flash is the newest and trendiest technology currently used in web design. Illustrator:

Illustrators conceptualize and create illustrations that represent an idea or a story through two-dimensional or three-dimensional images. Technical Illustrator: Technical Illustrators conceptualize and create three-dimensional images, storyboard sketches, and moving illustrations for animated productions, television commercials, movies, computer games, or set and exhibit designs.

Photo Editing / Photoshop Artist: Photo editing, and new photo editing software like Photoshop has helped professional photographers and designers more easily bring their visions to life through advertisements, magazine layouts, billboards, logos, and just about every other multi-media medium....

Multimedia Designer: Jobs in multimedia design can be found in such career fields as television or film production, animation, audio production, and set design, as well as several other multimedia, and production design fields. Photographer: Photography is more than just capturing an image.

Professional photographers need to learn how to use the camera and other photography equipment such as lights, film, lenses, filters, digital technology, as well as their own creative vision, to produce images that communicate the desired....

Prepress Technician: Prepress involves a variety of tasks including checking proofs for errors and print clarity and correcting any mistakes, transforming text and pictures into finished pages, and making printing plates of the pages.... Web Designer: As a web designer, your work could be viewed by

thousands of people everyday. Web designers create the pages, layout, and graphics for web pages, and play a key role in the development of a website.

Composition and Layout Composition In the arts of painting, graphic design, and photography, Composition is the plan, placement or

arrangement of the elements of art in a work. In graphic design and desktop publishing, composition is commonly referred to as page layout . Refers to the way in which we organize the material that makes up the content of a design . (your aim is to communicate a message clearly, coherently and logically)

Aims and objectives

Art and design stimulates creativity and imagination. It provides visual, tactile and sensory experiences and a special way of understanding and responding to the world. It enables children to communicate what they see, feel and think through the use of colour, texture, form, pattern and different materials and processes. Children become involved in shaping their environments through art and design activities. They learn to make informed judgements and aesthetic and practical decisions. They explore ideas and meanings through the work of artists and designers. Through learning about the roles and functions of art, they can explore the impact it has had on contemporary life and that of different times and cultures. The appreciation and enjoyment of the visual arts enriches all our lives.

The aims of art and design are:

- To enable children to record from first-hand experience and from imagination, and to select their own ideas to use in their work;

- To develop creativity and imagination through a range of complex activities;

- To improve the children's ability to control materials, tools and techniques;

- To increase their critical awareness of the roles and purposes of art and design in different times and cultures;

- To develop increasing confidence in the use of visual and tactile elements and materials;

- To foster an enjoyment and appreciation of the visual arts and a knowledge of artists, craftspeople and designers.

Teaching and Learning

The school uses a variety of teaching and learning styles in art and design lessons. Our principal aim is to develop the children's knowledge, skills and understanding in art and design. We ensure that the act of investigating and making something includes exploring and developing ideas, and evaluating and developing work. We do this best through a mixture of whole-class teaching and individual/group activities. Teachers draw attention to good examples of individual performance as models for the other children. They encourage children to evaluate their own ideas and methods, and the work of others, and say what they think and feel about them. We give children the opportunity within lessons to work on their own and collaborate with others, on projects in two and three dimensions and on different scales. Children also have the opportunity to use a wide range of materials and resources, including ICT.

We recognise the fact that we have children of differing ability in all our classes, and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- Setting common tasks that are open-ended and can have a variety of responses;

- Setting tasks of increasing difficulty where not all children complete all tasks;

- Grouping children by ability and setting different tasks for each group;

- Providing a range of challenges with different resources;

- Using additional adults to support the work of individual children or small groups.

Stages of art development

Each of these stages refers to a combination of visual characteristics found in the art work of children. "Developmental-Stage" theory

assumes that the stages occur in a sequential order. Little attempt has been made to relate these stages of growth in art directly to chronological age because so many factors contribute to the child's development in art. Many individuals never continue beyond the schematic or transitional mode of representation in the graphic arts. Just as children don't grow physically and at the same time as their peers, the same can be said for their creative and mental growth. It happens at different rates, which is normal.

1. The Scribble Stage

The first stage occurs when the child manipulates a drawing tool and makes random marks, dots, and lines on the drawing surface. He will scribble and manipulate the drawing tool with little or no concern for the appearance of the marks he makes. There are three discernible stages during this stage:

- random scribbling
- controlled scribbling
- naming of scribbling

By definition, a child in the scribbling stage, usually 2 - 4 years of age, is not drawing symbols for objects. Children like to scribble because it gives them a chance to move their arms around freely. The act of scribbling is purely kinesthetic and imaginative. Don't waste money on coloring books, they can actually inhibit children's creativity. They are much better off with a large sheet of paper and a fat, dark crayon.

2. The Pre-Schematic Stage

The second, or pre-schematic stage, is entered when the child produces his first representative symbols for objects in his environment. These symbols are formed with circles, squares, and

lines. The symbols change frequently. The pictures have a “floating organization and the paper may be turned many times while drawing. Later, the symbols may be organized horizontally. The pre-schematic stage refers to that stage when the child is drawing his first symbols, but has not yet developed “schema”. Generally from **3 to 7** years of age.

3. The Schematic Stage

The main characteristics of this stage are the repetition of symbols for familiar objects, and the use of the base-line. The term “schema” refers to the habitually repeated symbol for an object. Examples of such schema are the lollipop tree, the stiff scarecrow-type drawings of people, or a series of houses which are all drawn the same. The figures appear flat and stiff, and are changed only when there is strong motivation to do so. Later, multiple base-lines are the major organizational devices used by the child in this stage. X-ray or transparent views, top views, side views, or raised base-lines are used in increasing frequency as the subject depicted demands variation from the single base-line. The pictures become more complex; yet they still use schema. Single base-lines, multiple base-lines, and fold-up views are used. The fused or continuous contour line is also used to further define figures. In general, children reach this stage between **6 and 11** years of age. Without further instruction and practice a few children will reach a plateau during the latter part of this stage.

3. The Transitional Stage

This is the stage in which the maturing child, usually **9** years or older, attempts to produce art work that meets adult standards; yet he still produces works which unintentionally contain many characteristics of the schematic stage. For instance, a picture may include a natural

looking ground plane with trees of diminishing size going off into the distance. However, the child may include the top view of a swimming pool and place several stiff figures on the edge of the paper. The art work has visual contradictions. The base-line is replaced by a receding ground plane, and there is frequent use of intentional overlapping. Much attention is given to details, sex roles, and clothing differences. Some linear perspective may be used during this stage. A few children who enter this stage will reach a plateau and not enter the stage of realism.

5. The Realism Stage

The stage of realism is entered when the child is producing art work in the manner of adult artists. In general, the child is **12** or older. Considerable control over the medium, content, and organization is evident. The figures become natural in appearance, or are intentionally stylized. The consistent use of many organizational devices is also quite evident in the art work produced during this stage, such as overlapping, diminishing size, placement on the picture plane, and linear and aerial perspective. It is at this stage that the child becomes most critical and self conscious about their ability to produce realistic artwork.

Understanding **the stages of artistic development** can help you become better at creating art. It can also help you become a more effective art teacher. We develop artistically. Just like we develop other skills like talking and walking in stages, we develop artistic skills in the same way.

In 1947, Dr. Viktor Lowenfeld published “Creative and Mental Growth”, which quickly became THE textbook for art educators. Lowenfeld argues that there are six clearly defined **stages of artistic development** and that these stages can be witnessed in the artworks

of children. According to Lowenfeld, the six **stages of artistic development** are:

1. Scribble Stage- (1-3 years old) Children at this age are engaged in the physical activity of drawing. There is no connection made between the marks and representation during most of the scribble stage. However, towards the end of this stage children may begin to give marks names. This stage is mostly about the enjoyment of purely making marks.



2. Preschematic Stage-(3-4 years old) Children at this **stage of artistic development** are beginning to see connections between the shapes that they draw and the physical world around them. Circles and lines may be described as people or objects that are physically present in the child's life. It is in this stage that a child first makes the connection to communicating through their drawings.

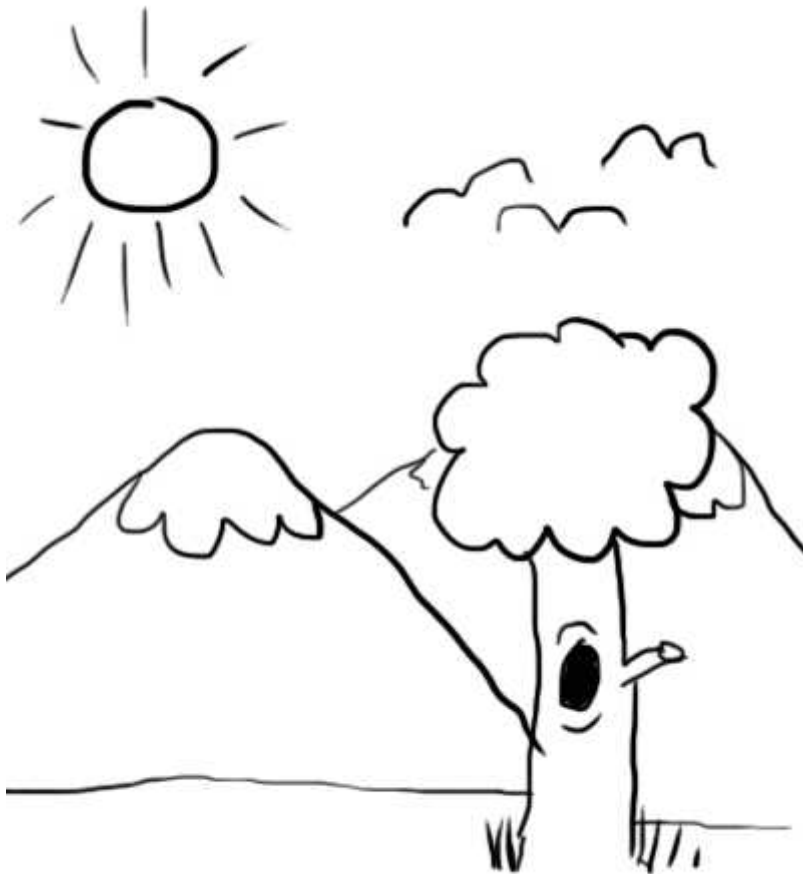


3. The Schematic Stage-(5-6 years old) Children at this stage have clearly assigned shapes to objects that they are attempting to

communicate. They often have developed a schema for creating drawings. There is a defined order in the development of the drawing. Drawings at this stage have a clear separation between the sky and the ground. Often the sky is a strip of blue at the top of the paper, while the ground is a strip of green at the bottom. Objects are often placed on the ground instead of floating in space. Objects of importance are often drawn larger than objects of lesser importance.



4. The Dawning Realism-(7-9 years old) At this **stage in artistic development**, children are beginning to become more critical of their own work. It has become evident that a structured order to drawing objects is no longer sufficient. While a schema is still used to create drawings, it is more complex than the schema used in earlier stages. Overlapping can be seen and a sense of spatial relationships is more evident.



5. The Pseudo-Naturalistic Stage-(10-13 years old) The use of value and light is now apparent in drawings. Children at this **stage of artistic development** are very critical of their own success. Success is determined by the level of realism achieved in the drawing. Frustration is a common occurrence. It is exceptionally important to encourage students at this stage.



6. The Decision Stage- (13-16 years old) Children at this stage will decide to continue drawing or view it as an activity without merit.

Because of the level of self criticism inherent at this stage, many children, (now young adults) view drawing as an skill that do they do not possess. Others, however, decide to continue working on their drawing skills and continue to develop. I think that it is important to encourage students to continue drawing despite their level of skill. Any skill level can be attained with practice. This **stage of artistic development** is perhaps the most critical to the development of an artist.



UPDATE: I recently added a new video podcast on this subject. Here's a link to the video – The Stages of Artistic Development

The period of decision

Art at this stage of life is something to be done or left alone. Natural development will cease unless a conscious decision is made to improve drawing skills. Students are critically aware of the immaturity of their drawing and are easily discouraged. Lowenfeld's solution is to enlarge their concept of adult art to include non-representational art and art occupations besides painting (architecture, interior design, handicrafts, etc.)

Challenges of teaching art and design in Zambia

For years more than any other endeavour or enterprise the arts in education have suffered from an over abundance of myths, misconceptions and problems in schools. Why is this so when the arts are as natural as living and breathing?

From the time that they are born children are introduced to the arts as the very foundation of their culture. The nursery is alive with aural sounds and pictorial visual imagery.

Colourful mobiles are sometimes the first objects of scrutiny from tiny eyes, while the tinkle of a lullaby by Brahms emanates from a small music-box. Parents sing with children, and sing them to sleep. During the early days of infancy parents read and act out traditional folk stories with laughter and in various tones of voice. Children respond by mimicking and playing. These sensory responses to the human experience are encouraged and rewarded by parents. Parents hang the child's very first drawings and paintings on the refrigerator in the kitchen. The very first song that a small child sings is lauded and applauded. Tiny-tots are encouraged to dance and perform- stage

mothers abound as tiny, pink ballet slippers are packed with costumes and make up.

The above are examples of 'the-arts-in-action' enacting body, spirit, intellect and emotion

while the child comes to know and understand their world. The arts as purveyors of culture are valued and introduced to young children by parents and grandparents. Young children's first attempts to communicate ideas and feelings are through one or more of the arts forms.

A simple gesture is captured in dance, a mood is expressed through music, an idea is

painted on paper and a response is mimed. It is impossible to imagine a child's life and

being without the arts. Yet, as a child grows older and enrolls in school, the arts, which are the very heart of our culture are undervalued. They become less important and less understood in educational contexts. The spontaneity of 'home-taught arts' which is meaningful and imaginative is lost.

The rich tapestry of the arts as ways of knowing and feeling, and sources of delight and

enjoyment are sacrificed for arts activities that are soul destroying and meaningless.

Children are not taught the basic knowledge and skills in the arts and therefore their

education lacks depth and dimension. Why is this happening?

There are many myths and misconceptions about the arts in schools as well as many

problems with pedagogy. This paper sets out to identify some of the myths and

misconceptions in arts education whilst identifying the conflicting pedagogical paradigms

which impinge on arts teaching today.

The Dichotomy between Community Values and the Arts:

suggests that the community is at odds with itself over its valuing of "an imaginative and creative life" which is fundamental to, and defines us as human beings. Society through the agency of schools is denying children the right to quality self-expression through the arts. Most submissions to the inquiry complained, more in sorrow than in anger that the arts in schools is widely regarded as a 'frill'. A society that regards paid work as the 'real thing' and creative life as a frill, something that is carried out on behalf of the community by a special priestly class (the arts community), is an incomplete and unhealthy society.

Arts education is needed to foster a widespread creative life which counterbalances the forces of mass production and mass consumption in a specialised materialistic society. Arts education is needed as an impetus for change, challenging old perspectives from fresh angles of vision, or offering original interpretations of familiar ideas. Paid work is seen as purposeful by the community, whilst artistic activities are not regarded as having any real purpose. Whilst consumers in society may value a marble sculpture it does not have the same purpose as an electric iron. Art, in this case, can be done without but the electric iron cannot.

From the point of view of the community the word 'artist' conjures a vision of a temperamental romantic leading a carefree life- a bohemian unencumbered by the mundane constraints that beset the ordinary wage-earner. This ambivalent community attitude flows through to schools - there is uncertainty of what the arts are and what worthwhile outcomes they can produce:

Many teachers... tend to avoid or ignore the arts in their teaching or, worse still, confuse art with entertainment, regarding arts activity, like play, as a non-serious

past-time and therefore to be accommodated only on the fringe the curriculum

(John Deverell, 1995, p.18)

Furthermore, whilst the community does not seem to value artistic and creative processes, per se the school generally, and arts educators in particular, recognises that the arts assist with the development of high level skills such as the student's ability to handle complexity and ambiguity, problem-solving, communication skills, self-discipline and team work.

These skills are recognised as essential for success in the new high technology, high-information and inclusive world in which we live. The arts teach the life-skills of team spirit, character building, cultural benefits and the opportunity to express feelings, and mix with other people. They enrich educational experience and foster confident self-expression - the desire to have a go, and develop habits of being self-directed and being involved.

Creative Life is Important for our Minds

A creative life is just as fundamental for our minds as exercise is for our bodies. Human

beings have always made art of some form or another, because it satisfies a human need to communicate experience, knowledge and ideas through aesthetic languages/symbols. 'It is this artistic process which challenges people to engage in arts making, define their ideas, encounter unpredicted problems and explore a variety of expressive media and creative alternatives' (Boyd, 1994, p.217). In the community there is the conception that the arts product is more important than the artistic process of creation. Both artistic product and

process are important because one cannot exist without the other.

Participation in the arts

requires creative processes such as imagination and inventive

problem-solving which are

logical and rational, thinking strategies. Engagement in the Arts is

more than "hands on,

minds off" activity and the community and schools must see it as

such. Involvement in the

arts (creative life) includes thinking skills such as:

- defining terms/classifying and categorising;
- determining consequences/discovering alternatives;
- becoming aware of complexity: seeing the 'grey' areas between black and white;
- finding underlying assumptions/using analogies;
- constructing hypotheses and generalisations/formulating and using criteria;
- drawing inferences from one or more premises/assumptions;
- enquiring and reasoning;
- distinguishing between fact and fiction;
- striving to be consistent and avoid contradictions;
- respecting different ways of thinking and being;
- tolerance of different viewpoints;
- determining and articulating feelings, value judgements/likes/dislikes; and
- identifying examples and counter examples (Boyd, 1994, p.217).

The Arts have whole languages of meaning that have no direct need of words. These

languages of creative life can be used for exploring, describing, interpreting, challenging,

celebrating, mourning for, and reflecting upon the world in the form of:

- receptivity to the sensory qualities of the world;
- intuitive, global thinking as well as analytical, linear thinking;

- attention to fine nuances;
- the cultivation of aesthetic judgements; and the ability to cope with ambiguity-meaning in artistic works is multi-dimensional, offering a variety of interpretations.

(P-10 Arts Framework, Education Queensland)

Both education and the community appear to value verbal and mathematical thinking, and thereby undervalue and inhibit the development of artistic skills and / or thinking through sensory images and languages - those often used in creative life. Eisner (1981), suggests that thinking through sensory images allows us to examine and explore information about the world. For example, drawing or painting allows us to re-structure and play with ideas and images found in our world without the use of verbal language. Music can be interpreted and enjoyed without resorting to words; while dance conveys meaning through gesture and movement. "Language is by n o means the only route for making sense of the world" (Gardner, 1982, p.88). Creative and innovative thinking are not just confined to the Arts.

The prime merit of arts education should be that nurturing creative thinking in a context where it is explicitly approved may give people the confidence to appreciate and develop habits of mind that will complement their learning in other areas of education and of life.

Yet, male students participate far less in many forms of artistic activities.

Rationalistic 'Chops and Swipes' that have Contributed to the Perception of 'Homogeneous' Arts.

There is a myth in the educational community that all arts forms are somewhat the same and so the Arts (Dance, Music, Drama, Visual arts and Music) have been forced through

rationalistic measures to be condensed into the same timetable slot in many primary schools.

Recognition of the Arts as a Key Learning Area in the National Curriculum Framework is a significant development at the school level, as it ensures that in the future the Arts will be mandatory in the curriculum.

It is the delivery of this Key Learning Area which is of greatest concern. As pointed out

previously in this paper some school personnel do not know what the Arts are and this has serious repercussions for most, if not all the Arts forms. On the surface, declaring the arts as a KLA for the compulsory years of schooling Years 1-10 may appear to be assigning curriculum equity and value for arts education, but if a school does not actively encourage and value the arts in real terms, the timetable and school organisational structure can serve to diminish the role of the arts -time allocation can control and inhibit the scope and sequence of the Arts.

The curriculum and timetable decision-makers in secondary schools most often have little experience of the Arts, coming from mathematics and science backgrounds, whilst teachers in traditional subject (English) areas believe their subjects to be more important than the Arts and demonstrate this by expecting more time on the timetable. Furthermore, it is difficult to estimate how much time the Arts receive in Primary schools (Queensland) because the involvement of students in arts activities is not documented because statistics are not maintained for student and teacher involvement in all of the arts subject areas. (Education Queensland Submission, 1995, p.1368).

A result of the 'sandwiching' of the arts into one timetable slot in Primary schools

presupposes that the Arts can be 'integrated' in delivery to students.

This notion opens a

Pandora's Box of what 'integration' really means and can this approach successfully address teaching and learning in each of the

arts forms. Integration may be not just confined to the primary school sector in the future. The Arts may be integrated at Years 8 & 9 as an expedient timetabling measure and could very well see arts forms in competition with each other. One scenario may be students completing an integrated Arts subject before they progress to Year 9. What would this subject comprise?

Experiments with colour

In the visual arts, **color theory** is a body of practical guidance to color mixing and the visual effects of a specific color combination. There are also definitions (or categories) of colors based on the color wheel: primary color, secondary color and tertiary color. Although color theory principles first appeared in the writings of Leone Battista Alberti (c.1435) and the notebooks of Leonardo da Vinci (c.1490), a tradition of "color theory" began in the 18th century, initially within a partisan controversy around Isaac Newton's theory of color (Opticks, 1704) and the nature of so-called primary colors. From there it developed as an independent artistic tradition with only superficial reference to colorimetry and vision science.

The foundations of pre-20th-century color theory were built around "pure" or ideal colors, characterized by sensory experiences rather than attributes of the physical world. This has led to a number of inaccuracies in traditional color theory principles that are not always remedied in modern formulations.

The most important problem has been a confusion between the behavior of light mixtures, called additive color, and the behavior of paint, ink, dye, or pigment mixtures, called subtractive color. This problem arises because the absorption of light by material substances follows different rules from the perception of light by the eye.

A second problem has been the failure to describe the very important effects of strong luminance (lightness) contrasts in the appearance of

colors reflected from a surface (such as paints or inks) as opposed to colors of light; "colors" such as browns or ochres cannot appear in mixtures of light. Thus, a strong lightness contrast between a mid-valued yellow paint and a surrounding bright white makes the yellow appear to be green or brown, while a strong brightness contrast between a rainbow and the surrounding sky makes the yellow in a rainbow appear to be a fainter yellow, or white.

A third problem has been the tendency to describe color effects holistically or categorically, for example as a contrast between "yellow" and "blue" conceived as generic colors, when most color effects are due to contrasts on three relative attributes that define all colors:

1. lightness (light vs. dark, or white vs. black),
2. saturation (intense vs. dull), and
3. hue (e.g., red, orange, yellow, green, blue or purple).

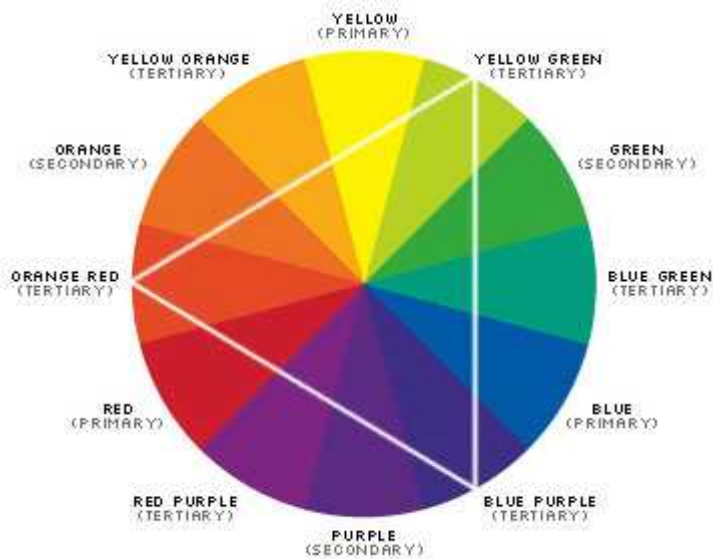
Thus, the visual impact of "yellow" vs. "blue" hues in visual design depends on the relative lightness and intensity of the hues.

These confusions are partly historical, and arose in scientific uncertainty about color perception that was not resolved until the late 19th century, when the artistic notions were already entrenched. However, they also arise from the attempt to describe the highly contextual and flexible behavior of color perception in terms of abstract color sensations that can be generated equivalently by any visual media.

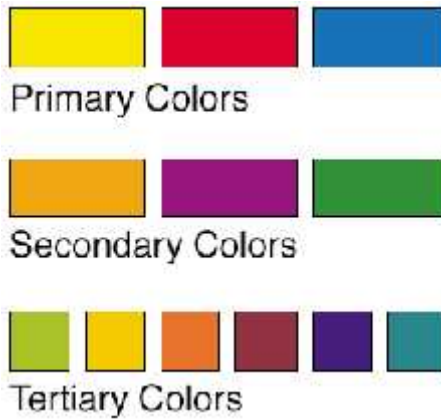
Many historical "color theorists" have assumed that three "pure" primary colors can mix all possible colors, and that any failure of specific paints or inks to match this ideal performance is due to the impurity or imperfection of the colorants. In reality, only imaginary "primary colors" used in colorimetry can "mix" or quantify all visible

(perceptually possible) colors; but to do this, these imaginary primaries are defined as lying outside the range of visible colors; i.e., they cannot be seen. Any three real "primary" colors of light, paint or ink can mix only a limited range of colors, called a gamut, which is always smaller (contains fewer colors) than the full range of colors humans can perceive.

Color Theory



A primary color is a color that cannot be made from a combination of any other colors. A secondary color is a color created from a combination of two primary colors. Tertiary color is a combination of three colors (primary or secondary).



Printers and artists have different definitions for primary colors. The traditional primary colors that painters have used are red, yellow, and blue. Modern printing press secondary colors are magenta, yellow, and cyan. These two primary color systems obviously do not agree. Additive and subtractive are the two primary methods for reproducing a range of color.

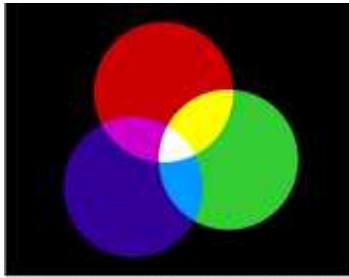
Additive Color

Additive color synthesis is the creation of color by mixing colors of light. Human vision relies on light sensitive cells in the retina of the eye. There are two basic kinds of sensors. These are rods and cones. Rods are cells which can work at very low intensity, but cannot resolve sharp images or color. Cones are cells that can resolve sharp images and color, but require much higher light levels to work. The combined information from these sensors is sent to the brain and enables us to see.

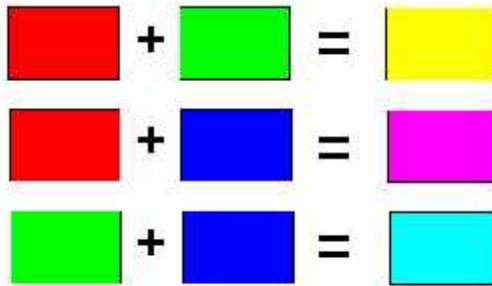
There are three types of cone. Red cones are sensitive to red light, green cones are sensitive to green light, and blue cones are sensitive to blue light. The perception of color depends on an imbalance between the stimulation level of the different cell types.

Additive color processes, such as television, work by having the capability to generate an image composed of red, green, and blue light. Since the intensity information for each of the three colors is preserved, the image color is preserved as well. The spectral distribution of the image will probably be wrong, but if the degree of intensity for each of the primary colors is correct, the image will appear to be the right color.

The three primaries in light are red, blue, and green, because they correspond to the red, green, and blue cones in the eye. Example 1 shows how the light from red, green and blue flashlights would appear if shone on a dark wall.



Example 1: Additive principle of color combining (light)



Derivation of Additive Secondaries from Additive Primary Colors.

Red + Green = Yellow

Red + Blue = Magenta

Green + Blue = Cyan

Printers' primaries—yellow, cyan, and magenta—are typically used by professional designers and printing presses .

When all of the colors of the spectrum are combined, they add up to white light.

2 parts Red + 1 part Green = Orange

2 parts Green + 1 part Red = Lime

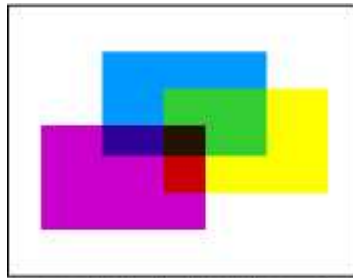
4 parts Red + 1 part Blue + 1 part Green = Brown

Subtractive Color

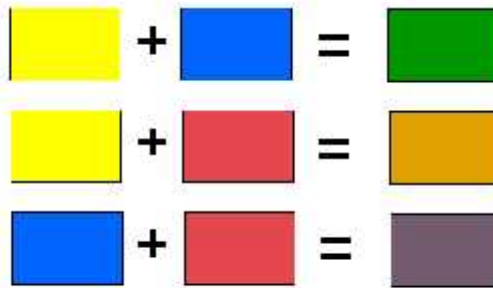
Subtractive color synthesis is the creation of color by mixing colors of pigment, such as paint or ink in your computer's printer. This type of color is what is used in the art and design world. When learning basic color theory, art students typically use familiar colors like red, yellow, and blue.

Subtractive color processes work by blocking out parts of the spectrum. The idea of subtractive color is to reduce the amount of undesired color reaching the eye. If, for example, you had a yellow image, you would want to have a dye that would let red and green reach the eye, and block out blue. The additive secondaries become the printers' subtractive primaries, because each of the additive secondaries will reflect two of the additive primaries, and absorb one of the additive primaries.

The three primaries on the artists' color wheel are red, blue, and yellow. Example 2 illustrates subtractive color by showing how primary colors mix on a piece of white paper.



Example 2: Subtractive principle of color combining (pigment)



Painting Primaries Mixing chart

Yellow + Blue = Green

Yellow + Red = Orange

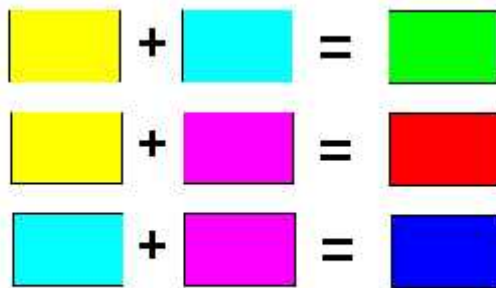
Blue + Red = Violet

When all of the colors are combined, they create black pigment.

Additive Primaries/Secondaries Absorption Chart

Color	Reflects	Absorbs
Yellow	Red and Green	Blue
Magenta	Red and Blue	Green
Cyan	Green and Blue	Red

With this information, if we wanted red, we would mix magenta and yellow. Magenta would absorb green, and yellow would absorb blue, leaving only red to be reflected back to the eye. For black, a combination of all three would be used, which should block out all light in theory. Printers use black as well, since the dyes used in printing are not perfect, and some light from other parts of the spectrum gets through.



Subtractive Primaries Mixing Chart

For printers' mixing:

Yellow + Cyan = Green

Yellow + Magenta = Red

Cyan + Magenta = Blue

Description of Color

Hue – Is the name of the color itself, the dominant wavelength of light or the choice of pigment.

Lightness (brightness) – Is the lightness or darkness of the color, the amount of light reflected or transmitted.

Saturation – Is the level of white, black or grey, ranges from neutral to brilliant (pastel to full color).

Tint – Base color plus white.

Tone – Base color plus grey.

Shade – Base color plus black.

Value – How light or dark a color is.

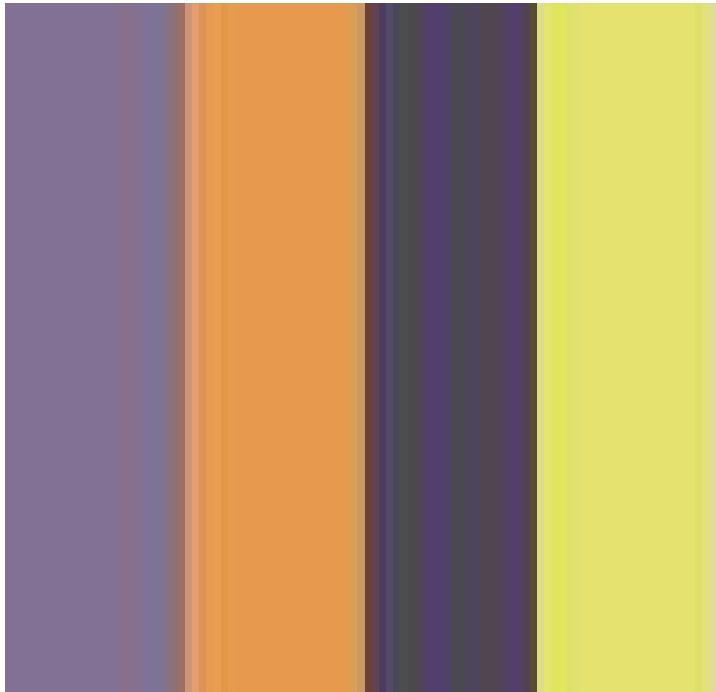
Aggressive - AKA 'Warm'. The yellows, oranges, and reds. These come towards the eye more (spatially) and are generally 'louder' than passive colors.

Passive - AKA 'Cool'. The greens, blues, and violets. These recede from the eye more (spatially) and are generally 'quieter' than the aggressive colors.

Color Schemes

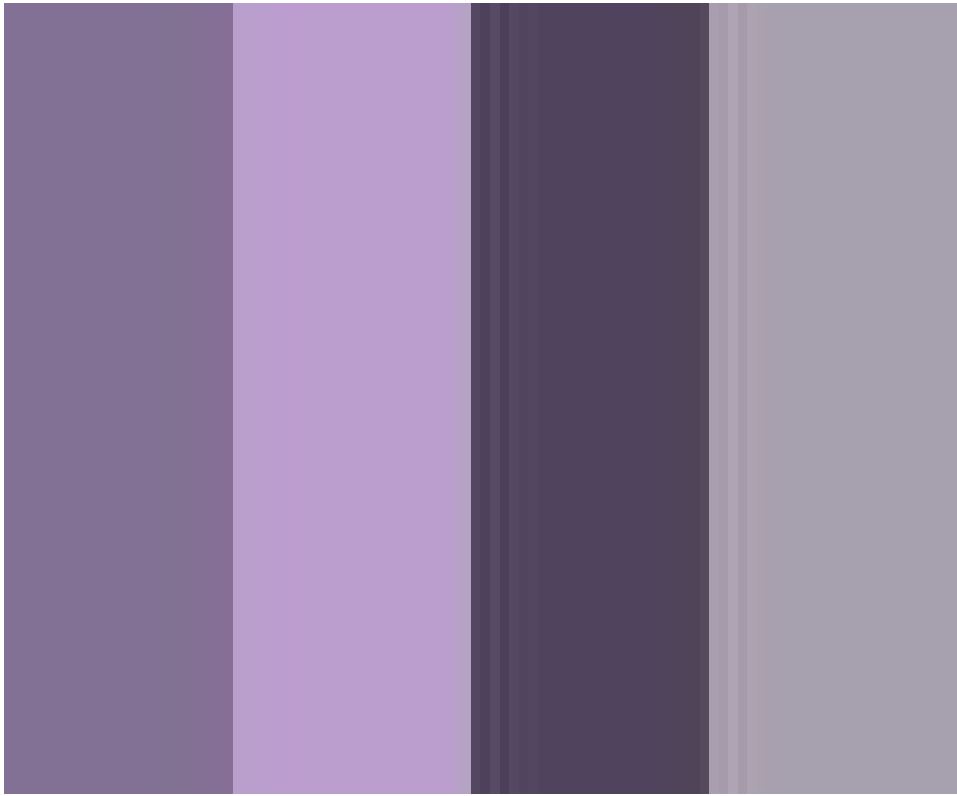
Achromatic – An achromatic color scheme is one that is colorless – using blacks, whites and grays.

Complementary – A complementary color scheme is one that uses colors directly across from each other on the color wheel. This can be accomplished by using two colors or hues that are opposites such as red and green or violet and yellow. In this color scheme any two complements, all the semi-neutrals and the neutral they produce can be used. Black and white can also be used. Since you can choose from varying colors and hues which can give a bold and dramatic effect, this color scheme is best used for dramatic, strong, or bold statements.



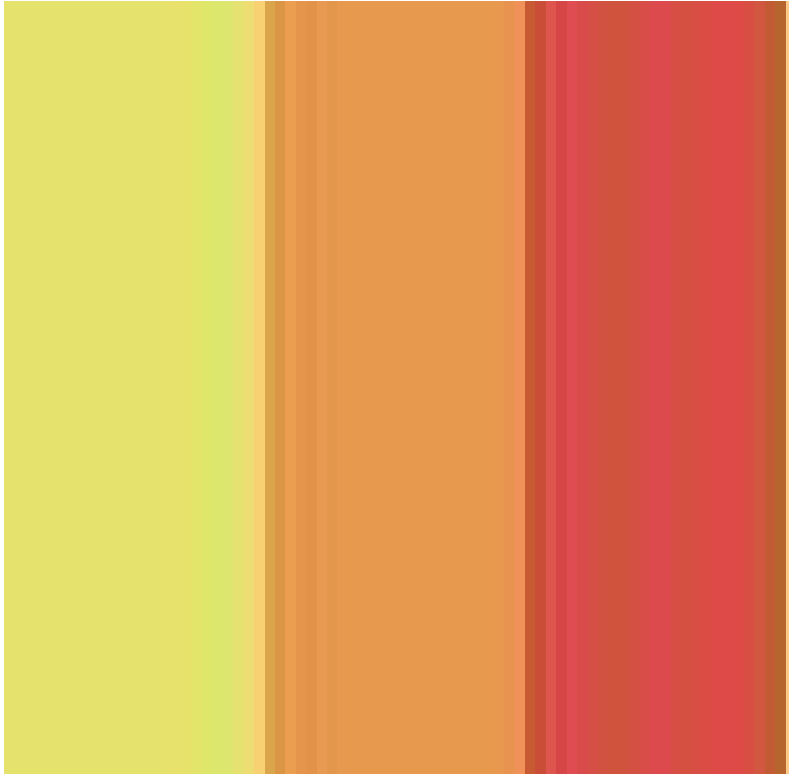
An example of a complimentary color scheme

Monochromatic – A monochromatic color scheme is a one-color color scheme. However, the color can be neutralized by adding its complement to lower the intensity of the color. Black and white can also be used to darken and lighten the value of the color. It is achieved by using one color or hue, utilizing that colors' various tints, tones and shades. Using a monochromatic scheme with multiple textures creates character and maintains unity.



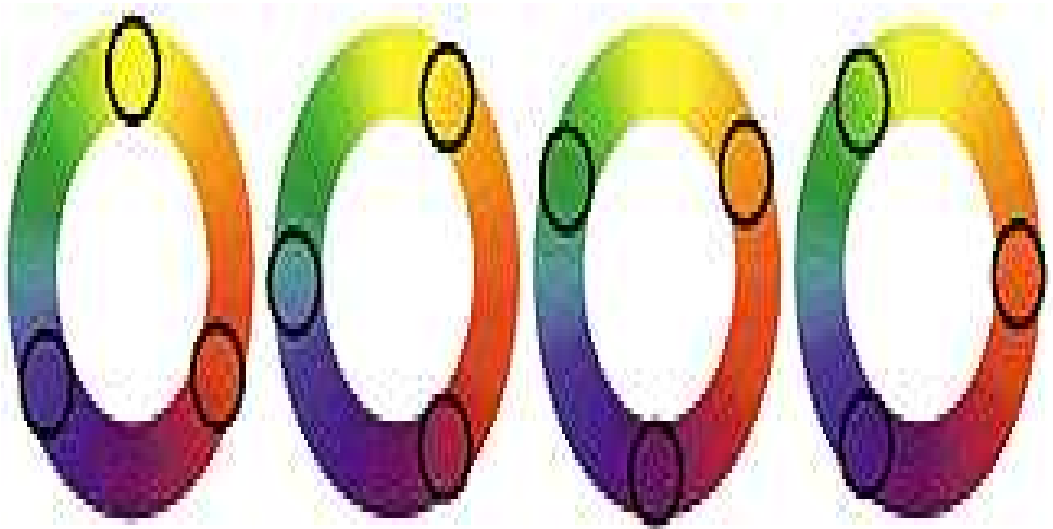
An example of a monochromatic color scheme

Analogous – An analogous color scheme is any three adjacent primary, secondary, or tertiary colors on the color wheel. These schemes can be warm or cool. Each can be neutralized by use of its complement, and black and white can be used. Analogous colors "harmonize" well and produce a definite mood to a composition. This can create a very harmonious color scheme.



An example of an analogous color scheme

Color Triad – A triadic color scheme are colors that are an equal distant from each other on the color wheel. Any three colors equidistant around the color wheel form a triad and can be used in this color scheme (eg., red, yellow and blue). Semi-neutrals are mixed using two of the colors in the triad and the third can be added to further neutralize the pair. Black and white can also be used. This can create a very balanced scheme.



An example of a color triad

Color Tetrad – A tetradic color scheme is one using four or more colors on the color wheel (eg., green, violet, red and yellow).

Color Diad – A diadic color scheme is one using two colors that are two colors apart on the color wheel (eg., red and orange).

Split Complementary – A split complimentary color scheme is similar to complimentary but instead of just two colors directly opposite on the color wheel, two of the three colors are adjacent to one of the colors that is opposite. More simply, choose one color and use the color on each side of its complement (eg., blue, yellow-orange and red-orange). Any three adjacent primary, secondary, and tertiary colors can be used, plus the complement of the middle hue. This complement is used subordinately and to produce semi-neutrals of the three colors while maintaining color harmony. Black and white can also be used.

References

- Diringer, D. (1968). *The Alphabet: A Key to the History of Mankind* 1 (3rd ed.). London: Hutchinson & Co. p. 441.
- Fraser, M.; Kwiatowski, W. (2006). *Ink and Gold: Islamic Calligraphy*. London: Sam Fogg Ltd.
- Johnston, E. (1909). "Plate 6". *Manuscript & Inscription Letters: For schools and classes and for the use of craftsmen*. San Vito Press & Double Elephant Press. 10th Impression
- Marns, F.A (2002) *Various, copperplate and form*, London
- Mediavilla, Claude (2006). *Histoire de la calligraphie française* (in French). Paris: Michel. ISBN 978-2226172839.
- Shepherd, Margaret (2013). *Learn World Calligraphy: Discover African, Arabic, Chinese, Ethiopic, Greek, Hebrew, Indian, Japanese, Korean, Mongolian, Russian, Thai, Tibetan Calligraphy, and Beyond*. Crown Publishing Group. p. 192. ISBN 978-082308230-8.
- Schimmel, Annemarie (1984). *Calligraphy and Islamic Culture*. New York University Press. ISBN 9780814778302.
- Wolfgang Kosack: *Islamische Schriftkunst des Kufischen Geometrisches Kufi in 593 Schriftbeispielen*. Deutsch - Kufi - Arabisch. 380 Seiten. Verlag Christoph Brunner, Basel 2014, ISBN 978-3-906206-10-3.

UNIT IV

Theory And Practice of Expressive Arts

Training and fitness

Training is teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. It forms the core of apprenticeships and provides the backbone of content at institutes of technology (also known as technical colleges or polytechnics). In addition to the basic training required for a trade, occupation or profession, observers of the labor-market recognize as of 2008 the need to continue training beyond initial qualifications: to maintain, upgrade and update skills throughout working life. People within many professions and occupations may refer to this sort of training as professional development.

Physical training concentrates on mechanistic goals: training-programs in this area develop specific skills or muscles, often with a view of peaking at a particular time. Some physical training programs focus on raising overall physical fitness.

In military use, training means gaining the physical ability to perform and survive in combat, and learning the many skills needed in a time of war. These include how to use a variety of weapons, outdoor survival skills, and how to survive being captured by the enemy, among many others. See military education and training.

For psychological or physiological reasons, people who believe it may be beneficial to them can choose to practice relaxation training, or autogenic training, in an attempt to increase their ability to relax or deal with stress.^[1] While some studies have indicated relaxation

training is useful for some medical conditions, autogenic training has limited results or has been the result of few studies



Principles of Training

In order to get the most out of your training, you must follow these simple training principles:

Overload

In order to progress and improve our fitness we have to put our bodies under additional stress. Doing this will cause long-term adaptations, enabling our bodies to work more efficiently to cope with this higher level of performance. Overloading can be achieved by following the

acronym FITT:

- Frequency: Increasing the number of times you train per week
 - Intensity: Increasing the difficulty of the exercise you do. For example running at 12 km/h instead of 10 or increasing the weight you are squatting with.
 - Time: Increasing the length of time that you are training for each session. For example cycling for 45 minutes instead of 30.
-
- Type: Increase the difficulty of the training you are doing. For example progress from walking to running.

Specificity

The type of training that you do should be specific to you and your sport. You should train the energy system which you use predominantly (i.e. don't run 5,000 meters in training if you're a sprinter!) and the fitness and skill components most important to your sport, for example agility, balance or muscular endurance.

You should also test the components which are important in your sport to see your strengths and weaknesses. With this information you can focus on improving your weak points.

Reversibility

Use it or lose it! Basically if you stop training then the improvements you have made will be reversed. So if you are ill or have a holiday and do not train for a period of time (even as little as a week) you may not be able to resume training at the point where you left off.

Variance

Try to vary your training, to keep you interested and to give your body a different challenge. Remember a change is as good as a rest. Many professional athletes will play a completely different sport inbetween their main season, to keep their fitness up whilst still having a rest!



Physical fitness can be achieved through physical exercise.

Physical fitness is a general state of health and well-being and, more specifically, the ability to perform aspects of sports or occupations. Physical fitness is generally achieved through correct nutrition, moderate-vigorous physical activity, exercise and rest.

Before the industrial revolution, fitness was the capacity to carry out the day's activities without undue fatigue. However, with automation and changes in lifestyles physical fitness is now considered a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypokinetic diseases, and to meet emergency situations.

Fitness



Balance Training

Fitness is defined as the quality of being suitable to perform a particular task. Around 1950, perhaps consistent with the Industrial Revolution and the treatise of World War II, the term fitness increased in western vernacular by a factor of ten.^[5] Modern definition of fitness describe either a person or machine's ability to perform a specific function or a holistic definition of human adaptability to cope with various situations. This has led to an interrelation of human fitness and attractiveness which has mobilized global fitness and fitness equipment industries. Regarding specific function, fitness is attributed to personnel who possess significant aerobic or anaerobic ability, i.e. strength or endurance. A holistic definition of fitness is described by Greg Glassman in the CrossFit journal as an increased work capacity across broad times and modal domains; mastery of several attributes of fitness including strength, endurance, power, speed, balance and coordination and being able to improve the amount of work done in a given time with any of these domains.^[6] A well rounded fitness program will improve a person in

all aspects of fitness, rather than one, such as only cardio/respiratory endurance or only weight training.

In order for physical fitness to benefit the health of an individual, an unknown response in the person called a stimulus will be triggered by the exertion. When exercise is performed with the correct amount of intensity, duration and frequency, a significant amount of improvement can occur. The person may overall feel better but the physical effects on the human body take weeks or months to notice and possibly years for full development. For training purposes, exercise must provide a stress or demand on either a function or tissue. To continue improvements, this demand must eventually increase little over an extended period of time. This sort of exercise training has three basic principles: overload, specificity, and progression. These principles are related to health but also enhancement of physical working capacity.

High Intensity Interval Training (HIIT)

High Intensity Interval Training consists of repeated, short bursts of exercise, completed at a high level of intensity. These sets of intense activity are followed by a predetermined time of rest or low intensity activity. Studies have shown that exercising at a higher intensity has increased cardiac benefits for humans, compared to when exercising at a low or moderate level. Research into the benefits of HIIT have revealed that it can be very successful for reducing fat, especially around the abdominal region. Furthermore, when compared to continuous moderate exercise, HIIT burns more calories and increases the amount of fat burned after exercise has finished. Lack of time is one of the main reasons stated for not exercising. HIIT is a great alternative for those people. It is much quicker than conventional workouts.

Concept of physical fitness(metabolic, morphological, bone integrity/ cardio vascular fitness/ fitness test)

Physical Fitness Terms and Concepts

F.I.T.T. = Frequency, Intensity, Time, and Type

Frequency - how often you do physical activity.

Intensity - how hard you perform physical activity.

Time - how long do you do physical activity.

Type - what is the activity you are involved in?

A person's physical fitness is not based on one variable but on a variety of fitness components that can be easily assessed. Those fitness components are: body composition, cardiovascular fitness, flexibility, muscular endurance, and muscular strength. These **five components are often called the health related** components of fitness. Most experts believe that in order for individuals to be truly physically fit, they must possess a minimum measure of all five of these health related components. In other words, to simply be strong is not enough to earn the label "physically fit." Following are definitions of the health related components of physical fitness.

* **Body composition** The percentage of body fat a person possess. Generally, to be considered fit, a male needs to have between 10 and 20 percent body fat, while a fit female has to have between 18 and 22 percent.

* **Cardiovascular fitness** The ability of the heart, lungs, and arteries to supply fresh oxygenated blood to the muscles of the body.

Cardiovascular fitness allows fit people to participate in vigorous aerobic exercise for long periods of time without undue fatigue.

* **Flexibility** The range of motion available at a joint or joints. Fit people possess full range of motion around their joints and are able to participate in a wide range of physical activities injury and pain free.

* **Muscular endurance** The ability of the muscles to continue to contract and do work for long periods of time. A fit person possesses enough muscular endurance to continue work or play for an extended period of time.

* **Muscular strength** The maximum amount of force that a muscle or muscle group can exert during a single contraction. A fit person possesses enough muscular strength to lift and move their own body weight without undue stress or injury.

Although the health related components are the most important components for determining physical fitness, a second division of components must also be discussed when considering total physical fitness. This second classification of components deals with the ability of an individual to be efficient at movement while participating in life-time fitness activities. For an individual to persist in exercising throughout life, that person must possess a certain amount of **skill or sport** related fitness. Therefore, the **skill related** components of fitness must be considered. The six skill related components of fitness are: agility, balance, coordination, power, reaction time, and speed.

Following are definitions of the **skill related** components of fitness.

* **Agility** The ability to change the position of the body quickly and accurately.

* **Balance** The ability to maintain equilibrium while moving or while stationary.

* **Coordination** The ability to execute motor tasks such as hitting a tennis ball or kicking a soccer ball quickly and accurately.

* **Power** The ability to deliver a force with strength and speed.

* **Reaction time** The time between a stimulus being administered and the beginning of the reaction to that stimulus.

* **Speed** The ability to move the body quickly.

Through proper practice each of these components can be improved so that an individual may become more proficient at sport skills, which may in turn allow the individual to enjoy more success at a lifetime sport, which may in turn lead to more and longer exercise bouts, which will lead to a better likelihood that the individual will reach a satisfactory level of physical fitness and become even better at that sport.

Physical fitness, this is a combination of **five health related** components and **six sport or skill related** components. A physically fit individual possesses muscular strength, muscular endurance, cardiovascular endurance, flexibility, and proper body composition, and is an efficient and capable performer of lifetime sports and/or fitness activities.

What is Resting Heart Rate?

■ **Resting heart rate is the number of beats in one minute when you are at complete rest.**

■ **The best time to take your RHR is immediately after awakening and before you get out of bed, measure your heart**

rate using a pulse from an artery, counting the beats for 15 seconds and multiplying by 4. Take the measurement for the 5 consecutive days and average them.

- **Resting Heart Rate is dependent on your life habits and a number of factors such as quality of sleep, stress level, and eating habits. This number can vary enormously between two persons of the same age, weight and height but with trained athletes, the difference is smaller and a woman's resting heart rate is usually higher.**
- **Generally, the more efficient your heart, the lower your RHR will be but if you are not feeling well your RHR will be higher than normal.**

What is Maximum Heart Rate?

- **Maximum heart rate is the highest number of times your heart can contract in one minute. This number declines with age and varies according to the type of sporting activity.**

Heart Rate Zones

- Once you know your RHR and MHR you can use this information to make some simple calculations for targeting what your heart rate should be when you are exercising.
- So what zones should you train in? Unfortunately, there is not simple answer to this question since it depends entirely on your objectives and present level of fitness. When you first use a Heart Rate Monitor, an observation period is essential before determining your goals and constructing a schedule. Using a HRM means listening to your heart.
- As a simple test, lie down for a few minutes and then take your heart rate. If your HR increases by up to 20 beats or there is a greater difference than normal., take note because you are either over-training or are simply tired. The same reason can cause your

HR to be slow to respond when you exert yourself or slow to respond during recovery - reduce the amount of training/interval training until the condition disappears.

- Whenever you find that your HR is higher than normal, you have either not recovered from a previous workout (takes 1-3 days) or you are developing an illness. This telltale sign is most noticeable when you have an unusually high RHR upon waking up.

Additional Information:

- Like any combustion engine, your body uses oxygen and fuel to generate energy. The cardiovascular system delivers oxygen to the skeletal muscles, which then use this oxygen to "burn" various fuels (carbohydrate and fat) to yield mechanical energy. A unique feature of your body is its ability to change in response to the demands placed on it. By working out hard, you overload your aerobic systems. During rest, your body adapts to make you stronger. This is accomplished by improvements in cardiovascular and muscular function. The heart becomes stronger and more efficient, and the skeletal muscles become better at extracting oxygen from the bloodstream. Within muscle cells, the mitochondria boost their enzyme systems to oxidize fuels.
- All of these changes occur slowly over time. For continued improvement, you must continue to overload these systems. As you adapt, however, you require harder workouts to do this. How do you know if you are training at the right level? Physiologists have discovered that the rate of oxygen "burned" in the muscles is the best measure of aerobic work. To determine this requires expensive equipment and specialized testing facilities. Basically, an individual runs on a treadmill while heart rate, and volume of inhaled and exhaled air are measured. Samples of exhaled air are periodically taken and the oxygen concentration determined. The difference between the amount of oxygen breathed in and out

during the test is what the muscles have consumed to burn fuel. The rate of oxygen consumption, in liters per minute is called VO₂. The test is done at progressively harder levels until the individual maxes out. The maximum rate of oxygen consumption is called the VO₂ max.

- Research on VO₂ has shown that there is a threshold below which no additional gains are achieved in aerobic exercise. For most people this is a pace that allows for casual conversation during the workout, and is approximately 55% of VO₂ max. Above this level you are sufficiently overloading your cardiovascular and muscular systems to bring about improvement. The lab equipment is much too bulky to take with you on the road. So, how do you know if you are above this level in your workouts?
- Maximum heart rate is related to maximum VO₂. The heart rate is much easier to measure and is a very good approximation of VO₂. The relationship between percentage of maximum heart rate and percentage of VO₂ max is very predictable and is independent of age, gender, or level of fitness.

Aerobics and gymnastics

Aerobic exercise



Cardio

Aerobic exercise (also known as **cardio**) is physical exercise of low to high intensity that depends primarily on the aerobic energy-generating process. Aerobic literally means "relating to, involving, or requiring free oxygen", and refers to the use of oxygen to adequately meet energy demands during exercise via aerobic metabolism. Generally, light-to-moderate intensity activities that are sufficiently supported by aerobic metabolism can be performed for extended periods of time.

When practiced in this way, examples of cardiovascular/aerobic exercise are medium to long distance running/jogging, swimming, cycling, and walking, according to the first extensive research on aerobic exercise, conducted in the 1960s on over 5,000 U.S. Air Force personnel by Dr. Kenneth H. Cooper.

Aerobic versus anaerobic exercise



Fox and Haskell formula showing the split between aerobic (light orange) and anaerobic (dark orange) exercise and heart rate

Aerobic exercise and fitness can be contrasted with anaerobic exercise, of which strength training and short-distance running are the most salient examples. The two types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle.

New research on the endocrine functions of contracting muscles has shown that both aerobic and anaerobic exercise promote the secretion of myokines, with attendant benefits including growth of new tissue, tissue repair, and various anti-inflammatory functions, which in turn reduce the risk of developing various inflammatory diseases. Myokine secretion in turn is dependent on the amount of muscle contracted, and the duration and intensity of contraction. As such, both types of exercise produce endocrine benefits.

In almost all conditions, anaerobic exercise is accompanied by aerobic exercises because the less efficient anaerobic metabolism must supplement the aerobic system due to energy demands that exceed the aerobic system's capacity. What is generally called aerobic

exercise might be better termed "solely aerobic", because it is designed to be low-intensity enough not to generate lactate via pyruvate fermentation, so that all carbohydrate is aerobically turned into energy.

Initially during increased exertion, muscle glycogen is broken down to produce glucose, which undergoes glycolysis producing pyruvate which then reacts with oxygen (Krebs cycle, Chemiosmosis) to produce carbon dioxide and water and releases energy. If there is a shortage of oxygen (anaerobic exercise, explosive movements), carbohydrate is consumed more rapidly because the pyruvate ferments into lactate. If the intensity of the exercise exceeds the rate with which the cardiovascular system can supply muscles with oxygen, it results in buildup of lactate and quickly makes it impossible to continue the exercise. Unpleasant effects of lactate buildup initially include the burning sensation in the muscles, and may eventually include nausea and even vomiting if the exercise is continued without allowing lactate to clear from the bloodstream.

As glycogen levels in the muscle begin to fall, glucose is released into the bloodstream by the liver, and fat metabolism is increased so that it can fuel the aerobic pathways. Aerobic exercise may be fueled by glycogen reserves, fat reserves, or a combination of both, depending on the intensity. Prolonged moderate-level aerobic exercise at 65% VO₂ max (the heart rate of 150 bpm for a 30-year-old human) results in the maximum contribution of fat to the total energy expenditure. At this level, fat may contribute 40% to 60% of total, depending on the duration of the exercise. Vigorous exercise above 75% VO₂max (160 bpm) primarily burns glycogen.

Major muscles in a rested, untrained human typically contain enough energy for about 2 hours of vigorous exercise. Exhaustion of glycogen is a major cause of what marathon runners call "hitting the wall".

Training, lower intensity levels, and carbohydrate loading may allow postponement of the onset of exhaustion beyond 4 hours.

Aerobic exercise comprises innumerable forms. In general, it is performed at a moderate level of intensity over a relatively long period of time. For example, running a long distance at a moderate pace is an aerobic exercise, but sprinting is not. Playing singles tennis, with near-continuous motion, is generally considered aerobic activity, while golf or two person team tennis, with brief bursts of activity punctuated by more frequent breaks, may not be predominantly aerobic. Some sports are thus inherently "aerobic", while other aerobic exercises, such as fartlek training or aerobic dance classes, are designed specifically to improve aerobic capacity and fitness. It is most common for aerobic exercises to involve the leg muscles, primarily or exclusively. There are some exceptions. For example, rowing to distances of 2,000 m or more is an aerobic sport that exercises several major muscle groups, including those of the legs, abdominals, chest, and arms. Common kettlebell exercises combine aerobic and anaerobic aspects.

Among the recognized benefits of doing regular aerobic exercise are:

- Strengthening the muscles involved in respiration, to facilitate the flow of air in and out of the lungs
- Strengthening and enlarging the heart muscle, to improve its pumping efficiency and reduce the resting heart rate, known as aerobic conditioning
- Improving circulation efficiency and reducing blood pressure
- Increasing the total number of red blood cells in the body, facilitating transport of oxygen
- Improved mental health, including reducing stress and lowering the incidence of depression, as well as increased cognitive capacity.

- Reducing the risk for diabetes. One meta-analysis has shown, from multiple conducted studies, that aerobic exercise does help lower Hb A_{1C} levels for type 2 diabetics.

As a result, aerobic exercise can reduce the risk of death due to cardiovascular problems. In addition, high-impact aerobic activities (such as jogging or using a skipping rope) can stimulate bone growth, as well as reduce the risk of osteoporosis for both men and women.

In addition to the health benefits of aerobic exercise, there are numerous performance benefits:

- Increased storage of energy molecules such as fats and carbohydrates within the muscles, allowing for increased endurance
- Neovascularization of the muscle sarcomeres to increase blood flow through the muscles
- Increasing speed at which aerobic metabolism is activated within muscles, allowing a greater portion of energy for intense exercise to be generated aerobically
- Improving the ability of muscles to use fats during exercise, preserving intramuscular glycogen
- Enhancing the speed at which muscles recover from high intensity exercise
- Neurobiological effects: improvements in brain structural connections and increased gray matter density, new neuron growth, improved cognitive function (cognitive control and various forms of memory), and improvement or maintenance of mental health

Some downfalls of aerobic exercise include:

- Overuse injuries because of repetitive, high-impact exercise such as distance running.

- Is not an effective approach to building muscle.
- Only effective for fat loss when used consistently.

Both the health benefits and the performance benefits, or "training effect", require a minimum duration and frequency of exercise. Most authorities suggest at least twenty minutes performed at least three times per week.

Varieties

Indoor

- Stair climbing
- Elliptical trainer
- Indoor rower
- Stairmaster
- Stationary bicycle
- Treadmill

Outdoor

- Walking
- Cycling
- Running
- Cross-country skiing
- Cross-country running
- Nordic walking
- Inline skating
- Rowing

Indoor or outdoor

- Swimming
- Kickboxing

- Skipping rope or jump rope
- Circuit training
- Jumping jacks
- Jogging
- Water aerobics



Daniele Hypólito on the Balance Beam at the 2007 Pan American Games

Gymnastics is a sport involving the performance of exercises requiring flexibility, balance and control. Internationally, all events are governed by the Fédération Internationale de Gymnastique (FIG). Each country has its own national governing body (BIW) affiliated to FIG. Competitive artistic gymnastics is the best known of the gymnastic events. It typically involves the women's events of vault, uneven bars, balance beam, and floor exercise. Men's events are floor exercise, pommel horse, still rings, vault, parallel bars and the high bar. Gymnastics evolved from exercises used by the ancient Greeks that included skills for mounting and dismounting a horse, and from circus performance skills.

Other FIG disciplines include: rhythmic gymnastics, trampolining and tumbling and aerobic gymnastics. Disciplines not currently

recognized by FIG include aesthetic group gymnastics, men's rhythmic gymnastics and TeamGym. Participants can include children as young as 20 months old doing kindergym and children's gymnastics, recreational gymnasts of ages 5 and up, competitive gymnasts at varying levels of skill, and world class athletes

History and philosophy of physical education

The field of physical education has gone through many cycles over its long history. These cycles range from a strict authoritarianism to the liberal democracy of today. This transformation to the democracy has opened the field of physical education up to many new sciences, which are creating many new professional opportunities. If the cycles of physical education continue, these new professions will hopefully pave the way to future discoveries and studies of physical education.

The Spartans and Athenians were the first to have a type of physical education. Though very different, both systems served the people and their needs. The Spartan system was similar to a dictatorship. Male children were taken at the age of seven to learn basic military skills while living in barracks. When the children reached the age of fourteen, they began learning group fighting tactics which would allow them to succeed while in the military from the ages of twenty to thirty. Once thirty, the men could then marry a woman who had been doing some training of her own in order to make strong babies. The philosophy of the Spartans was basically to allow them to invade other countries if desired, and to prevent other countries from invading them.

The philosophy of the Athenians was quite different compared to the Spartans. The Athenian culture was very democratic, and focused on training the mind and body. Reading and writing was a large part of society as well as physical activity which took place in the center of the city where the gymnasium was located. The physical education

philosophy of the Athenians was the high point of physical education for many years.

Some other cycles in physical education that we have evolved from are that of the Romans, the dark ages, and the crusades. The Roman era is a bit disturbing, but is nonetheless a cycle of physical education. Physical education for the Romans was about athletics, which was primarily about entertainment. People were forced to fight to the death, and oftentimes fed to lions. During the dark ages, religion viewed physical education as a waste of time and a work of the devil. The dark ages were a very sedentary time for human civilization. Following the dark ages in approximately 1096, were the crusades. The crusades were a time of muscular Christianity, because of the Muslims conquering Jerusalem. Muscular Christianity is basically Christians believing that the more one trained to become good soldiers, the more Christian a person was. In 1270, the crusades ended and so did the thought of physical education being worthwhile until approximately 1400 when the renaissance period began. Physical education during the renaissance period is quite similar to physical education today. It is done to better oneself, not to be doing something for someone else. The development of physical education had another setback in the 1600's when it was very functional and not a priority. People believed that if it did not have a specific purpose, then it was a waste of time.

During the 1700's, there was a big change in physical education that can be largely attributed to three people: Rousseau, Johan Simon, and Guts Muths. Rousseau was the first person to promote education for the masses and he also thought of play as being educational. In 1712, Rousseau invented an activity that is still used by millions of children everyday, recess. Johan Simon was the first physical education teacher and believed physical education should be taught along with reading and writing. Simon believed physical education should

include a lot of physical labor. Guts Muths developed a series of gymnastic apparatuses and believed physical education developed very important social skills. These people of the 1700's and the things they did began paving the road to where we are today.

During the 1800's, physical education programs were finding their way into universities which contributed to many things we have today. New sports were being invented, intramurals were being brought into schools, women began exercising, gymnasiums could be found in most colleges, and many recreational areas and parks were being built in order to decrease the crime rate. This continued on into the 1900's which brought on the creation of the National Collegiate Athletic Association to regulate college athletics, and the golden age of sports during the 20' and 30's. During this golden age of sport, the number of people in sport increased dramatically, the number of teachers increased, and physical education began moving toward the involvement of sport. In 1941, World War II began which brought a big shock along with it. Of the first 2 million males drafted, 45% failed their physical. With this, physical education began to be very strongly pushed in schools in order to improve the health of the American people.

Since W.W. II, the United States has continued to press the importance of physical education, which brings it to where it is today, a highly complex field with many different sub-disciplines. The sub-disciplines are:

--"Exercise physiology, which is the study of bodily systems and their reactions to the stress of exercise.

--Kinesiology, which is the study of how the muscular system moves the bony structure of the body.

--Biomechanics, which is the study of the human body as a mechanical system, utilizing principles and applications from physics.

--Motor learning, which is the changes in motor performance related to experience and practice.

--Sport sociology, which is the social structure, social patterns, and social organization of groups engaged in sport.

--Sport Psychology, which is the study of behavioral and psychological issues and problems in sport.

--Sport pedagogy, which is the study of the processes of teaching and coaching, the outcomes of such endeavors, and the content of fitness, physical-education, and sport-education programs." (Siedentop)

These sub-disciplines have created many new jobs for people in the field of education, and will surely branch off to form others in the future.

Physical education has definitely come a long way since the Spartans and Athenians. From an authoritarian type system to promoting lifespan physical education with many sciences studying the different intangibles of physical education in order to better the mind and body. These new sciences have obviously broadened the "umbrella of physical education", but when looking to the future, there really is no end in sight. The growing "umbrella" will continue getting larger as new thoughts and ideas come, and with them, new sciences also.

Philosophy of Sport is an area of philosophy that seeks to conceptually analyze issues of sport as human activity. These issues cover many areas, but fall primarily into five philosophical categories: metaphysics, ethics and moral philosophy, philosophy of law, political philosophy, and aesthetics. The philosophical perspective on sport originated in Ancient Greece, having experienced a revival in the latter part of the 20th century with the work of Paul Weiss and Howard Slusher.

A philosophical perspective on sports incorporates its metaphysical relationships with art and play, ethical issues of virtue and fairness and more broadly sociopolitical

Biomechanics analysis of performance in individual sports

A biomechanical analysis of sports performance provides an objective method of determining performance of a particular sporting technique. In particular, it aims to add to the understanding of the mechanisms influencing performance, characterization of athletes and provide insights into injury predisposition. While the performance in sport of able-bodied athletes is well recognized in the literature, less information and understanding are known on the complexity, constraints and demands placed on the body of an individual with a disability. This article provides a dialogue that outlines scientific issues of the performance analysis of multi-level athletes with a disability, including Paralympians. Four integrated themes are explored, the first of which focuses on how biomechanics can contribute to the understanding of sports performance in athletes with a disability and how it may be used as an evidence-based tool. This latter point questions the potential for a possible cultural shift led by the emergence of user-friendly instruments. The second theme briefly discusses the role of reliability of sports performance and addresses the debate of two-dimensional and three-dimensional analyses. The third theme addresses key biomechanical parameters and provides guidance to clinicians and coaches on the approaches adopted using the biomechanical/sports performance analysis for an athlete with a disability starting out, to the emerging and elite Paralympian. For completeness of this discourse, the final theme is based on the controversial issues on the role of assisted devices, and the inclusion of Paralympians into able-bodied sport. All combined, this dialogue highlights the intricate relationship between biomechanics and training of individuals with a disability. Furthermore, it illustrates the complexity of modern training of athletes, which can only lead to a better appreciation of the performances to be delivered in the London 2012 Paralympic Games.

Advantages of Sport Biomechanics

When coaches understand how forces work on muscles and affect motion in sports, they have a clear advantage over those who lack this knowledge and its applications. Athletes who know the basic concepts have a rationale for learning the correct way to execute skills. Knowing the reason behind learning a challenging technique gives them more motivation to master it.

The key to success is finding effective instructional cues that help the athlete achieve correct mechanical technique. Coaches with a command of mental training tools and sports training principles can help athletes make amazing things happen on the field.

Anatomy and physiology lay the foundation for biomechanics and kinesiology, areas of study about human movement. With a command of these areas, coaches can:

- Analyze sport movements,
- Select the best training exercises,
- Reduce or prevent injuries,
- Design or choose the sport equipment that best matches athletes' personal needs.
- Maximize economy and efficiency of movements.

The laws and principles of sport biomechanics are particularly helpful for designing training activities that match the mechanical demands of sports. For example, these principles help answer questions about the similarities between weight training exercises and sport movements and provides a rationale for which exercises a coach might include in the training program.

Biomechanical Analysis



With the level of competition ever increasing in sports, it is important both to perform, and train with the body in perfect biomechanical

form. This will help ensure that you can continue to compete injury free, and perform at your highest potential. With experience in a variety of sports, the **sports medicine and conditioning specialists** at SPC's training centres are experts in analyzing biomechanical form as it pertains to various sports activities.

How is a Biomechanical Analysis performed?

One of SPC's specialists will observe, and often record the athlete performing a specific sports skill. Then, by careful analysis the skill is broken down into its fundamental components in order to find any biomechanical or movement error in the technique that may lead either to injury or decrease performance.

clinic [click here](#).

Sports biomechanics allows detailed analysis of sports movements. With these results the mechanics of movements can be improved to allow better sports performance and/or less injury risk. Sports biomechanics is often confronted with very special requirements:

- o Analysis often has to be done at the place of sports performance (in the field)
- o High performance athletes need to get analyzed in competition to get relevant information
- o Results have to be communicated and be understood by athletes and trainers to make use out of them in training

Sports biomechanics often focuses on improvement of sports performance to reach extraordinary results. Often Olympic athletes

get sports biomechanical assessment to reach optimal movement performance.

As athletes and their conditions are very individual, sports biomechanical assessments need to be individual to the athlete and the specific question. Methods used in sport biomechanics can differ and mostly include 2D or 3D kinematics, kinetics, EMG or pressure. A special requirement in high performance sports is the analysis in competition, where no markers or sensors can be used. Especially in this field the unique capabilities of Simi systems have enormous advantages.

Active health and wellness/ exercise physiology

Exercise physiology is the physiology of physical exercise, that is, study of the acute responses and chronic adaptations to a wide range of exercise conditions. In addition, many exercise physiologists study the effect of exercise on pathology, and the mechanisms by which exercise can reduce or reverse disease progression. Accreditation programs exist with professional bodies in most developed countries, ensuring the quality and consistency of education. In Canada, one may obtain the professional certification title – Certified Exercise Physiologist for those working with clients (both clinical and non clinical) in the health and fitness industry.

An exercise physiologist's area of study may include but is not limited to biochemistry, bioenergetics, cardiopulmonary function, hematology, biomechanics, skeletal muscle physiology, neuroendocrine function, and central and peripheral nervous system function. Furthermore, exercise physiologists range from basic scientists, to clinical researchers, to clinicians, to sports trainers.

- Aerobics and lifesaving

Sports in Zambian society

Nsolo also called **Chisolo** is the Zambian version of mancala.

Nsolo game is usually played by scooping holes in the ground and using small stones or Mongongo nuts for playing pieces. Two players scoop four rows of holes in the ground and begin to play, usually with the help of a number of bystanders. However, carved wooden game boards exist from earlier years and can also still be bought at tourist markets in Livingstone and Lusaka. Several variations of the game exist.

Swimming II and Athletics II

Human swimming



A swimmer performing front crawl



Competitive open water swimming race

Human swimming is the self-propulsion of a person through water or another liquid, usually for the purpose of recreation, sport, exercise, or survival. Locomotion is achieved through coordinated movement of the limbs, the body, or both. Humans are able to hold their breath underwater and undertake rudimentary locomotive swimming within weeks of birth, as an evolutionary response.

Swimming is consistently found to be among the top recreational activities undertaken by the public, and in some countries, swimming lessons are a compulsory part of the educational curriculum. As a formalized sport, swimming features in a range of local, national, and international competitions, including every modern summer Olympics, which occurs every four years.

Swimming can be undertaken using a wide range of different styles, known as 'strokes,' and these strokes are used for different purposes, or to distinguish between classes in competitive swimming. It is not necessary to use a defined stroke for propulsion through the water, and untrained swimmers may use a 'doggy paddle' of arm and leg movements, similar to the way four-legged animals swim.

There are four main strokes used in competition and recreation swimming: the front crawl, the breaststroke, the backstroke and the butterfly. Competitive swimming in Europe started around 1800, mostly using the breaststroke. In 1873 John Arthur Trudgen introduced the trudgen to Western swimming competitions after copying the front crawl used by Native Americans, but substituting a scissor kick for the traditional flutter kick in order to reduce splashing. The butterfly stroke was developed in the 1930s and was considered a variant of the breaststroke until it was accepted as a separate style in 1952.

Other strokes exist for specific purposes, such as training or rescue, and it is also possible to adapt strokes to avoid using parts of the body, either to isolate certain body parts, such as swimming with arms only or legs only to train them harder, or for use by amputees or those suffering from paralysis.

Adapted P.E and sports

With the development of new and improved technology with physical education, and especially adapted physical education, it is important for the APE teacher to know and understand different ways to implement technology for increased success for their students. APE teachers can develop an updated website regarding a fitness workout plan, in which students can download and follow at home with a sibling or parent. Students can be taught how to keep track of their physical fitness goals and record the data on a spreadsheet. Video

files can also be used to demonstrate proper technique. Teachers can easily create videos of students doing an activity and download them onto an iPod or computer so students have an easily accessible reference to use during transition periods or after they graduate.^[7] Video files or iMovies can be utilized as report cards or as evidence of IEP goal attainment. In APE pedometers can easily be introduced into any lesson and taught how to use and how to keep track of steps. Teachers can also play appropriate and motivating music for aerobic activities. Video games are also starting to become more and more predominant in physical education classes, such games can be used outside of school as well. Some games are particularly accessible for individuals with disabilities including Wii and Eye Toy Play. New applications (Apps) are constantly being created to assist people with disabilities in numerous ways. With technology growing, APE teachers need to continue to develop as professionals in providing new ways to enhance their students physical development.

Adaptive Physical Education (APE) is a direct service that can be provided to a special needs child, should the Committee on Preschool Special Education (CPSE) or the Committee on Special Education (CSE) determine that the child is in need of such service. In many cases, if a child is identified as visually impaired, physically handicapped, severely multiply impaired, or other health impaired, he or she will be warranted APE services.

Adaptive Physical Education (APE) is an adapted, or modified, physical education program designed to meet the individualized gross motor needs, or other disability-related challenges, of an identified student. The program can be provided one-on-one, in a small group, or within the general physical education setting. The APE instructor needs to be trained in assessing and working with special needs children. Lesson plans, rubrics, and worksheets need to be adapted for the needs of the children.

The need for Adaptive Physical Education (APE) is determined by the CPSE or CSE. The APE instructor assesses the child and presents the information to the committee. The assessment must include diagnostic and curriculum-based data, observations, and input by the child's general physical education teacher. If the child is receiving OT, PT or Vision Therapy (VT), then input should be obtained by these providers as well.

Based on the assessment and any other information provided by committee members, the committee determines whether or not APE services are needed. If the committee recommends such services, then APE becomes a part of the child's Individualized Education Plan (IEP). The plan must include the assessment information, the amount of APE to be received, whether or not the child will be in the general physical education setting, and goals with measurable objectives/benchmarks.

It's important to note that APE should not be viewed as a related service. Because physical education is federally mandated for all students, the APE teacher is a direct service provider. The APE teacher is to provide adaptations or modifications that will allow the special needs child to participate in age-appropriate physical educational activities. Adaptations or modifications can be made in four areas

Physical education classes teach us much more than the importance of an active life and a healthy body; they teach us from an early age how to interact, how to compete in a fair manner, and most of all, how to collaborate with others in order to win or achieve great results. Unfortunately, not every child can enjoy the wonder of running around, playing games and sports, and laughing freely with the other children; this is why adapted physical education was created, and in what follows we are going to take a closer look in order to better understand what it is and what it deals with.



Adapted physical education is the science, some would even say art, of creating a physical education program for someone with disabilities, whether they are physical or mental impairments. This type of physical education has to not only create a special activity regimen, but deal with implementing it and monitoring the children or learners of a sport or game. The physical education program has to be comprehensive, meaning it has to start by taking into account the learner's impairments and challenges, and try either to create a routine that they can perform, or one that challenges them into performing something a bit more difficult, but which helps them invaluabley.

It has been stressed and overstressed that these new generations of children no longer have the right amount of physical activity, something which is very necessary for physical and mental development. But what about the children with disabilities? Wouldn't

they too benefit in one form or another by taking physical education classes, or taking up a sport? The answer is a definite yes, and there are many people with disabilities who have improved their condition considerably thanks to a more active lifestyle. This is what **adaptive physical education** tries to achieve, but unfortunately there aren't resources to do this everywhere.



Special schools for children with learning or physical disabilities have to make programs like these available for them; not all children would benefit from such a program, but it takes a few professionals to decide when a child would benefit from physical education as well. The program they follow has to be adapted to their own needs and limitations, and they always have to be guided and helped by a special teacher who knows how to teach them and how to prevent them from injuring themselves. Finally, adaptive physical education can refer to various fitness exercises that the child or youth has to perform, or even to organized games where multiple players participate.



Curriculum development in P.E

THERE are so many school leavers on the streets who are unemployed because they are unable to do any specialised work despite having attained the minimum education requirement in Zambia.

Such school leavers can not also come up with tangible ideas to excel in life due to lack of entrepreneurship skills and knowledge as a result attending school for 12 years which never prepared them for a challenging future ahead.

Over the past 49 years of Zambia's independence, there have been dissatisfaction with the education offered to school-going children. Calls directed at changing the Primary and Secondary School Curricular have been made.

The present Curriculum has been labelled as a dominantly examination curriculum which places emphasis on factual information and forces learners to memorise the factual information and does not promote critical learning.

Research has also shown that it uses English which is an alien language as a medium of instruction in the early grades. English is alien to the majority of children and is completely different from the language they use in the community and at home.

The Patriotic Front (PF) Government and its partners is now seeking to re-orient the curriculum at all the levels of education to put emphasis on life skills through the launch of the new school curricular from early education to teacher training dubbed "Empowering Learners by Putting Theory into Practice."

Education, Science, Vocational Training and Early Education Minister John Phiri says the theme is intended to remind the teachers that their teaching methods and strategies should focus on producing a learner who will have life skills to cope with different challenges of life.

A learner, who has skills to apply for survival, will not only cope in a challenging society but will also contribute to national development. Munali Secondary School was active on January 15, 2014, as different stakeholders converged to witness the launch of the new school curricular which is earmarked to tackle issues that were raised from the current curriculum.

The new curriculum will be implemented in phases with the Early Childhood Education (Pre-School), Grades one, five, eight and 10 beginning this month while the rest of the curriculum will be rolled out within the next three years.

"The implementation of the new school curriculum shall be conducted

in phases, starting in January, 2014, with Early Childhood Education (Pre-School), grades one, five, eight and 10. The other grades to follow in 2015 are grade two, six, nine and 11 and Adult Literacy,” Dr Phiri announced.

The Minister said that grades three, seven and 12 curriculums will be implemented in 2016 with grade fours being the last level to implement the new curriculum in 2017.

With the anxiety that comes with every change, the Ministry has decided to administer the first examination based on the new curriculum at grade nine in 2015 with grades seven and 12 examinations in 2016.

With the launch and the implementation framework outlined by the Minister, the parents, pupils and stakeholders are concerned to know what the new curriculum is all about and if it can bring any hope to the Zambian education sector which is currently considered below par in the region compared to other countries?

At the Early Childhood Education level, there are four major changes which all public and private institutions have been tasked to comply with.

The curriculum has been standardised as all early childhood education centres will use one curriculum which has been developed by the Ministry. Both public and private institutions are expected to use the national curriculum.

Dr Phiri explained that the move is meant to provide uniform early childhood education to all learners in different parts of the country and in line with international standards.

The new early childhood curriculum has also been linked to grade one in order to help learners enter into primary school easily, adding that much time at this level will be devoted to social interaction through play activities constituting 60 per cent, while academic activities will constitute 40 per cent of learning time.

Local Languages widely used in the particular localities will be used as a medium of instruction.

At the primary school level, the Ministry has made five changes which it has also urged institutions to comply with.

The medium of instruction from grade one to four shall be one of the official local languages, while English shall be taught as a subject beginning at grade two. From grade five up-wards the medium of instruction shall be English.

This means children will be instructed in the languages they are familiar with while at grade two they will start learning English. The children will be taught English using the local languages until when in grade five when they will now start getting instructions in the English language after learning it from grade two to four.

The changes on the use of the local language are meant for both public and private schools while international and private primary schools catering for non-Zambians will be exempted from this requirement with permission from the permanent secretary.

The Ministry has developed a new approach to the teaching of initial literacy in the early grades which follows the internationally recognised methods of teaching literacy based on initial sounds, phonics and word building.

The Ministry has introduced literacy competence tests at grades one and four to ensure that learners breakthrough in literacy at the lower primary and before they proceed to the upper primary school level; the move will mean only those that pass will go to upper primary while those that fail will be dealt with as special needs.

The Minister explained that the move was to avoid having pupils in the upper primary that could neither read nor write.

Sign language and braille have also been introduced to serve learners with special educational needs.

Under this curriculum, five major reforms have been made with the creation of two curriculum pathways, academic and vocational.

The academic path is meant for learners with passion for academic subjects and desire for careers in that direction. In accordance with the concerns that have been expressed about mathematics and science,

all senior technical secondary schools, national and regional will offer an academic path with emphasis on mathematics and pure sciences. The vocational path is for ambitious learners and interests in technical and other hands-on subjects. The curriculum will provide practical skills to such learners starting at grade eight to 12.

In order to provide the above curriculum effectively, schools will closely collaborate with Technical, Vocational and Entrepreneurship Training Authority (TEVETA) and other line ministries.

Learners studying the vocational curriculum will obtain trade certificates as well as grade nine or grade 12 Certificates. The trade certificates will be awarded by TEVETA whereas the academic certificates for grade nine and 12 shall be awarded by Examinations Council of Zambia (ECZ).

In the first phase, the Ministry and TEVETA have agreed to award trade certificates in the following fields: Bricklaying and Plastering, Carpentry and Joinery, Metal Fabrication, Electrical Engineering, Home Management and Food Production.

The Vocational Curriculum includes computer studies and will start to be implemented in the secondary schools which have the personnel, facilities and equipment.

The first secondary schools to implement the vocational curriculum will be the existing technical schools.

Dr Phiri reviewed that the vision of his Ministry is to make certain secondary schools specialist schools for Technology, Agriculture, Physical Education and Sports, Performing and Creative Arts and Home Economics and Hospitality.

Computer Studies has been introduced in secondary schools while Zambian Languages shall be offered in the new curriculum as a compulsory subject at the junior secondary school level to be studied by learners pursuing the academic curriculum.

Entrepreneurship education has also been integrated in appropriate subjects with emphasis on learners running small business projects in groups.

Regarding the national and global challenges and concerns on the morality of young people, the new curriculum has further incorporated several cross-cutting concerns, prominent among them, Comprehensive Sexuality, Life Skills, Financial, Anti-Corruption, Drug and Substance Abuse, Environmental and Road Safety Education.

The Ministry has also reviewed the adult literacy curriculum to reduce the number.

The curriculum has been standardised as the only one national curriculum to be used by all the centres.

This will also entail providing uniform adult literacy education.

Contemporary entrepreneurship and other life skills have been incorporated. Information and Communications Technology has been added and Civic Education has also been included and the phonemic and phonic approach of teaching initial literacy introduced.

Teachers Training Curriculum will help teachers to cope with the changes made in the curriculum of their learners with the Early Childhood Teacher Education, Primary

School Teacher Education, and Secondary School Teacher Education Courses changed.

“The Patriotic Front Government desires and aspires to put in place a good education system which guarantees learners quality education for today and the future,” said Dr Phiri.

“I am confident that with the collaboration, cooperation and concerted efforts of all stakeholders working together, the challenges can be overcome. The financial and technical support from our cooperating partners is applauded. I am aware that they have helped us in reviewing the curriculum and are still supporting us in implementing the new curriculum,” he said.

And to show that the government is not idling while its partners are busy supporting the project, Dr Phiri has disclosed that the Ministry has allocated K113.4 million in 2014 to cater for the procurement of educational materials and equipment for the early childhood, primary,

secondary, adult literacy and colleges of education.

The allocation is to facilitate for a successful roll-out of the new curriculum at all levels.

It is clear that the new curriculum once fully operational will not only raise the literacy levels of Zambia but impact its citizens with skills to foster national development.

A Senior Government Official has reiterated the Ministry of Education directive that Physical Education be included in the school curriculum in Kabompo District in North Western Province.

Kabompo District Commissioner Rebbeca Mukuka said Physical Education should be incorporated in the school curriculum like any other subjects because sports played an important role in the physical and mental development of pupils.

Mrs. Mukuka made the remarks when she officiated at the ongoing North-western Province Schools' Inter-zone Sports Festival at Kabompo High School today.

The District Commissioner said her office was actively monitoring schools to ensure that sports was taken seriously as is the case with other subjects in a bid to enhance the physical and mental development of pupils

- REFERENCES
- Almond, L. (1986). Primary and secondary rules. In R. Thorpe, D. Bunker, & L. Almond (Eds.), *Rethinking games teaching* (pp. 38-40). Loughborough: University of Technology, Loughborough.
- Booth, K. (1986). An introduction to netball - An alternative approach. In R. Thorpe, D. Bunker, & L. Almond (Eds.), *Rethinking games teaching* (pp. 27-31). Loughborough: University of Technology, Loughborough.
- Buck, M., & Harrison, J. (1990). An analysis of game play in volleyball. *Journal of Teaching in Physical Education*, 10, 38-48.
- Caine, R., & Caine, G. (1994). *Making connections: Teaching and the human brain*. New York: Addison-Wesley Innovative Learning Publications.
- Curtner-Smith, M. (1996). Using games invention with elementary children. *JOPERD*, 67(3), 33-37.
- Ellis, M. (1983). Similarities and differences in games: A system for classification. Paper presented at the AIESEP conference, Rome, Italy.
- Hopper, T. (1994). Can we play the game? *RUNNER*, 32(2), 21-22.
- Kirk, D. (1982). Theoretical guidelines for 'teaching for understanding'. *BAALPE*, 18(1), 41-45.
- Pigott, B. (1982). A psychological basis for trends in games teaching. *BAALPE*, 18(1), 17-22.
- Rovegno, I., & Bandhauer, D. (1994). Child-designed games - experience changes teachers' conceptions. *JOPERD*, 65(6), 60-63.
- Schmidt, R. A. (1976). The Schema as a Solution to Some Persistent Problems in Motor Learning Theory. In G. E. Stelmach (Eds.), *Motor Control: Issues and Trends* (pp. 41-65). New York: Academic Press.

- Spackman, L. (1983). Invasion games: An instructional strategy. *British Journal of Physical Education*, 14(4), 98-99.
- Thorpe, R. (1983). An "understanding approach" to the teaching of tennis. *BAALPE*, 19(1), 12-19.
- Thorpe, R., & Bunker, D. (1989). A changing focus in games teaching. In L. Almond (Eds.), *The place of physical education in schools* (pp. 163-169). London: Kogan/Page.
- Thorpe, R., Bunker, D., & Almond, L. (Ed.). (1986). *Rethinking games teaching*. Loughborough: University of Technology, Loughborough.
- Varela, F., Thompson, E., & Rosch, E. (1991). *The embodied mind*. Cambridge: The MIT Press.
- Werner, P., Thorpe, R., & Bunker, D. (1996). Teaching games for understanding: Evolution of model. *JOPERD*, 67(1), 28-33.

UNIT V:

Teaching methods in Expressive Arts

Teaching techniques in art and design

Methodology for teaching and learning contemporary art

In teaching process both questions "What?" and "How?" should be targeted. Both knowledge about contemporary art and suitable methods, which make learning more effective, are important. Methodology helps to systematically fulfill learning objectives, is coherent with the subject and considers working styles of both students and teachers. Variability of learning methods help to make learning more effective, but it should be kept in mind that a method itself does not provide effective learning (Kidron, 1999). Selection and use of methods are influenced by teacher, student, subject and situation (Conti & Kolody, 1998).

Social constructivist discourse and learner-centered teaching are found to be effective approaches nowadays. The social constructivist model is based on the recognition that learning takes place over time and that active learning requires opportunities to link previous knowledge with new understandings (Cochran-Smith & Lytle, 2001; Uptis, 2005, referred by Lind, 2007) and is an outcome of collaborative learning. Learner-centred methodology is considered to be more effective than teacher-centred instruction, as it counts on students' needs and experiences and thus makes achieving learning outcomes more effective. Learner-centred methods are for example: brainstorm, debate, seminar, project method, role play, study trips, workshops, experiential learning, practice, self-reflection. Learning is made more effective by increasing learners' activity and considering

different learning styles. Methods that encourage active learning, for example inquiry and questioning, collaborative learning and portfolios, help to develop critical thinking, can involve students in their own learning and self-evaluation, share responsibility and be more flexible (Roucher & Lovano-Kerr, 1995). Learning styles (characteristic way how an individual treats information, emotions and behaviour) are different (Gardner, 1995), but stable in different learning situations and do not depend on context (Conti & Kolody, 1998). As in every learning situation there are people with different learning styles, methodological diversity helps to make learning more efficient to people with various learning styles. It is useful to combine methods which affect different senses and engage person as a whole. In conclusion, methodological principles of teaching contemporary art could consider: 1) social constructivist discourse, 2) learner-centered methods, 3) activeness and engagement and 4) diversity of methods.

Methods for teaching contemporary art

The selection of methods is also influenced by the subject matter (in this case different practices of contemporary art) and the cognitive level of learning objectives. Some methods are more coherent with the subject matter and thus more reasonable to use. In art education practical methods have been used traditionally. In the case of contemporary art, which is in constant development, interpretation, skills of critical thinking and interaction are as important as practical activity.

In the following section I will bring some examples of methods which could be used when teaching different practices of contemporary art. The methods follow the categories of contemporary art described in the beginning of the article and the features of contemporary art education. I have described different methods for different cognitive

levels of learning objectives. Learning objectives are divided into four categories: knowledge, comprehension, creation and reflection, based on Bloom's Taxonomy of educational objectives and adjusted for the context of art education. The methods can be used step-by-step or only the latter levels can be used. The categories of methods are based on subjective experience and synthesis.

Interdisciplinarity

Teaching contemporary art allows us to draw connection between art and other subjects, supporting discussion about important issues in society. Through discussion we prepare students to understand not only the world of contemporary art but also culture and politics (Zupancic, 2005). It is a great possibility to develop connections and critical thinking. The use of political and social issues could be encouraged in art education, and examples can be brought from artists work and students could be encouraged to express opinions.

Example. Political art. The art of Shirin Neshat can be brought as an example. Depending on the learning objectives following methods could be used: 1) knowledge: directed discussion about current political issues; 2) comprehension: brain storm and mind map based on the artist's work; 3) creation: creating and performing an interactive political performance as a group practice; 4) reflection: analyses of the performance and linking with the artist's work as a group discussion.



Which Tallinn!? Community project in Sally Stuudio which asked how can Tallinn be improved. More cosy places for relaxing.

Interaction and engagement

A great deal of contemporary art is interactive, the viewer is an active subject in the work. Thus active engagement and creating a personal attitude are important in teaching contemporary art. Nowadays young people prefer to encounter art as active participants rather than passive viewers (Illeris, 2005). Active engagement could be a principle in dealing with any kind of contemporary art, but it is especially coherent with interactive practices, for example art interventions, guerilla art and community art.

Example. Community art. Guerilla gardening can be brought as an example. Depending on the learning objectives following methods could be used: 1) knowledge: presentation about different community

art projects; 2) comprehension: mapping the problems in discussion with selected target group; 3) creation: creating idea sketches as group work; 4) reflection: seminar for assessing idea sketches and their possible application.

Interpretation

The base and values of today's contemporary art date back to 1960s conceptual art. Charman & Ross (2006) point out that the skill of interpretation is as important as the ability to handle the media. The notion that works of contemporary visual art can have multiple interpretations which are created by the viewer, which is the alternative to the traditional approach to understanding an art work, which emphasizes the transmission of meaning from teacher to pupil.

For developing skills of interpretations, methods based on dialogue are suitable, these bring out different views and develop critical thinking. Attitudes which are open to different interpretations help to deal with controversial and abrasive art work, which are often avoided by teachers and about which viewers often ask if it is art at all. Discussion about controversial art work allows students to share their ideas with their peers, contemplate how different people react to art work and discuss the roles in the art world (Emery, 2006). These discussions also provoke interesting interactions between students about relevant issues in art and society.

Example. Conceptual art. The art of Damien Hirst can be brought as an example. Depending on the learning objectives following methods could be used: 1) knowledge: lecture and discussion about the issues of the art work; 2) comprehension: seminar about what is art; 3)

creation: creating a conceptual art work; 4) reflection: art debate about each work.

Synthesis of new media

New media and information and communications technology influence art education a great deal. ICT is part of young people's everyday life, therefore it is natural that it is also used in art education. On the one hand using new technology opens up dilemmas as it means that we need to reconsider our understanding of skill, technique, expression and representation (Atkinson, 2002, 192). On the other hand new technology opens up new possibilities. New media can be used as a supporting tool or a means of expression with any type of contemporary art practice.

Example. Documental art. The art of Sophie Calle can be brought as an example. Depending on the learning objectives following methods could be used: 1) knowledge: watching a documentary about an artist, writing down different aspects; 2) comprehension: phrasing personal "research question", phrasing the timetable of the project as a digital timeline; 3) creation: observation, photo documentation, editing photo video based on the topic; 4) reflection: digital presentation and feedback, self-reflection.



Sally Stuudio students using ICT in art class. Photo: Tanel Rannala

Teaching contemporary art differs from teaching traditional and modern art. If the main value is not realistic depiction or originality of art work, but rather interpretation, comprehension, engagement and interdisciplinarity, teaching and learning methodology should pay more attention to those qualities. In this article I have offered a couple of possibilities of how different practices of art education could be dealt with. The selected methodology were based on social constructivist discourse. Depicted example methods were based on features which characterize teaching contemporary art: interdisciplinarity, interpretation, engagement and synthesis of new media. Methods were selected to be coherent with selected content.

Instructional Techniques

According to Howard Garner, a good art teacher will reach their students verbal/linguistically, mathematical/logically, bodily/kinesthetically, visual/spatial, musically/rhythmically, interpersonally, intra-personally, naturalistically, and existentially. Every child has a different strength among these intelligences. The more of these intelligences are addressed in a lesson, the more students are reached and learn.

You can integrate several of these intelligences in one lesson. For example, you can reach both linguistics, body/kinesthetics, and visually oriented students by writing a play, illustrating and performing it.

Following are activities that can be included in each lesson:

Linguistic	Essays, journals, logs, newspaper articles, storytelling, debates, creating audio, poems, letters, PowerPoint audio, plays, interviews, books, product slogans, newsletters
Logical	Puzzles, designing a calendar, story problems, categorizing facts, strategizing, problem-solving, formulas, reasoning, interpretation
Kinesthetic	Manipulatives, role playing, dancing, building, scavenger hunt, model making, skits, making a frame, sculpting, simulations
Visual	Art (duh!), maps, video, slide show, creating posters, illustrating a book, graphs, charts, albums, filmmaking, art software
Musical	Composing, rhythmical patterns, musical games, MIDI music, write new words for a song, put music

	to a presentation, sing a song that tells a story, play historical music, dance to music
Interpersonal	Teaching others, leading, cooperative learning groups, environmental, social, and political issues, apprenticeships, blogs, IM
Intra-personal	Self-directed projects, self-assessment, goal setting, emotional processing, diary, autobiography
Naturalistic	Collect objects in nature, texture rubbings of leaves, plotting from a compass, cooking a meal from plants found in nature, landscape painting, sculpting clay found by a river bed, baking clay in an underground oven
Existential	Philosophical discussions, creating art that questions life and reality, discussion on religion, discussion of good and evil, creating religious art

Teaching methods



Although each Learning Through Art residency is unique, years of research and professional development have resulted in a set of approaches and philosophies that are present throughout all of the residencies. Read below to learn about LTA's strategies and follow links to see examples of them in action.

Modeling Artists' Thinking & Process

LTA teaching artists encourage each student to think like an artist by modeling their own artistic process as well as exposing them to works of art and a variety of ideas and approaches. Watch a video on the Learning Through Art YouTube Channel of a teaching artist discussing a work of art with students.

Reflective Practice

Reflection is an integral component of every LTA residency and can take the form of group discussions of student artwork, individual sketchbook reflections, and checklists of goals generated by students.

Open-ended and extended investigations

Each LTA residency begins with developing an Essential Question, a

question that is designed to address a big idea within the chosen curriculum area. For example, “What connects or divides us?” is a question designed to examine historical conflicts in social studies as well as have students think about their personal relationships. These types of questions serve as the guiding framework for all 20 sessions. View an example of lesson plans that demonstrate this practice.

Material and idea explorations

In order to build technique and foster student innovation, LTA teaching artists include sessions that are solely dedicated to investigating the properties and possibilities of materials and ideas. Watch a video on the Learning Through Art YouTube Channel of one of our teaching artists leading a material exploration.

Collaborative and interdisciplinary projects

The structure of LTA is designed to foster collaboration with educators from other disciplines, and often students in LTA create group projects. These collaborative approaches create natural opportunities for interdisciplinary learning and creative generation of new ideas and solutions.

Balancing process and product

It is important to LTA that teachers, parents, and students value the importance of exploring, thinking, and participating in the artistic process. Therefore various stages, including preliminary sketches and student writings, are exhibited in addition to finished works. In our annual A Year With Children exhibition, “process boards” that demonstrate the development of a project are as important as the final works exhibited.

Through 50 years of research, Thomas Angelo (1993) identifies 14 principles for good teaching:



Principle

Students are actively engaged in learning

Teacher focuses attention by making it clear what is to be learned and the priorities of subject elements.

Teacher sets high, but realistic goals

Use in Classroom

Students teach other students, collaborate, hands-on work, and are motivated by the teacher.

Teacher tells students initially what they are going to learn and why it is important for them to know the material.

Some of these goals are formulated from test data and your assessment of student

	knowledge.
Teacher meaningfully connects new information with prior knowledge	"Yesterday we learned about primary and secondary colors. Today we are going to use what we've learned by ____."
Teacher helps students unlearn erroneous knowledge and bias	The teacher assesses the success of the lesson and then reteaches if necessary.
Teacher organizes subject content in meaningful ways that are personally and academically appropriate, and is aware of their own learning style (meta-cognition)	Sometimes the organization of subject matter changes dynamically as the teacher teaches. Each group of students is different.
Teacher gives timely and specific feedback to students.	The teacher roams the room and looks over the student's shoulder to make sure they understand and then gives immediate feedback. Examination results are reviewed and retaught if needed.
Teacher knows in advance the standards to be used in assessment and evaluation, and the nature of that assessment.	The teacher hands out the rubric for the lesson ahead of time so students know exactly what constitutes an "A."

Teacher invests adequate time and quality with a focused effort.

Teacher finds real-world applications in many contexts so that students transfer what they are learning.

Teacher perceives and adopts high expectations of achievement.

Teacher balances instruction so that all learners are challenged.

Teacher clearly perceives the value in what is to be learned.

Teacher interacts frequently with learners and other teachers.

The teacher plans for a longer lesson, and then shortens it by priorities if students need more time.

"If you become an art director, you will need to have thorough knowledge of the elements of design."

Let students know your expectations and ask them what they expect from the course.

Because novice learners need more time, give more challenging material to high achievers while you spend more time with remediation.

Explain to students why it is important to know the material. The value of the material should also motivate both students and teacher.

Learn students' names, ask them all engaging questions, and collaborate with successful teachers.

John Jay Bonstingl (1995) says that there should be a new paradigm in instruction. The old paradigm doesn't work with today's students anymore. Following is a chart of the old vs. the new:

Old Paradigm

Success is limited to a few winners. All others are made to consider themselves and their work as mediocre.

Competition-based

Lessons are linear, consecutive segments of one-way communication

Product-oriented. Focused solely on results. Grades and rankings are important in themselves.

Life, including schooling, is only worthwhile if you reach your goals. The process has little or no intrinsic merit and must be abbreviated whenever possible so goals can be reached sooner.

New Paradigm

Unlimited, continuous improvement and successes are the goals of the school.

Cooperation-based

Learning is a spiral with offshoots, with energy directed toward continuous improvement.

Process-oriented. Goals are important, but the process of getting to the goal is at least as significant. Assessments are used for diagnostic and prescriptive purposes.

Life is a journey and has intrinsic merit if lived with a zest for life, love and learning. Developing a "yearning for learning" is most important of all.

The system and its processes don't matter, as long as the ends are achieved.

Work is a task, not intended to bring joy and pride to the worker.

School is a place where teaching is done to students. Students are passive, while the teachers are active.

Teachers are isolated from each other by time and space.

Administration is viewed as the teacher's natural adversary.

Teachers are viewed as the students' natural adversaries.

The integrity and health of the system, its processes, and its people must be maintained, or the system will be substandard and eventually fail.

Work should be challenging, invigorating, and meaningful. Workers should take pride and joy in the products and processes of their work.

School is a community of learners in which administrators, teacher, and students learn how to improve at the work they do together so that everyone succeeds their "personal best."

Teachers work together on school time to build success with each other and with a manageable number of students in a cooperative group.

Administrators are viewed as teammates and partners in removing obstacles to student and teacher success.

Teachers are viewed as teammates and partners in removing

	obstacles to student and teacher success.
Single-discipline instruction	Multi and cross-discipline instruction
Learning is restricted to the curriculum.	Learning is the foundation for life-wide, life-deep, and life-long learning. (3D Learning)
Factory model- Rule by compliance, control and command. Authoritarian, hierarchical. Management frequently based on fear.	New model- Lead by helping and providing vision and support, making it possible for students and teachers to take pride in their work together and have joy in the process and product of continuous improvement. (The Japanese call this kaizen)
Centralized control over resources, curriculum, teaching methods, length of class periods, etc.	Ste-based management of resources, curriculum, teaching methods, length of class periods, etc.
There is one right answer for every question asked by the teacher, text, and test.	External and internal truths are discovered through teachers' and students' questioning together.
Testing is the primary means of assessing the learning process.	Testing, when appropriate, directs instruction and the learning process. Performance-based assessments such as portfolios,

Instruction is set up to generate the correct answer.

Teachers are expected to know everything about their subjects. They give students data and information. Students memorize facts and then forget it later. (Rote memorization)

Parents are outsiders, often made to feel unwelcome.

Businesses adopt schools and are kept at arms length.

The community is not

exhibitions, and performances.

Instruction is set up to generate questions followed by inquiry. Students demonstrate their understanding of the nature of questions and the way they are solved.

Teachers are experts in their field. They are the most enthusiastic and dedicated learners in the classroom. Students learn from teachers, from each other, the community and other sources. They incorporate this knowledge into their own lives and apply their insights to real-life challenges.

Parents are partners, suppliers, and customers. They are an integral part of the student's progress from the beginning through the end of their schooling.

Businesses are invited to become partners, suppliers, and customers in the students' continuous progress, not for commercial gain.

The community is welcome in the

encouraged to be involved in the local school or in youth. They are not encouraged to take pride in their local schools.

The final goal- Students are products of the school.

school and encouraged to contribute time and talent to the betterment of their school and youth.

The final goal- Students are their own products, continually expanding their interests, their abilities, and developing their character. They have continuous improvement and help others to do the same.

Classroom management



Establishing procedures, like having children raise their hands when they want to speak, is a type of classroom management techniques.

Classroom management is a term used by teachers to describe the process of ensuring that classroom lessons run smoothly despite

disruptive behavior by students. The term also implies the prevention of disruptive behavior. It is possibly the most difficult aspect of teaching for many teachers; indeed experiencing problems in this area causes some to leave teaching altogether. In 1981 the US National Educational Association reported that 36% of teachers said they would probably not go into teaching if they had to decide again. A major reason was "negative student attitudes and discipline".

According to Moskowitz & Hayman (1976), once a teacher loses control of their classroom, it becomes increasingly more difficult for them to regain that control. Also, research from Berliner (1988) and Brophy & Good (1986) shows that the time a teacher has to take to correct misbehavior caused by poor classroom management skills results in a lower rate of academic engagement in the classroom. From the student's perspective, effective classroom management involves clear communication of behavioral and academic expectations as well as a cooperative learning environment. Douglas Brooks (1985) reports seminal research on the first day of school activity selection and sequence of novice middle school teachers compared with experienced, successful classroom managers. Brooks reports that effective classroom managers organized their activities on the first day of school consistent with the emerging needs of the students. These middle school student needs were the following: 1. Am I welcome? 2. What are we going to do today? 3. Am I in the right room? 4. Is the teacher interested in me? 5. What are the rules for this classroom? 6. What are the goals, instructional methods and assessment systems for the class? 7. Is the teacher interested in how I learn best? 8. What interests does the teacher have that I can relate to? 9. What are we expected to do for tomorrow? and finally 10. Will the teacher answer a question I have after class? In response to these emerging and sequential student needs effective middle school teachers organize the first day activities in the following sequence: 1. Personally greet students 2. Advance organizer for the session at the

bell, 3. Roll and Seating 4. Student Information cards 5. Introduce 5 core rules (entry, listening, raising hands, leaving other's stuff alone and finally exiting the class) 6. Describe class goals, instructional methods and grading system, 7. Assess preferred learning styles, 8. self-disclosure 9. Preview of next session and finally 10 Access after class. Middle school teachers that meet these 10 student needs with specific activities tend to communicate competence and effectively communicate behavioral and academic expectations.

Classroom management is closely linked to issues of motivation, discipline and respect. Methodologies remain a matter of passionate debate amongst teachers; approaches vary depending on the beliefs a teacher holds regarding educational psychology. A large part of traditional classroom management involves behavior modification, although many teachers see using behavioral approaches alone as overly simplistic. Many teachers establish rules and procedures at the beginning of the school year. According to Gootman (2008), rules give students concrete direction to ensure that our expectation becomes a reality.

They also try to be consistent in enforcing these rules and procedures. Many would also argue for positive consequences when rules are followed, and negative consequences when rules are broken. There are newer perspectives on classroom management that attempt to be holistic. One example is affirmation teaching, which attempts to guide students toward success by helping them see how their effort pays off in the classroom. It relies upon creating an environment where students are successful as a result of their own efforts. By creating this type of environment, students are much more likely to want to do well. Ideally, this transforms a classroom into a community of well-behaved and self-directed learners.

Corporal punishment

Until recently, corporal punishment was widely used as a means of controlling disruptive behavior but it is now illegal in most schools. It is still advocated in some contexts by ultra-religious people such as James Dobson, but his views "diverge sharply from those recommended by contemporary mainstream experts" and are not based on any sort of empirical testing, but rather are nothing more than expressions of his religious doctrines of "biblical literalism and 'authority-mindedness.'^[8]

Rote discipline

Also known as "lines," rote discipline is a negative sanction used for behavior management. It involves assigning a disorderly student sentences or the classroom rules to write repeatedly. Among the many types of classroom management approaches, it is very commonly used.

Preventative techniques

Preventative approaches to classroom management involve creating a positive classroom community with mutual respect between teacher and student. Teachers using the preventative approach offer warmth, acceptance, and support unconditionally - not based on a student's behavior. Fair rules and consequences are established and students are given frequent and consistent feedback regarding their behavior.^[9]

One way to establish this kind of classroom environment is through the development and use of a classroom contract. The contract should be created by both students and the teacher. In the contract, students and teachers decide and agree on how to treat one another in the classroom. The group also decides on and agrees to what the group will do should there be a violation of the contract. Rather than a consequence, the group should decide on a way to fix the problem through either class discussion, peer mediation, counseling, or by one on one conversations leading to a solution to the situation.

Preventative techniques also involve the strategic use of praise and rewards to inform students about their behavior rather than as a means of controlling student behavior. In order to use rewards to inform students about their behavior, teachers must emphasize the value of the behavior that is rewarded and also explain to students the specific skills they demonstrated to earn the reward. Teachers should also encourage student collaboration in selecting rewards and defining appropriate behaviors that will earn rewards.^[10]

Good Teacher-Student Relationships

Some characteristics of having good teacher-student relationships in the classroom involves the appropriate levels of dominance, cooperation, and awareness of high-needs students. Dominance is defined as the teacher's ability to give clear purpose and guidance concerning student behavior and their academics. By creating and giving clear expectations and consequences for student behavior, this builds effective relationships. Such expectations may cover classroom etiquette and behavior, group work, seating arrangements, the use of equipment and materials, and also classroom disruptions. Assertive teacher behavior also reassures that thoughts and messages are being passed on to the student in an effective way. Assertive behavior can be achieved by using erect posture, appropriate tone of voice depending on the current situation, and taking care not to ignore inappropriate behavior by taking action

Classroom management as a process

In the *Handbook of Classroom Management: Research Practice and Contemporary Issues* (2006), Evertson and Weinstein characterize classroom management as the actions taken to create an environment that supports and facilitates academic and social-emotional learning. Toward this goal, teachers must (1) develop caring, supportive relationships with and among students; (2) organize and implement

instruction in ways that optimize students' access to learning; (3) use group management methods that encourage students' engagement in academic tasks; (4) promote the development of students' social skills and self-regulation; and (5) use appropriate interventions to assist students with behavior problems.

Dr. Tracey Garrett also describes classroom management as a process consisting of key tasks that teachers must attend to in order to develop an environment conducive to learning. These tasks include: (1) organizing the physical environment, (2) establishing rules and routines, (3) developing caring relationships, (4) implementing engaging instruction and (5) preventing and responding to discipline problems. Classroom Management Essentials, created by Dr. Tracey Garrett, is the first classroom management app for the iPad, iPhone and iPod touch that guides teachers through the tasks involved in the process of classroom management.

Classroom management as time management

In their introductory text on teaching, Kauchak and Eggen (2008) Kauchak, D., and Eggen, P. (2008). Introduction to teaching: Becoming a professional (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc. explain classroom management in terms of time management. The goal of classroom management, to Kauchak and Eggen, is to not only maintain order but to optimize student learning. They divide class time into four overlapping categories, namely allocated time, instructional time, engaged time, and academic learning time.

Allocated time

Allocated time is the total time allotted for teaching, learning, and routine classroom procedures like attendance and announcements. Allocated time is also what appears on a student's schedule, for

example "Introductory Algebra: 9:50-10:30 a.m." or "Fine Arts 1:15-2:00 p.m."

Instructional time

Instructional time is what remains after routine classroom procedures are completed. That is to say, instructional time is the time wherein teaching and learning actually takes place. Teachers may spend two or three minutes taking attendance, for example, before their instruction begins.

Engaged time

Engaged time is also called time on task. During engaged time, students are participating actively in learning activities—asking and responding to questions, completing worksheets and exercises, preparing skits and presentations, etc.

Academic learning time

Academic learning time occurs when students 1) participate actively and 2) are successful in learning activities. Effective classroom management maximizes academic learning time.

Common mistakes in classroom behavior management

In an effort to maintain order in the classroom, sometimes teachers can actually make the problems worse. Therefore, it is important to consider some of the basic mistakes commonly made when implementing classroom behavior management strategies. For example, a common mistake made by teachers is to define the problem behavior by how it looks without considering its function.

Interventions are more likely to be effective when they are individualized to address the specific function of the problem behavior. Two students with similar looking misbehavior may require entirely different intervention strategies if the behaviors are serving different functions. Teachers need to understand that they need to be able to change the ways they do things from year to year, as the children change. Not every approach works for every child. Teachers need to learn to be flexible. Another common mistake is for the teacher to become increasingly frustrated and negative when an approach is not working.

The teacher may raise his or her voice or increase adverse consequences in an effort to make the approach work. This type of interaction may impair the teacher-student relationship. Instead of allowing this to happen, it is often better to simply try a new approach.

Inconsistency in expectations and consequences is an additional mistake that can lead to dysfunction in the classroom. Teachers must be consistent in their expectations and consequences to help ensure that students understand that rules will be enforced. To avoid this, teachers should communicate expectations to students clearly and be sufficiently committed to the classroom management procedures to enforce them consistently.

"Ignoring and approving" is an effective classroom management strategy. This involves ignoring students when they behave undesirably and approving their behavior when it is desirable. When students are praised for their good behavior but ignored for their bad behavior, this may increase the frequency of good behavior and decrease bad behavior. Student behavior may be maintained by attention; if students have a history of getting attention after misbehavior, they may continue this behavior as long as it continues to get attention. If student misbehavior is ignored, but good behavior

results in attention, students may instead behave appropriately to acquire attention.

Peer and micro teaching

The art of teaching does not merely involve a simple transfer of knowledge from one to other. Instead, it is a complex process that facilitates and influences the process of learning. Quality of a teacher is estimated on how much the students understand from his/her teaching. The classrooms cannot be used as a learning platform for acquiring primary teaching skills. Training of medical teachers in specific teaching skills is a major challenge in medical education programs. The pedagogic skill for teaching can be acquired only through more structured and cheaper faculty training techniques. With the introduction of microteaching about five decades ago, the lacunae of scientifically proven or effective methods to be followed in teacher training programs has been overcome.

Micro-teaching is a training technique whereby the teacher reviews a videotape of the lesson after each session, in order to conduct a "post-mortem". Teachers find out what has worked, which aspects have fallen short, and what needs to be done to enhance their teaching technique. Invented in the mid-1960s at Stanford University by Dr. Dwight W. Allen, micro-teaching has been used with success for several decades now, as a way to help teachers acquire new skills.

Micro-teaching is an organized teaching improvement technique where the experimental teacher teaches a small group of audience (peers), which is recorded for review after each teaching section. The teacher reviews the recorded footage, makes correction where necessary, improves and re-teach until the desired result is achieved/learned.

In the original process, a teacher was asked to prepare a short lesson (usually 20 minutes) for a small group of learners who may not have been their own students. This was videotaped, using VHS. After the lesson, the teacher, teaching colleagues, a master teacher and the students together viewed the videotape and commented on what they saw happening, referencing the teacher's learning objectives. Seeing the video and getting comments from colleagues and students provided teachers with an often intense "under the microscope" view of their teaching.

Micro lessons are great opportunities to present sample "snapshots" of what/how you teach and to get some feedback from colleagues about how it was received. It's a chance to try teaching strategies that the teacher may not use regularly. It's a good, safe time to experiment with something new and get feedback on technique

Techniques

Since its inception in 1963, micro-teaching has become an established teacher-training procedure in many universities and school districts. This training procedure is geared towards simplification of the complexities of the regular teaching-learning process. Class size, time, task, and content are scaled down to provide optimal training environments. The supervisor demonstrates the skill to be practiced. This may be live demonstration, or a video presentation of the skill. Then, the group members select a topic and prepare a lesson of five to ten minutes. The teacher trainee then has the opportunity to practice and evaluate his use of the skills. Practice takes the form of a ten-minute micro-teaching session in which five to ten pupils are involved.

Feedback

Feedback in micro-teaching is critical for teacher-trainee improvement. It is the information that a student receives concerning his attempts to imitate certain patterns of teaching. The built-in feedback mechanism in micro-teaching acquaints the trainee with the success of his performance and enables him to evaluate and to improve his teaching behavior. Electronic media gadgets that can be used to facilitate effective feedback are a vital aspect of micro-teaching.(Teg, 2007).

Microteaching, a teacher training technique currently practiced worldwide, provides teachers an opportunity to perk up their teaching skills by improving the various simple tasks called teaching skills. With the proven success among the novice and seniors, microteaching helps to promote real-time teaching experiences. The core skills of microteaching such as presentation and reinforcement skills help the novice teachers to learn the art of teaching at ease and to the maximum extent. The impact of this technique has been widely seen in various forms of education such as health sciences, life sciences, and other areas. The emerging changes in medical curricula by the Medical Council of India and the role of medical teachers envisage the need of this special training of teachers and monitoring of their skills for their continued efficient performance at any age. The alleged limitations of microteaching can be minimized by implementing this at the departmental level in several sequences. The author made literature search of research and review articles in various educational databases, journals, and books. From the reference list of published articles, books were also reviewed. This paper presents an outline of the various phases of microteaching, core teaching skills, implementation aspects, and the impact of microteaching on medical education.

Efficient technique and effective teaching

Microteaching can be practiced with a very small lesson or a single concept and a less number of students. It scales down the complexities of real teaching, as immediate feedback can be sought after each practice session. The modern-day multimedia equipment such as audio–video recording devices have a key role in the learning process.

Observing a fellow teacher and using a trial-and-error in own teaching sessions are very common way of self-training. But, both of them have their own demerits. On the other hand, microteaching helps in eliminating errors and builds stronger teaching skills for the beginners and senior teachers. Microteaching increases the self-confidence, improves the in-class teaching performances, and develops the classroom management skills.

Microteaching in medical education

The traditional medical teaching emphasizes on the transmission of factual knowledge and hence, the teachers are the main source of information. But, the conventional methods of medical teacher training are not adequate. So, the teaching objectives have now shifted to the student centered, measurable, achievable, relevant, and timely concept. Microteaching allows learning each skill to the maximum extent as there is a chance of listening, observing, and practicing.

Implementation of microteaching in medical education

There was an increase in interests toward introducing microteaching techniques in the Indian medical schools. This training technique provides medical teachers an excellent opportunity to improve their teaching skills and follows the Skinners' theory of operant conditioning and also has a scientific basis. The Medical Council of India has also recommended training for medical teachers for their

continued, efficient performance in that capacity at any age. It is widely accepted that the quality and competency of medical teachers can be improved by effective medical education training programs.

Steps and requirements of microteaching

Knowledge acquisition, skill acquisition, and transfer are the three different phases of microteaching. describes the various phases of microteaching. Knowledge acquisition phase is the preparatory, pre-active phase, in which the teacher gets trained on the skills and components of teaching through lectures, discussion, illustration, and demonstration of the skill by the experts. In the interactive, skill acquisition phase, the teacher plans a micro-lesson for practicing the demonstrated skills. The colleagues and peers can act as constructive evaluators which also enable them to modify their own teaching-learning practices. The teacher can reinforce behaviors and skills that are necessary and extinguish that are not needed. Ultimately, they can integrate and transfer this learned skills from simulated teaching situation to real class room teaching. lists the 10 key steps of a microteaching activity.

After understanding the concepts and components of each core teaching skill, the participant should prepare a micro-lesson for each core teaching skill, and implement one skill in each microteaching session in a sequential manner. The setting can be done in the department itself with minimal facilities on a weekly or monthly basis. Adequate and appropriate constructive feedback for each skill can encourage re-teaching and re-implementing of the skill. The feedback data can be reused, and all the core teaching skills can be integrated in a macro lesson and ultimately to a real classroom teaching or medical education programs. The entire faculty play dual role of trainee and constructive evaluators. This also improves the evaluating skills of teacher. Though there are possible chances of not providing proper feedback during the initial sessions, the skilled

ability to evaluate and provide constructive feedback increases when there is an increase in the number of sessions.

Core skills applicable in clinical teaching

The core techniques involved with microteaching are based on the fact that teaching can be analyzed and estimated using various simple teaching tasks/skills, which are a set of behavior or acts of the teacher that facilitates learning (directly or indirectly). During the origin of microteaching, almost 20 teaching skills have been identified. But, it has now increased up to 37 or even more. Listed below are some of the important teaching skills

Lesson planning

It involves the preparation of a micro-lesson which should be organized in a logical sequence. The content should be concise, appropriate, relevant, and could cover the specified duration.

Presentation and explanation

This involves the skills required to explain with clarity and proper understanding of the concepts. The components include teacher enthusiasm, creating readiness by a beginning statement or topic sentence, effective explanation, planned repetition, and concluding statements or key messages with summary of explanation.

Illustrating with examples

The teacher trainee should be able to rightly explain the concept by simple, relevant, and interesting examples to increase learners' understanding.

Reinforcement

This skill is meant for increasing the participation of the learners in the development of teaching process. Use of positive verbal and non-verbal cues would be key component for this skill.

Stimulus variation

Securing and sustaining the attention of the learner is imperative for a good teacher. The effective components of the skill are gestures, change in speech pattern, and change in interaction style.

Probing questions

It is important to allow and encourage the fellow trainees to ask structured questions and clarify doubts. Redirection, refocusing, and increasing critical awareness are significant components of this skill.

Classroom management

Providing proper instructions, restricting inappropriate behavior, and calling the learners by name are essentials of this skill.

Using audiovisual aids

The increased awareness of the audiovisual aids is important for this skill. Adequate spacing, distinct size, proper spacing between words and lines, and use of relevant words or phrases are the key components for this skill.

Merits and demerits

Microteaching has a pivotal role in all medical education training programs and contributes to a great extent to the better understanding of teaching process and its complexities. A case study on microteaching lesson study combining the elements of Japanese

lesson study and microteaching technique reported that the pre-and post-lesson plans had successfully demonstrated growth in teachers' knowledge on teaching. The "teach, critique, re-teach" model in a dental education program identified microteaching as a technique for personality development and confidence-building of health professionals. Heyroth describes microteaching as a "scaled-down teaching encounter designed to develop new skills and refine old ones." In spite of experiencing anxiety, microteaching has evolved as the proven technique in nurse education. Apart from increasing the teaching performances of 57 nursing students, the microteaching had proven to be effective in the retention of the learned behaviors, even 6 months after course completion. Dietetic students had reportedly high confidence levels after an intensive workshop based on microteaching technique. Another study determined the impact of a microteaching experience on development of performance-based skills at a pharmacy college. A microteaching activity incorporated within a professional development seminar series was proved to be an effective method to enhance and develop communication, problem-solving, and critical-thinking skills in pharmacy students. Microteaching helps not only in developing skills of the novice teachers but also assists in comparing the effectiveness of variation of one microteaching with another. Microteaching has the ability to enhance the skills of problem solving, critical thinking, questioning, and reflective thinking. It improves learning by realistic applications. The other key benefits of this technique included the following: Transformation of difficult topics into learnable units, usage of advanced organizers, integration of the lecture with applications on topics, and usage of proper questions and pauses. The role of health educators can thus be effectively satisfied by practicing microteaching techniques.

Not just in medicine or health sciences, the microteaching concept had worked more efficiently in teaching mathematics than the

traditional teaching techniques. The utilization of expanded microteaching activities in a mathematics teaching practical course significantly reduced the levels of anxiety. Behaviorist phenomenon of microteaching through a Neo-Vygotskian theoretical lens, employing a case study of two groups of prospective teachers being coached by a professor and clinical instructor was shown by Vare Jonatha. The new microteaching model conceptualizes the teacher education program with the advances in social learning theory and meta-cognitive learning strategies. An exploratory study by Hansford examined the relationship between various conditions of feedback in peer microteaching, the personality dimension dogmatism, and non-verbal perceptiveness.

Proper practice is deemed essential for teacher training programs, as it serves trainees to gain their first teaching experience and helps to develop the knowledge, skills, and attitudes. But, time remains the major hurdle for microteaching sessions in a medical education training programs. These results in neither all the skills are practiced nor are all trainees given an opportunity for re-planning and re-teaching activities. The training becomes ineffective unless the teacher acquires the quality of effective student teaching.

The other limitations of microteaching include the following: No emphasis on contents, skill dependency, and administrative/logistic problems when the class size is large. This can be minimized by implementing the activities at the departmental level in several sequences. Extensive training programs are possible when the teachers are well equipped with core skills. These programs can then be effectively utilized for learning of new skills and strengthening and elaboration of existing skills. Hence, a better understanding of the complexities of the teaching process by the faculty is more important.

In India, microteaching technique is under-estimated and under-utilized for various reasons. Practicing the economical, simpler

methods of microteaching would help develop better teachers for the country.

Microteaching works as a focused instrument which helps to practice essential teaching skills safely and effectively at any age. This paper describes microteaching as an Efficient Learning Technique for Effective Teaching. Learning is a change in behavior, which is brought about by activity, training, or experiencing at any age. When the learner is more experienced, learning becomes more effective. The most important quality of the participants of microteaching sessions is the ability to give and receive constructive feedback with an open mind and achieves appropriate teaching-learning goals. In addition, it increases self-confidence of teacher in an atmosphere of friendliness and equanimity.

One of the most visible approaches to **peer learning** comes out of cognitive psychology, and is applied within a "mainstream" educational framework: "Peer learning is an educational practice in which students interact with other students to attain educational goals." In this context, it can be compared to the practices that go by the name cooperative learning. However, other contemporary views on peer learning relax the constraints, and position "**peer-to-peer learning**" as a mode of "learning for everyone, by everyone, about almost anything." Whether it takes place in a formal or informal learning context, in small groups or online, peer learning manifests aspects of self-organization that are mostly absent from pedagogical models of teaching and learning.

Why Peer Teaching?

PreK-12 students help each other learn every day. They teach each other. Why wait until college to develop their teaching skills?

The success of collaborative learning, in and out of schools, depends on how well peers teach each other. Our purpose is to understand and improve this process in order to enhance learning in elementary and secondary schools. At the same time, we can strengthen students whose interest and effectiveness as peer teachers can lead them to consider teaching as a career.

1. Be sure your tutors are trained.

Existing research identifies adequate tutor training as an essential component of peer tutoring programs.

One after-school peer tutoring program implemented in a middle school in California, called Student-2-Student, offers tutoring in a variety of subjects to students with the help of high-achieving eighth graders. Student-2-Student is selective in its recruitment of tutors. Qualified eighth graders meeting a minimum GPA requirement and demonstrating high citizenship must complete an application process and obtain approval from their teachers before being paired with struggling students. The program advisor then matches tutors to students based on who seems to be a good match academically and socially. Tutors receive quality training in effective ways to work with their tutees.

This program led to a significant improvement in core subject letter grades for all participants. In an evaluation of the program, participants also demonstrated increased responsibility, completion of homework assignments, and significantly improved work habits.

2. Use a reward system.

In another peer teaching program, sixth grade students enrolled in general reading education classes in a Midwestern, urban middle school were assigned to tutoring pairs of either equal ability or pairs

in which high-achieving students modeled successful learning with lower-achieving students. Similar to Student-2-Student, the students received training prior to tutoring.

What sets this peer tutoring program apart from common peer tutoring practices is the inclusion of a reward system for students to encourage participation and on-task behavior. During the sessions, the teacher supervised all activities and passed out raffle tickets to students exhibiting good tutoring or on-task behavior. Students wrote their names on earned tickets and placed them in a collection throughout each week. At the end of each week, the teacher would draw several names of students who could each choose a small prize from a box of inexpensive toys.

Evaluation of the class-wide peer tutoring model with rewards for good behavior showed substantial letter grade improvements for the students. The lottery system for reinforcing participation and on-task behavior was shown to overcome challenges to student motivation.

3. Emphasize confidentiality, positive reinforcement, and adequate response time.

The tutors at Student-2-Student are taught to demonstrate three important things during any given tutoring session: confidentiality, positive reinforcement, and adequate response time when asking questions. The training process also instructed tutors on explaining directions, designing work for extra practice, watching for and correcting mistakes, and providing positive feedback and encouragement.

4. Choose the learning exercise and the appropriate vehicle for it.

Simply placing students in groups or pairs and telling them to “work together” is not going to automatically yield results. You must

consciously orchestrate the learning exercise and choose the appropriate vehicle for it. Only then will students in fact engage in peer learning and reap the benefits of peer teaching.

5. Use group strategies:

To facilitate successful peer learning, teachers may choose from an array of strategies:

- **Buzz Groups:** A large group of students is subdivided into smaller groups of 4–5 students to consider the issues surrounding a problem. After about 20 minutes of discussion, one member of each sub-group presents the findings of the sub-group to the whole group.
- **Affinity Groups:** Groups of 4–5 students are each assigned particular tasks to work on outside of formal contact time. At the next formal meeting with the teacher, the sub-group, or a group representative, presents the sub-group’s findings to the whole tutorial group.
- **Solution and Critic Groups:** One sub-group is assigned a discussion topic for a tutorial and the other groups constitute “critics” who observe, offer comments and evaluate the sub-group’s presentation.
- **“Teach-Write-Discuss”:** At the end of a unit of instruction, students have to answer short questions and justify their answers. After working on the questions individually, students compare their answers with each other’s. A whole-class discussion subsequently examines the array of answers that still seem justifiable and the reasons for their validity.

6. Use role playing and modeling.

During the first week of the sixth grade reading program, project staff explained the tutoring procedures and the lottery, modeled each component of the program, and used role-playing to effectively demonstrate ways to praise and correct their peers.

7. Emphasize the importance of active learning.

Many institutions of learning now promote instructional methods involving “active” learning that present opportunities for students to formulate their own questions, discuss issues, explain their viewpoints, and engage in cooperative learning by working in teams on problems and projects. Critique sessions, role-play, debates, case studies and integrated projects are other exciting and effective teaching strategies that stir students’ enthusiasm and encourage peer learning.

8 .Teach instructional scaffolding.

To reap the benefits of peer teaching, tutees must reach a point when they are practicing a new task on their own. Tutors can help prepare students for independent demonstration by providing instructional scaffolding, a method by which the tutor gradually reduces her influence on a tutee’s comprehension. See our guide on instructional scaffolding here for further explanation.

9. Explain directive versus nondirective tutoring.

A tutor who engages in directive tutoring becomes a surrogate teacher, taking the role of an authority and imparting knowledge. The tutor who takes the non-directive approach is more of a facilitator, helping the student draw out the knowledge he already possesses. Under the directive approach, the tutor imparts knowledge on the tutee and explains or tells the tutee what he should think about a given topic. Under the non-directive approach, the tutor draws knowledge

out of the tutee, asking open-ended questions to help the student come to his own conclusions about the topic. Both are valid methods, but different levels of each should be used with different students and in different scenarios.

10. Explain how to provide feedback.

Positive verbal feedback: Teach your tutors the importance of positive verbal feedback. Prompt students to come up with a list of standard statements which they feel may be positively reinforcing. They also need to be taught how much positive feedback to give. Giving feedback after each and every response can take too much time and diminish its effect. Teach tutors to give genuine praise after every third or fourth correct response and after particularly difficult problems. Make sure to have them practice.

Corrective feedback: Teach your tutors how to respond when an incorrect answer is given. When an incorrect answer is given, the tutor should promptly give and explain the correct answer or draw the correct answer out of the tutee without being critical of the tutee, and then give the tutee an opportunity to repeat the correct answer.

It should be noted that the majority of peer-tutoring programs for students are intended to complement, not substitute for, regular classroom instruction. Tutoring should never be a substitute for professional teaching. An is as a rich blend of peer and adult instructional strategies

Learning to teach well is good for learning and good for living. At the Hoenny Center, we seek to understand, improve, and support the teaching abilities of elementary and secondary school students. We review and do research, consult with students and professional teachers, and disseminate information. We believe that developing teaching abilities in k12 students will improve the field of candidates

for teacher certification programs and, thus, strengthen the teachers who graduate from them.

21 Benefits of Celebrating K-12 Students' Peer-Teaching

We nurture all kinds of abilities in kids, why not teaching?

Here are some academic and behavioral benefits for ALL K-12 students when teachers encourage students to help each other learn, a list developed as we listened to teachers and others talk about peer teaching.

1. Improves students' subject matter achievement.
2. Increases student motivation for learning.
3. Provides opportunities for students to practice and improve teaching skills.
4. Increases students' engagement in and responsibility for learning.
5. Gives students a service model for helping others.
6. Supports the inclusion of those with disabilities.
7. Adds healthy options for students' time.
8. Provides before and after school opportunities—a way to extend the school day.
9. Supports improved Adequate Yearly Progress (AYP) for schools.

10. Motivates improved school attendance.
11. Acts as a drop-out prevention program and contributes to a higher graduation rate.
12. Encourages cooperative, rather than competitive, classroom behavior.
13. Acts as a learning tool for tutors and an effective support for peers.
14. Offers leadership opportunities for tutors and a model for peers.
15. Allows tutors to deepen their learning by breaking down content in order to share.
16. Leads to tutor's greater self esteem.
17. Gives struggling students an additional life line for success.
18. Provides an additional valuable teacher-directed classroom learning strategy.
19. Supports teachers' program to remediate needs of their students.
20. Helps high school students decide about teaching careers.
21. Provides a K-12 foundation for college teacher education preparation

References

Atkinson, D. (2002). *Art in Education: Identity and Practice*. Dordrecht, Boston, London: Kluwer Academic publishers.

Charman, H., Ross, M. (2006). *Contemporary Art and the Role of Interpretation: Reflections from Tate Modern's Summer Institute for Teachers*. *International Journal of Art Design Education*, 1, 28 - 41.

Conti, G., Kolody, R. (1998). *Guidelines for Selecting Methods and Techniques*. In. *Adult Learning Methods: A Guide for Effective Instruction*. M.W. Galbraith (Ed.). Malabar, Florida: Krieger publishing Company, 73 - 89.

Danto, A.C. (1992). *Beyond the Brillo Box: The Visual Arts in Post-historical Perspective*. New York: The Noonday Press: Farrar , Straus, Giroux.

Danto, A.C. (1995). *After the End of Art: contemporary art and the pale of history*. New Jersey, Chisester: Princeton University Press.

Efland, A., Freedman, K., Stuhr, P. (1996). *Postmodern Art Education: An Approach to Curriculum*. Virginia: The National Art Education Association.

Emery, L. (2006). Censorship in Contemporary Art Education. In. Art education in a Postmodern World: Collected Essays. T. Hardy. (Ed.). Bristol: Intellect Ltd. 33 - 44.

Gardner, H. (1995). Reflections on multiple intelligences. Phi Delta Kappan, 77(3), 200.

Hardy, Tom (2006). Introduction: Nailing Jelly: Art Education in a Postmodern World. In. Art education in a Postmodern World: Collected Essays. T. Hardy (Ed.). Bristol: Intellect Ltd.

Illeris, H. (2005). Young People and Contemporary Art. International Journal of Art Design Education, 24(3), 231-242.

Kidron, A. (1999). 122 õpetamistarkust. Tallinn: Andras & Mondo.

Lind, V. (2007). High quality professional development: An investigation of the supports for and barriers to professional development in arts education. International Journal of Education & the Arts, 2, 1 - 18.

Page, T. Herne, S., Dash, P., Charman., Atkinson, D., Adams, J. with: Benjamins, R., Dickens, C., Gigg, C., Hutchins, H., Law, A., Morris, J., Ovington, M.J., Sanders, P., Thompson, E., Ward., H., Whelan, L. (2006). Teaching Now with the Living: A Dialogue with Teachers Investigating Contemporary Art Practices. International Journal of Art and Design Education, 2, 146 - 155.

Parson, M. (2004). Art and Integrated Curriculum. In Handbook of Research and Policy in Art Education. E.W. Eisner, M.D. Day (Eds.).

Mahwah, London: National Art Education Association, Lawrence Erlbaum Associates, Publishers, 775 - 794.

Roucher, Nancy, Lovano-Kerr, Jessie (1995). Can the arts maintain integrity in interdisciplinary learning? Arts Education Policy Review, 96 (4), 20-26.

Zupancic, T. (2005). Contemporary artworks and art education, International Journal of Education through Art, 1, 29 - 41.