Best Practices

The College strives to promote in students a sense of responsibility for their own development and an understanding of their obligations as members of a democratic society. The College fosters in students the desire to learn, the ability to think clearly and express themselves effectively, the habit of analytical and reflective thought, and an awareness of themselves, their heritage, other cultures and their environment. The following two best practices are worth mentioning in this context.

Best Practice: I

Title of the Practice: Participative Administration

Objectives of the practice:

The main objectives of this practice are

- To be accountable to the work.
- To improve employee relations by inculcating mutual co-operation and co-ordination.
- To improve quality of the programmes by sharing expertise knowledge.
- To become more competitive.
- Tap the unused potentialities of the staff and students.

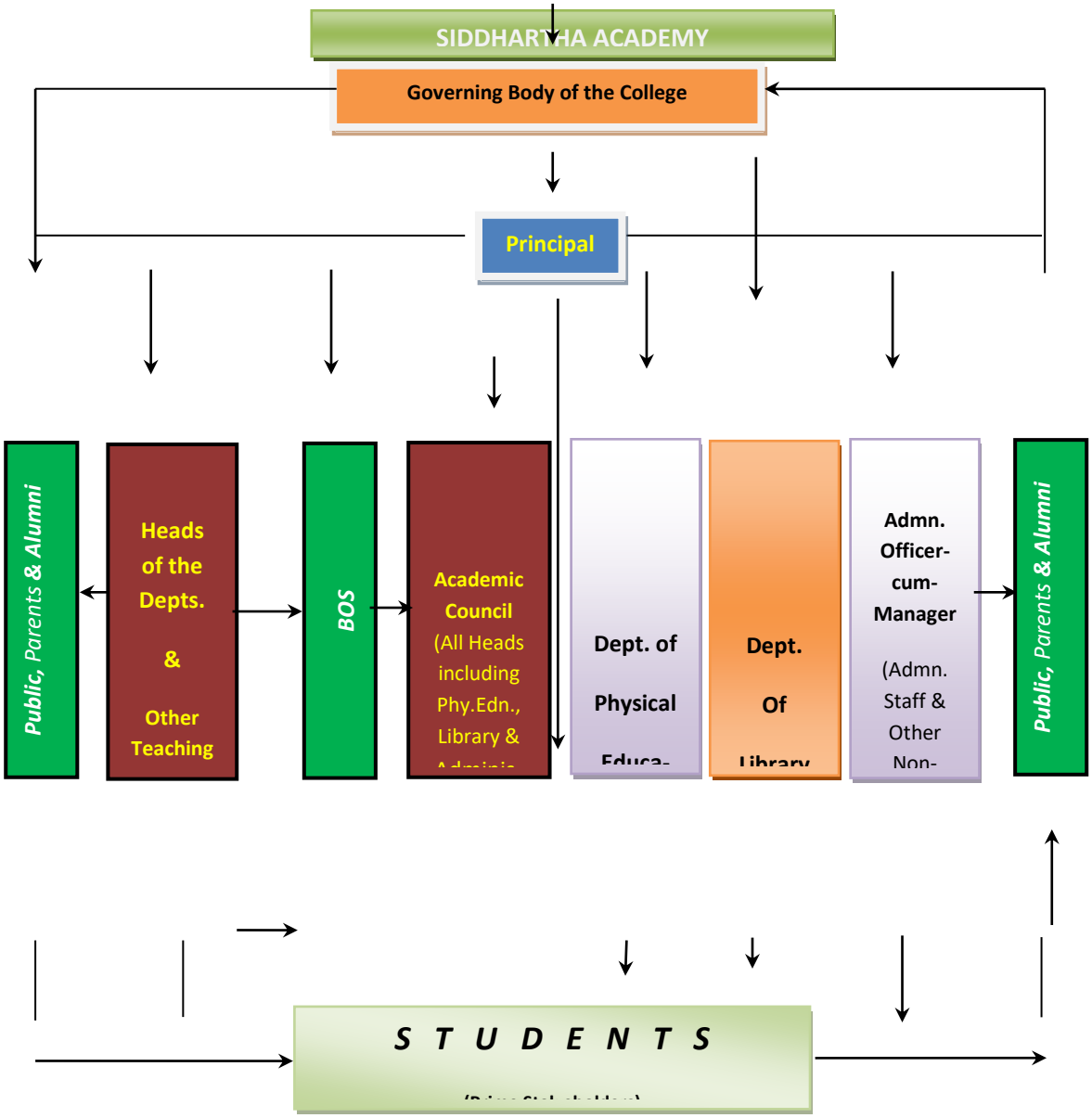
The Context:

Planning is the real starting point within the organisation. So, All staff should take preliminary look at possible future opportunities to the development of the curricular and technology. The growth of participatory and work innovative programmes such as participative management, staff involvement by formulating committees and students involvements through quality circles has been introduced.

The Practice:

It is the usual practise to conduct all the activities through various committees such as

- Research committee is formulated to promote research culture among the staff.
- Career Guidance and Placement Cell brings the employment and career opportunities to the door steps of the college for the benefit of students.



Evidence of Success:

By introducing various committees all the staff members are made accountable. Their innovative thoughts are used either one way or other for the development of the college. Staff members have been made responsible for the duty assigned to them. It leads to competitions among the staff members to prove themselves.

With the promotion of student centric activities through quality circles focus is laid on training students in multi skills which promote holistic development. **Problems Encountered & Resources required:**

Co-ordination among the staff of various departments to conduct activities is difficult task to motivate the students in conducting student centric activities has become a challenge. Staff and students should show much interest to conduct various activities proposed by the college.

The college has to bear the expenditure involved to conduct various activities by the staff and students

Best Practice: II

Title of the Practice: Tutor-Ward System

Objectives of the practice:

To Strengthen the bond between the teacher and thought to provide academic support to the students.

The Context:

To check indiscipline, irregularity and lake of motivation among the students the Principal and the teachers thought of introducing Tutor-Ward System to motivate the students. The practice yielded rich fruit. As a result students became more and more enthusiastic and started participating in all the curricular and extracurricular activities of the college.

The Practice:

Every faculty member is ward tutor with 30 students under her/his care. She/he needs them one hour every week and takes care of:

- Mentoring and guiding them in academic and non-academic activities.
- Charting their progress through maintenance of progress reports.
- Ensuring that her/his wards are aware of all the facilities provided in the college such as Library, Network Resource Centre, Career Guidance & Placement Cell, etc.
- In stilling values of Discipline, Punctuality, Regularity, Innovation, Confidence through one-to-one counselling, Group Dynamics and Group activities, Seminars for students, Quiz and Field trips etc.
- Conducting Parent-Teacher interface meeting to inform parents about

progression of their wards.

- Acting as Guide and Counselor.

After charting their progress through progress reports students are divided into weak, slow, advanced and strong learners. Accordingly the following measures are taken to provide knowledge to them.

Weak Learners:

- Crash Course for 15 days
- Remedial Classes
- Group Study
- Each one - Teach one

Slow Learners:

- Group Discussions
- Using OHP
- Revision

Advanced Learners:

- Class room Seminars
- Preparing for Competitions
- Knowledge extension programmes

Strong Learners:

- Class room Seminars
- Preparing for Competitions
- Power Point Presentations
- Preparation for Oral presentations.

Evidence of Success:

Reports from the Heads of the department revealed that more than 50% students have shown remarkable change in their attitude to academic pursuits. It helped the students to improve their all round personalities and solve their problems.

Problems Encountered & Resources required:

It takes some times on the part of the teachers to trace out slow learners. College has to bear the expenditure involved in sending the messages to the parents regarding

the performance of the students.

The additional information regarding Innovation and Best Practices, Which the College would like to include.

Best Practice: III

Title of the Practice: Blood Grouping & Donation

Objectives of the practice:

The main objectives of this practice are

- To understand the basic concept of Blood Grouping
- To acquaint the students with their blood group
- To enlighten the students about their blood group compatibility for transfusion.

The Context:

Blood groups are created by molecules present on the surface of red blood cells (and often on other cells as well). Every year our nation requires about **4 Crore units** of blood, out of which only a meager **40 Lakh units** of blood is available. The **gift of blood** is the **gift of life**. There is no substitute for human blood. Every two seconds someone needs blood. More than 38,000 blood donations are needed every day. A total of 30 million blood components are transfused each year. The average red blood cell transfusion is approximately 3 pints. The blood type most often requested by hospitals is Type O. Sickle cell patients can require frequent blood transfusions throughout their lives. More than 1 million new people are diagnosed with cancer each year. Many of them will need blood, sometimes daily, during their chemotherapy treatment. A single car accident victim can require as many as 100 units of blood. Blood cannot be manufactured – it can only come from generous donors. We should be able to cater the blood need of at least 10% of the Indian population. It is not a difficult task at all if we keep spreading through word about our noble cause.

Practice:

Blood typing is done prior to a blood transfusion or when classifying a person's blood for donation. Blood typing is a fast and easy way to ensure that you receive the right kind of blood during surgery or after an injury. If you are given incompatible blood,

it can lead to blood clumping, or agglutination, which can be fatal.

Every year a Blood Grouping Programme is being conducted to our I Degree students which is useful for donating the blood in emergency situations. The blood draw which is usually performed at a hospital or a clinical laboratory is done in our seminar hall in association with LION'S District 324C4 Blood Bank, Vijayawada. The skin of the student is cleaned before the test with an antiseptic to help prevent infection. A nurse or technician wraps a band around the student's arm to make the veins more visible. He or she will use a needle to draw several samples of blood from your arm or hand. After the draw, gauze and a bandage will be placed over the puncture site.

In order to determine the blood type, a lab technician mixes the blood sample with antibodies that attack types A and B blood to see how it reacts. If the blood cells clump together when mixed with antibodies against type A blood, for example, the student has type B blood. The blood sample is then mixed with an anti-Rh serum. If the blood cells clump together in response to the anti-Rh serum, it means that the student has Rh+ blood.

The blood type can be determined in a matter of minutes. Once the blood type is known, the student can donate blood and receive transfusions from donors in the compatible blood groups.

(Source: Blood Groups, Blood Typing, and Blood Transfusions. (2001, Dec. 3). Nobelprize.org. Retrieved May 24, 2012, from http://www.nobelprize.org /educational/ medicine/landsteiner/readmore.html) The III year B.Z.C. students have participated in the blood grouping programme and encouraged the I Degree students to donate the blood for the people who need it. Moreover, after blood grouping the students were given a report of the primary health check up along with the analysis of the blood which is an expensive task for the economically backward students. The LION's District 324C4 Blood Bank has done this free of cost.

EXAMPLES OF BLOOD USE

1. Automobile Accident	50 units of blood
2. Heart Surgery	6 units of blood / 6 units of platelets
3. Organ Transplant	40 units of blood / 30 units of platelets
4. 20 bags of cryoprecipitate	25 units of fresh frozen plasma
5. Bone Marrow Transplant	120 units of platelets/ 20 units of blood
6. Burn Victims	20 units of platelets

Evidence of Success:

100 units of blood have been contributed by our students this year. The students are humble enough to donate blood whenever necessary. They take pride in donating blood to the needy. The NSS Units of the college and the Department of Zoology have been successfully conducting this Blood Grouping & Blood Donation Programme.

Problems Encountered:

A few girl students were exempted from Blood Donation due to Anaemia and underweight.

Resources required:

Anti serums (material) are required**.**

For further details:

Dept. of Zoology, A.G. &S.G.S.Degree College of Arts & Science, Vuyyuru-521165

Best Practices: IV

Title of the Practice: Herbal Holi

Objectives of the practice:

The main objectives of this practice are

- To enlighten the students regarding the harmful effects of the coloured powders used generally during Holi.
- To enlighten the people of the slum nearby on the harmful effects of the chemicals used in the dyed powders
- To distribute the natural colours prepared by the students to people of the slum nearby.

The Context:

Celebrate an Eco Friendly Holi

Ideally, the festival of Colours, Holi is meant to celebrate the arrival of spring while the colours used in Holi are to reflect of the various hues of Spring Season. But unfortunately, in modern times Holi does not stand for all things beautiful. Like various other festivals, Holi too has become ruthlessly commercialized, boisterous and yet another source of environmental degradation. "Holi" is a cultural festival in India, which marks the advent of spring and is celebrated with colours. Traditionally it was played with natural dyes made from flowers. In Vrindavan for example, holi is still celebrated according to tradition, with rose petals and tuber rose. But today, tradition has been replaced with toxic and synthetic holi colours, which are available in the market, eg. Purple colour comes from chromium iodide, black from lead oxide. These chemicals, made from substances like industrial dyes are not only a health hazard but also contribute to significant amount of pollution of local water sources. To de-pollute Holi and make it in sync with nature, as it is supposed to be, several social and environmental groups are proposing a return to more natural ways of celebrating Holi.

The aim of this attempt is to generate awareness amongst people about the various harmful effects of use of chemicals in Holi celebrations and encourage people to celebrate an eco friendly Holi! Holi is very popular festive occasion in India. It is very colourful festival and all the youth participate in this occasion and they smear colours on their faces and clothes of each other on that day. The colours used during that occasion are with chemical ingredients.

Harmful Chemicals in Holi Paste type colours:

According to the researched fact sheet on Holi, the pastes contain toxic chemicals that can have severe health effects. The table below shows the chemical used in various Holi colours and their harmful effects on human body. (Source:

Vatavaran)

Color	Chemical	Health Effects
Black	Lead oxide	Renal Failure
Green	Copper Sulphate	Eye Allergy, Puffiness and temporary blindness
Silver	Aluminium Bromide	Carcinogenic
Blue	Prussian Blue	Contact Dermatitis
Red	Mercury Sulphite	Highly toxic can cause skin cancer

Harmful Chemicals in Gulal:

The dry colours, commonly known as gulals, have two components – a colourant that is toxic and a base which could be either asbestos or silica, both of these cause health problems. Heavy metals contained in the colourants that can cause asthma, skin diseases and adversely affect the eyes.

Harms of Wet Holi Colors:

Wet colours, mostly use Gentian violet has a colour concentrate which can cause skin dis-colouration and dermatitis. These days, Holi colours are sold loosely, on the roads, by small traders who often do not know the source. Sometimes, the colours come in boxes that specifically say 'For industrial use only'.

The Practice:

Every year an exhibition with various coloured materials prepared by using plant products is being arranged in the premises of the college by the students.

Methodology:

Dry Colours:

1. Yellow – Mix one part ground turmeric to two parts of flour or besan. You can also use atta, maida, rice flour, arrowroot powder, fuller's earth / multani mitti and even talcum powder in place of besan. Mix appropriate quantity of the powder with besan, etc. or use separately. You can use cheaper methods like drying the rind of the Bael fruit (Aegle marmelos) and grinding it to obtain a yellow powder.
2. Red – Grind red sandalwood into fine powder and use it as a natural colour. Remember, that your colour concoction must be economical to use and easy to prepare. Red sandalwood powder may be expensive and difficult to procure, so you may use herbal vermillion instead. This you can prepare by mixing together sun dried and powdered extracts of hibiscus, marigold, sunflower etc. To increase the bulk, add any flour to it.
3. Green –Pure mehendi / henna powder. Mix with equal quantity of flour to get a lovely shade of green. "Dr Mehendi" will not leave its imprint on your face as it can be easily brushed off. You can also crush the leaves of the wheat plant to obtain a natural and safe green Holi colour.
4. Black – Take a small or medium sized steel container and brush it with a little mustard oil. Hold it (oil-side down and facing the candle flame) on top of a lighted candle with the help of a pair of iron tongs. After some time you will find black soot collecting in the container. This is natural collyrium or kajol, and can be used as a black dye.

Wet Colours:

1. Majenta – Finely grate beetroot and mix in with water. This will yield a majenta colour.

2. Red – Boil ten to fifteen peels of onion in half litre of water. Cool and use as a red colour. Lac dye may also be used to produce a natural red colour. This can be mixed with required amount of water to get the correct diluted effect as desired. Nodules of certain leafy creepers like the pui. Also produces a reddish dye which can be soaked in water to bring the desired shade of colour. Buras (Rhododendron arboretum) known as 'Burans' in the Garhwal hills and 'Brans' in the Kumaon hills gives a lovely red colour when soaked in water overnight.

3. Purple – Take some amount of potassium permanganate and put it in a bucket of water. It will readily dissolve and the hue would be that of a deep purple, which could be used as a harmless chemical dye.

4. Blue – Crush the berries (fruits) of the Indigo plant and add to water for desired colour strength. In some Indigo species the leaves when boiled in water yield a rich blue.

5. Black – Boil dried fruits of Amla / Indian Gooseberry in an iron vessel and leave it overnight. Dilute with water and use.

(Source: Harness water resources for a better future - Activity Guide for the 13th National Children's Science Congress)

Suggested Activity:

New colours using flowers like marigold, yellow chrysanthemum, tesu, various leaves like spinach etc may be tried and experimented with to make natural holi colours. Demonstrate to your school mates and friends in the neighbourhood. Collectively plan to use only natural holi colours during this holi.

Evidence of Success:

Our exhibitions on "Herbal Holi" have been attracting the students and students are very much interested to know about the harmful effects of those chemical colours. Year by year the usage of coloured gulal is decreasing among the student community of this area. The students practice to make herbal colours on their own and as a humble gesture distribute it among the children in the nearby slums.

Problems Encountered:

A few students with sensitive skin have given disconsent to participate in the programme.

Resources:

Plant products which give colours like turmeric, carrot, Aloe, Beet root, berries of the indigo plant, amla, Onion , marigold, multani mitti , besan, atta etc

For further details: Department of Botany, AG & SGS Degree College, Vuyyuru, 521 165.

Other Best Practices:

Student aid Fund:

Keeping in view the fact that most of the students belong to economically weaker sections of the society, the college has established a **Poor Student Aid Fund** to inculcate charity, generosity and helping nature among students to give a helping hand to the economically poor students to complete their studies without interruption The students and staff of the college generously contribute to the Poor Student Aid Fund which is transparently maintained. The Fund raised through the donors is fixed in the bank account and the interest every year goes towards payment of fees of economically backward students. Some of the students successfully completed their education by using this fund.

Lab to Land Experiments/Field Visits:

The college has adopted a practice of linking the students lab practical's with field visits. In this regard, the students from science stream especially from the Botany and Zoology departments are provided an opportunity to test what they learn during their practical work in the laboratories. The objective is to inculcate an interest among the students to give vent to their experiences while entering into employment market after completing their studies. For instance, the Science students are provided with an opportunity to visit herbal/botanical Gardens, Museums, Fish ponds, Power Generating stations etc. Attempts are also made to arrange inter disciplinary study tours for the practical experience and exposure of students. The Department of History also avails the opportunity to take the students to historical tours to acquaint the students to the incredible culture and history of our nation. Students actively participate in these tours and visits to find accountability of whatever they learn in the college.

Regular Internal Assessment of Students:

Most of the students often absent themselves from college classes with a notion to study only during examinations. Our object is to make them attend classes regularly. The goal of introducing this practice is to attract the students to the classes so that they can regularly attend the classes and enjoy the enthralling learning experience. It is also to assess the performance of the students regularly and suggest them to develop their performance. Ultimately the goal of the practice is to grow an interest of the students to follow the class teaching.

No Capitation No Donation:

"No Capitation No Donation" is one of the prime healthy practices followed by our college right from its inception. The college was established way back in 1975 with the noble cause of providing collegiate education to the students especially hailing from the rural background & the economically weaker section of the society. This is the Vision and Mission of the founders of our college. We still uphold the same practice and continue to do the same in the years to come.

- The college feels concerned about the development of the talent of teachers and encourages them to attend various programmes like refresher courses, workshops, orientation courses, seminars, conferences etc. The papers are also presented by the teachers of the college in such programmes
- Improvement in teaching aids is a continuous process
- The institution makes all efforts to display sensitivity to changing educational, social and market demands. Value based education is imparted to the students through

different means and is imbibed in the curriculum itself.

- Complaint Boxes are available in the campus for immediate suggestions/ complaints for redressal.