CHAPTER 5

RESULTS AND CONCLUSION

5.1 GENERAL

The chapter recapitulates all the findings and highlights the major ones as interpreted by the researcher.

This research study has shown that the students in the affiliated colleges look to Anna EDUSAT for supplementing class lectures and for gaining greater insight into their fields of specialisation. Second and more importantly they are also aware of the limitations of the programmes and also of the changes that have to be made in the programmes for them to retain their significance and the intent with which the Anna EDUSAT was started.

5.2 MAJOR FINDINGS FROM THE FOCUS GROUP

When the discussion was happening, the students were asked to opine about Anna EDUSAT telecast in the engineering curriculum. Some of the answers given by them which were in favour of Anna EDUSAT were like it helps in understanding the concepts when the subjects are taught by the experienced academics. Visuals make it easy to grasp concepts and is a welcome shift from conventional classroom teaching. While some students agreed that the programmes are advanced and innovative when compared with conventional teaching methods some of them opined that additional information beyond syllabus is rarely covered. It had equal number of drawbacks, like most of the students especially those from mother tongue
Tamil medium schools cannot understand the lectures because of the content and English language. Though the programmes are interactive, all students are not able to get their doubts cleared and lack of clarity in audio and video further adds the snag list. Most of the experts speak or deliver lecture at faster pace. Live demonstrations absent and poor time schedule were pointed out.

When the students were asked to suggest for improvising the Anna EDUSAT programmes, the majority of them had said that two-way communication is a must in order to clarify their doubts. Practical and simulation knowledge to be added to the video programmes.

Some even proposed that teaching has to be more innovative, creative and detailed through the help of more live demonstrations. Technical problems both in audio and video delivery to be rectified as they interrupt the flow of learning.

5.3 MAJOR FINDINGS FROM THE CONTENT ANALYSIS

The overall video content quality when analysed denotes the three factors content, communication and technical audio are of good standard. All the videos have fallen under average or satisfactory condition when their technical conditions were studied. In the first audio category, two out of three videos have shown the presence of slight noise, which clearly indicates more care, has to be paid while doing the recordings inside the studio. The video aspect points that more animated visuals and live demonstrations has to be unquestionably added to increase the appealing factor among the students. The communication and content have suggested that more para-phrasing and summarizing of the content are required at the end of the video lecture series. Ok fillers have to be avoided and more questions should be encouraged to be asked by the expert which will help the students to interact with the academician.
5.4 MAJOR FINDINGS FROM THE SURVEY

Many of the students are either not aware of Anna EDUSAT or lack access to it in their educational institutions. Though 71 affiliated colleges have subscribed to this facility, many have stopped the reception of the transmission after a period of time. Those who are regular watchers have pointed out that as the live telecast of the programmes have been stopped, students are not watching during telecast as the interactivity part is missing. The colleges record the programmes and preserve it for future use. Whenever the students have a leisure period they are able to watch the recorded educational videos. Here again, the college authorities decide which educational videos shall be watched by the students. In the light of the results of this study, it was also found that majority of the colleges do not get the telecast schedule on time. Sometimes the telecast happens even on national holidays because of which the students miss the ETV programmes. Majority of the students who view the programmes complained about the poor audio and video quality.

As the interactivity between the subject delivering experts and students has been completely stopped, many students do not find it worthwhile watching the programmes which have already been covered by their class teachers. If some students have missed an episode of a programme they do not have the liberty to get the DVD and watch according to their convenience. Of late, Anna University has taken the initiative of uploading some of the educational videos in its website, so that it will be helpful for the students to download them.

Anna EDUSAT educational programmes badly need to innovate, transform and use latest technology to make the programmes attractive. It has to be given wide publicity so that all the affiliated colleges should encourage their students to watch it compulsorily.
i) **Lack of interactivity as compared to online education:** Youth today rely more on the internet for education purposes be it using wikipedia or downloading e-books online or using old question papers (sample books). New media allows the users to learn via interaction and participation. Education through television channels are more often one way communication and very often fail to engage the audience.

ii) **Packaging of Programmes:** The TV Channels decisions to stick to old programmes packaging have been a big let down and have not gone well with the students’ community.

iii) **Lack of innovation in content:** While television medium offers a lot of innovation in content in the form of experts/speakers, locations, technical incentives etc, those are not available in educational channels, they have ended up teaching the same stuff taught in schools in the same way. Overall it lacks innovation in content.

iv) **No Entertainment Value:** While most content in media including serious content providers like news channels have switched to infotainment content, educational television channels still lacks the excitement value that they could add to their content.

v) **Minimal use of visual medium:** The latest and broader scopes of visual effects and set designs have not been fully explored by the media channels. The sets, backdrops, surrounding ambience lacks the luster to look interesting.

vi) **Advertiser interests and sponsorships:** The lack of interest among target audience also reflects in the lack of interest
among advertisers and without quality sponsors, programmes take a hit in their quality and vice versa. As Anna EDUSAT is the sole investor in producing the educational content and has no revenue from sponsors like other TV channels, hence it cannot feel the heat of the competitors. Competition for TRP and grabbing the attention of sponsors gives rise to creativity.

Some of the measures to be taken care for better efficacy of Anna EDUSAT have been analysed. The content that today’s youth needs are dynamic, exciting and must add value to the time they spend. Keeping this in mind, educational channels must create content that satisfy their needs. Scientists, noble laureates, entrepreneurs from around the world could be invited for speeches and presentations which could draw some interest.

Providing incentives through gifts, scholarships, etc can be an add-on to motivate to the youth audience to watch and participate in it. Identifying target group and placing programme content based on strategic timings for increased visibility of programmes should be followed. By the usage of in trend technologies and by differentiating content from institutions and new media, youth could be drawn to watch programmes.

Changing the perception that educational channels air same boring content with one way communication can persuade the youth to watch the channel. Presence in social media and constant updates on shows can be used to promote the programme. Students expect more of interaction than the regular class. Lots of competitions and assessments could be conducted. The timing has to be changed. The students feel bored to listen to the class in video conferencing for more number of hours. Class should be taken regularly, once in a week, just one class is not satisfactory. Continuity is missed every time when the next class starts.
Colleges who have subscribed with Anna EDUSAT generally record the live show and play back according to their convenience. That should be taken into account because the students are not happy with it. The teaching method has to be changed with more usage of videos and animations used in it to explain to the students which will be quite an easier way to learn. Apart from the regular lectures there should be a few sessions only to interact and a few competitions can be on the schedule for once in a while and the winners can be awarded or gifted so it would be of some encouragement to the students.

The educational interactive video conferencing programme of Anna University Chennai called as Anna EDUSAT is not effective enough for the students. Most of the students are not aware of such a channel. Out of 52 colleges only very few of the colleges attend the tele-classroom, which is the first drawback. Publicity has to be made to the affiliated colleges. It should be more of interactive and make the students get involved. But if this amount of response is going to continue from the students then this tele-classroom will not sustain for a longer span of time.

To fulfill learner’s needs, the design of video clips (content, duration, technical aspects etc.) ought to take into account the targeted audience’s age. Relevant real-life pictures, objects or animation can be increased to enhance learner’s motivation and engagement during the teaching and learning processes. Introductions to all the educational videos should be replaced with quality induction sets instead of the usual regular montage where Anna University logo appears in graphics. The montages can be tit bits of the video clips of the content to be shown and the learners can relate the content with their prior knowledge and are curious to learn more. Long videos should be provided with small breaks – this will enable learner control over to check his notes and solve the query directly with the experts help on the spot.
The Interactive channel must be interactive in nature to engage learners. For instance, question and answer session, games, puzzle as well as quizzes can be included. There should be sufficient pauses that enable reflection and proposals of issues and questions. The videos must capture images in action to provide useful learning experience to learners so that they are able to pick up the manipulative skills demonstrated in the video clips. Moreover, the videos also have limitation in terms of stimulating discussions in class, making learning fun as well as promoting self-learning, critical and creative thinking of education.

5.5 CONCLUSION

While producing an educational television programme, one needs to think of the disadvantages of television. If there is no interaction among the students who are watching and the expert who delivers the content, there is very mere space for improvisation as there is a lack in instant feedback. These educational channels do not even have the provision where the student learners can give their suggestion or get in touch. Hence it is absolutely one sided on the part of the broadcasters just to transmit the programmes and sit back and watch. On the other hand, the viewers have no other option but just to watch whatever is transmitted on their television screen inside their college campus. The prospects to find out the real number of viewers getting benefitted from the telecast of such educational programmes stands doubtful as the producers cannot determine the real strength because no interaction happens.

Evaluations of these educational programmes are not made. Though there is huge investment made by Anna University in producing and telecasting television programmes. The current demand shows that a group of experts can be formed by the university who should review the existing television programmes, and decide on the redesign of the programmes that
have become invalid in content or in the way of presentation. The content and the form of the programmes to be revised or reproduced can be determined with the cooperation of the expert group. A good cinematographer and an expert video director who has sound knowledge of media conception, planning and development can change the packaging style. More camera angles and movements can be represented with dynamic shots.

The telecasted educational content can be transformed into e-content material which can be available on the university web page. Though this initiative has been already taken, most of the times the content is not accessible on the website with links leading to server error or broken links pages. So a proper web development team can take care of not only uploading the videos but also ensures that the learners are able to download smoothly. Being the nodal agency of engineering education departments, Anna University can think of a free software platform which can be used to provide any subject content that can be used by students according to their own convenience. Even the experienced teachers of the affiliated colleges can be trained or given a chance to produce lectures that might create interest among those college students to watch it on screen because of familiarity. More encouragement given to discussions with students after the tele-class gets over in solving the queries. Feedback from the affiliated colleges watching Anna EDUSAT programmes can be taken on regular intervals that might be considered in future improvements. It has been also noticed that once the equipments installation is done, the affiliated colleges during the occurrence of technical problems are redressed only over the phone. Anna University can ensure that apart from deploying infrastructure the proper maintenance of hardware equipments at colleges and faulty machines should be rectified regularly.
As Anna University has produced some emeritus professors, they can be invited for delivering lectures in the Anna EDUSAT channel. The MOU’s with reputed institutions abroad can be also considered. The teacher exchange programmes gets eminent professors and their lectures recorded with sub-titles can be also added. This will be a great asset for the staff and students who are watching and probably can create a goodwill that might help in transformation of the students’ perspective towards Anna EDUSAT. Anna University can also think of sharing of engineering knowledge at global level. International agencies involved in the use of new technologies for education like Commonwealth of Learning (COL), Massachusetts Institute of Technology (MIT), USA, United Nations Educational Scientific and Cultural Organization (UNESCO) can have a tie-up and more resources can be shared with mutual consideration. This might even pressurize in creating advanced quality of production to meet the global arena standards.

Though Anna EDUSAT is dedicated to creating syllabi based programs, the workshops, symposiums, national and international conferences that happen within the campus can also be considered to break the monotony. A difference in format may create enthusiasm among the viewers to watch the channel. It will also create more awareness among the rural students about new ideas on a specific topic by watching such programmes. As suggested by Sahid Rasool, development of “Learning Object Repository (LOR)” on various educational subjects will make learning more enjoyable and enriching. Each LOR consists of 60-90sec video taken from the main educational video prop up with a brief written content. LOR might draw the attention of students rather than watching the educational videos for a longer duration which may not attract students.
Publicity of the channel and the programme schedule in the college websites, canteens and all the places where students’ hangout happens can create more interest. Even social networking sites and web pages related to Anna University can give wider publicity for Anna EDUSAT programmes. Since the last ten years, the bulk production of programmes is in lecture format, without caring too much for the production values and elements which has reduced the importance and lacks effectiveness. A content developer or producer in-charge can be recruited who can deviate and use their production skills to make programmes attractive and creative. The person can be an experienced creative director who can bring a splash of change in the production style and packaging.

Using television for imparting education by educational institutions has not been found appreciable. Those who use are also very low in number. The usage of television can be emphasized more. Only 71 out of 500 affiliated colleges have subscribed currently to Anna EDUSAT. A few institutions that might be having financial crunch are deprived from accessing Anna EDUSAT. Hence, some discount offers or EMI scheme or waiving of the Five lakh subscription amount can be considered by the authorities. The live interactive session with a slot for discussion with the expert can be brought back in order to bridge the gap between the viewers and the resource person. Though it’s not a commercial channel, still it is expected that at the end of each session, quiz programmes with gift vouchers or a small amount of monetary rewards can attract the participants to interact with the expert. As some of the students prefer the videos in the local language, a few of the contents can be either dubbed in Tamil or provided with a sub-title for easy understanding.
Educational institutions should facilitate the students and staff with a fixed slot in their time-table for watching these educational programmes. Even the place where the programmes are viewed should not be clumsy, clutter free and should have the minimal hygienic facilities with proper air and light facilities. Each student can be provided with a proper chair or desk so that they can take notes of the experts lecture.

5.6 SUGGESTIONS / RECOMMENDATIONS

As this study limits to Anna EDUSAT, other educational channel programmes could also be studied and the results compared.

This study focused only on B.E. 2\textsuperscript{nd} and 3\textsuperscript{rd} year students of Anna University affiliated colleges. The study can be expanded to include other colleges’ students who might be accessing to some other educational programmes or with the students who have never been given a chance to watch the educational channels on television. IIT-M (Indian Institute of Technology, Madras) programmes that are also available on NPTEL sites can be part of a comparative study by future researchers.

Observation and other research methods can also be adopted to ensure the effectiveness of the educational programmes on the students and faculty members which has not been used by the researcher in the current study.

Constraints of time and study assignments have forbidden further investigation with all respondents. Even after getting permission well ahead, the researcher had to compromise on time limit in one or two places. The researcher was also helped by her friend who
translated the questionnaire into Tamil language for easy understanding of the students. At a few places though she wanted to interact but was dependant on the interpretation. A local researcher well acquainted with the language may collect more indepth reports.

There is vast scope for doing elaborate study in this area, which would yield greater insights and enable the educational programme producers and investors who run such channels to orient towards achieving their goals. This study has taken the effectiveness of Anna EDUSAT educational programmes as one of the mediating factors in general impact on the students. Some more factors like gender, rural –urban divide, demographic profiling, economic status of students, which branch of engineering prefers to watch and many more factors can be stressed in future research.

The viewers metric that was focused on the respondents’ preference in watching Anna EDUSAT programmes and its usefulness can be integrated with behavioral or personality development, communication speaking skills enhancement to yield substantiate results by future researchers.

More detailed study on a comparative basis with other educational programmes would yield in greater variations in findings and can produce more subtle divergences. The study gives ideas for researchers to probe into various dimensions that will be helpful to them in evaluating educational programmes on a colossal scale.