Teaching is a noble profession. Great men of old went through the hands of great teachers. Great teachers of old turned the world upside down with their philosophies and great ideas. Enumerate by making a list of great men whose inventions and discoveries have shaken and civilized the world and you will find that all of them were taught by particular individuals to whom they gave credit.

Teaching is one of the oldest professions. It has no specific history because all through human history people have learnt and have gone through the hands of teachers.

However, it was in the Gurukula system where teachers (gurus) interacted with students in an organized way. The teachers instructed the students in various disciplines and the students did service for their teachers. The Greeks had a similar system where teachers and philosophers were approached by individuals to gain knowledge.

The teacher in higher education is facing a big challenge today because his role is not just limited to that of facilitator of knowledge. He is expected to meet the rising expectations of the present society and future generations. His responsibilities have increased manifold due to explosion of new knowledge, change in social system, new family structures and altogether different value patterns in the society. For this purpose he has to be prepared well for transmitting knowledge and above all shaping
the human beings for future society. Therefore, there is a need to prepare, educate and motivate teachers regularly by exposing them to different type of situations viz. knowledge explosions, reorganization of value pattern, usage of technology, innovations in the different areas etc.

In pursuance of this a few institutions launched in-service teacher education programmes for the teachers at the tertiary level of education. The UGC inter alia started a scheme summer institutions in which teachers of different subjects were brought together to study the new dimensions of their disciplines. The National Policy of Education 1986 emphasized the need for continuing education in general and orientation as well as refresher courses in particular for teachers teaching at tertiary level. This policy has proposed to promote the motivation of teachers through systematic renovation in individual subjects and methodologies and thereby inculcate in the teacher the right kind of values and interests for furthering initiative for innovative and creative work. The UGC formulated the Academic Staff Orientation Scheme (ASOS) and established Academic Staff Colleges in different universities. The chief purpose of establishing the Academic Staff College was to establish an institution which will be responsible for developing programmes to enhance the motivation of academic and non-academic staff of colleges/ universities through systematic orientation in specific subjects, techniques and methodologies. Most of the ASCs were established about a decade ago. The expectation was that these institution will play significant role in the in-service education of teachers. But how far this
experiment has been a success and how far the desired goals have been achieved.

5.1 Objectives of the study
The study was undertaken to fulfill the following objectives:

1) To study the adequacy and extent of utility of the infrastructure acquired.

2) To study the quality of Professional Development Programmes in terms of
   i) Reading material provided.
   ii) Quality of Resource Persons associated.
   iii) Relevance of the content discussed during the programme.
   iv) Methodology of conducting the sessions.
   v) Level of interaction.

3) To study the impact of the Professional Development Programmes in terms of
   i) Acquisition of knowledge.
   ii) Providing appropriate teaching methodology to teach at higher education level.
   iii) Development of teacher's personality.

5.2 Delimitation of the study
Present study was delimited in the following aspects:

- The study was restricted only to the Four ASCs of the northern region of the country.
- The data regarding the adequacy of infrastructure and the quality of the programmes was collected only from those participating in the programme at the time of the visit of the researcher.
Only 20 teachers who had attended the Professional Development Programme were selected from the catchment area of each of the 4 ASCs.

Only one functionary was interviewed from one ASC.

5.3 Methodology
In the present study the existing status of the infrastructure facilities available in the ASCs and the academic inputs provided by them were studied besides the impact of the professional development programmes on the actual classroom teaching. Hence survey method which suits best to the nature of present study was used.

5.4 Sampling
In the present study sampling exercise was undertaken at four stages. In the first stage ASCs to be included in the study, were selected, in the second stage participants attending OPs/RCs were selected, in the third stage functionaries of ASCs (from whom relevant information pertaining to the staff colleges was sought) were selected and finally the in-service college/University teachers who had already attended the programmes conducted by the ASCs were selected.

5.5 Tools Used
Keeping in view the nature of the study the following tools were developed by the investigator to collect relevant information:

(I) Interview schedule for functionaries of ASCs.
(II) Questionnaire for participants.
(III) Questionnaire for in-service teachers.
(IV) Inventory (for infrastructure items).
(V) Observation schedule.

5.6 Statistical Technique Used

For the analysis of data obtained with the help of different tools used in the study, both qualitative and quantitative methods of analysis were used.

CONCLUSIONS

In the light of the analysis and interpretation of data, following are the major findings of the study with regards to various aspects of ASC:

5.7.1 Infrastructure Facility

- Boarding and lodging facility

Participants are required to stay in the ASC for a duration ranging from 3-4 weeks. Therefore, for their whole hearted and effective involvement in the programme, it is important that they feel comfortable at the place where they are staying. From the analysis of responses of subjects following conclusions were made:

The staying arrangement made by the ASCs of HPU and KU have been considered only moderately satisfactory. The ASC of HPU doesn't have official accommodation for making the arrangements of stay of the participants. Therefore teachers make private arrangements which are considered only moderately adequate. In case of ASC of KU also the official accommodation is inadequate and the majority of participants are required to make their own arrangements. Therefore, they are only moderately satisfied with the available accommodation.

However, in case of ASCs of PU and GNDU reasonably good official accommodation is available for the participants of
different programmes. Therefore, the participants have rated the arrangements as highly satisfactory.

Keeping in view the frequency of professional developmental programmes conducted by the ASC, it is suggested that funds be made available to ASCs to construct their own hostels so that ASCs may make the stay of participants reasonably comfortable.

As far as the amount of travelling allowances and daily allowances (TA/DA) paid to the participants is concerned, majority of the participants (above 70%) of ASC of GNDU Amritsar and PU Chandigarh, consider the amount as sufficient.

In case of ASC of KU (52%) only majority the participants considered the amount as inadequate to reach such expenses. However, in case of ASC of HPU, majority (73.19 %) have expressed that the amount is inadequate. This may be because of the fact that Shimla being a hill station, the living cost is higher compared to the cities of the plane.

- Conference room facility

The conference room facility has been found to be very satisfactory in case of ASC of HPU by both, the teachers attending the programme and also those who have already attended. Similarly in case of other three ASCs also this facility has been found to be quite satisfactory by the majority of the participants.

The investigator through his own observation also found the conference room facility as adequate in all the four ASCs. However, the conference room of ASC of HPU was found to be
better equipped and furnished in comparison other three ASCs. It may be further pointed out that the ASC of HPU has spent maximum amount amongst the four ASCs included in the present study to furnish its conference room. The majority of participants found the seating arrangements in the conference rooms of three ASCs viz., ASCs of HPU, GNDU and KU as quite satisfactory. In case of ASC of PU participants were equally divided on this issue.

- **Library facility**

  Participants attending the programmes in ASC of HPU, PU and GNDU were aware of the library facility available for them in the respective ASCs. However, 50 % of the participants attending the programmes in KU expressed their ignorance about the availability of library facility in the ASC. This is perhaps because of the reason that the ASC library is not located in the same building in which academic sessions of the ASC programmes are generally held.

  - With regard to the adequacy of library facility, it may be concluded from the perception of the teachers who had already attended the programmes in the respective ASCs that they were moderately satisfied with the library facility provided to them by the ASC.

  However, in case of participants who were attending the programmes in different ASCs at the time of data collection, only the majority of participants (61.90 %) of ASC of HPU found the library facility satisfactory, where as in case of remaining three ASCs, (PU, GNDU and KU) majority of the participants were not satisfied with the library facility provided to them.
• As far the seating arrangements in the library are concerned, the same are considered satisfactory by majority of participants only in case of HPU and GNDU. In the remaining two ASCs of PU and KU, majority of the participants have expressed dissatisfaction with the seating arrangements made in the library. In the absence of satisfactory seating arrangement in the library the utilization of library facility is considerably reduced. Therefore, it is suggested that proper seating arrangements be made in the library.

• Regarding the use of library facility, it may be concluded from the responses of the teachers who have attended the programmes from the four ASCs that except for ASC of GNDU where the library facility was used to a large extent, in the remaining three ASCs, the use of library facility was only to some extent. In other words we can say that library facility remains underutilized in case of three ASCs. This was also evident from the number of participants who had borrowed books during the programmes.

• Regarding the use of library facility in enriching the subject knowledge, it was found that except for the ASC of GNDU where majority of the participants found the facility helpful 'to a large extent', in the remaining three ASCs the facility was considered helpful only to some extent by majority of the participants. It may therefore be concluded that ASC libraries are not well equipped with the books which may help to enrich the subject specific knowledge of the participants.
• **Use of Audio-visuals aids**

Majority of the respondents from the ASCs of PU, GNDU and KU have expressed that the facility of TV/ VCR is not being utilized fully by the staff colleges to enrich the programmes. However, in case of ASC of HPU, majority of participants have expressed that the facility is being utilized effectively.

Regarding the use of audio-visual facility by the participants, it has been expressed by the majority in case of PU that the participants are provided enough opportunities to make use of audio-visual aids. However, in case of remaining three ASCs, comparatively lesser percentage of participants make use of this facility.

• **Computer facility**

This facility was available in all the four selected ASCs. Majority of the participants in ASCs of HPU, PU and GNDU were aware about the availability of computer facility. Whereas, in case of ASC of KU, only 36 % of the participants were aware about this facility. This is because of the reason that most of their RCs are conducted in the respective departments where this facility is hardly utilized during the programme. The ASC hardly has the provision of a computer system exclusively for use in professional development programmes.

• **Publication**

The ASC of HPU has its own publications. It publishes news bulletin, programme reports and a biannual Journal. Majority of the participants in this case have expressed that the functionaries of ASC encouraged them to contribute articles for the journal. Their impressions about the programme attended
by them were also invited. The remaining three ASCs i.e. PU, GNDU and KU hardly have their own publications.

5.7.2 Programme Inputs

- **Use of BB and other aids by the RPs**
  
  Majority of the participants from all the four selected ASCs have expressed their satisfaction regarding the use of BB and other aids by the RPs to make their presentation interesting and effective.

- **Adequacy of reading material**
  
  Regarding the adequacy of reading material provided to the participants during the programmes, it has been expressed by a percentage ranging from 26.19 % (GNDU) to 57.14 % (HPU) of the teachers attending the programmes that the reading material supplied to them is adequate. Thus it may be stated that the reading material supplied to the participants has not been considered adequate by the majority.

- **Effectiveness of ‘participant – centered’ sessions**
  
  Participant-centered sessions refer to those sessions in which the participants are engaged in some activity. Majority of the participants found the participant- centered sessions very interesting and useful in all the ASCs as the percentage ranges from 66.67 % to 85.71 %.

- **Provision of lecture hand - outs**
  
  The lecture hand-outs provided by RPs were found satisfactory only in case of ASC of PU. In the remaining three ASCs, majority of teachers responded that the lecture briefs are hardly provided by the RPs on the topics delivered by them.
• **Relevance of content**

Regarding the relevance of content covered during the sessions, majority of participants from all the four selected ASCs considered the topics covered during programmes as very much relevant to the objectives of the programme.

• **Level of interaction**

It may be concluded from the analysis that level of interaction of the participants with the RPs in all the four ASCs was found quite satisfactory by the majority of participants.

• **Quality of RPs**

Regarding the quality of RPs, it has been found that by and large the majority of the participants in all the four ASCs were satisfied with the quality of RPs invited by the ASC. Similarly majority of the teachers were satisfied with the communication skill of RPs. It may thus be concluded that generally ASCs associate RPs who have rich experience in their field and also can communicate their views effectively.

• **Evaluation of RPs**

Evaluation of the resource persons is continuously done by the participants of the programme. While associating the RPs in different programmes this evaluation is also kept in mind.

• **Methodology of conducting the sessions**

Various methods are used for conducting the sessions in the professional development programmes. Emphasis is given on those methods which ensure maximum participation of the participants. Methods like lecture-cum-discussion, panel
discussion, workshop, brainstorming, participants presentation etc. are usually used.

5.7.3 Impact of the programme

The impact of the programme was studied in terms of outputs related to: (i) Development of knowledge (ii) Mastery over teaching skills and methods of teaching and (iii) Development of personality. Major findings related to the impact are as under:

- **General Awareness**

  Majority of the teachers in the ASCs of HPU, PU and GNDU were satisfied with the impact of the programme in terms of development of general awareness among the teachers. However, in case of ASC of KU, majority of the participants expressed very little or moderate satisfaction with the impact of the programme in development of general awareness. It is therefore suggested that the ASC may take more care of this component in the future programmes.

- **Knowledge about other subjects besides the teaching subject**

  In orientation programmes there is discussion on various issues beyond the teaching subjects of the teacher. This is helpful for the teacher in co-relating his subject of teaching with other subjects and thus enabling the students in understanding his subjects in the larger perspective.

  The programmes of ASCs of HPU, PU and KU were moderately helpful in imparting knowledge of other subjects, whereas in case of ASC of GNDU, the majority of teachers has
expressed that the programmes were helpful 'to a large extent' in providing them such knowledge.

- **Conceptual clarity of the subject**

  One of the objectives of the professional development programmes, especially of the orientation programme is to help the teacher to have conceptual clarity of the subject which he/she teaches. Majority of the teachers in case of ASCs of HPU, PU and GNDU have expressed that these programmes are helpful 'to a large extent' in making conceptual clarity to the teacher in the teaching subjects. However, the teachers who had attended these programmes in KU found the programmes only moderately helpful in this regard.

- **Communication Skill**

  ASCs are found to play important role in developing the skill of communication among teachers which is an important skill for effective teaching. The majority of the teachers who attended the programmes from the ASCs of GNDU, HPU and PU have found these programmes very helpful in improving their skill of communication. However, in case of ASC of KU, the programmes are found to be of moderate help in improving the skill of communication by the majority of the participants. It is therefore suggested that emphasis be given to those practical exercises which are helpful in improving the communication skill of the teachers.

- **Skill of introducing the lesson**

  An effective introduction of the lesson in the class is extremely helpful in keeping the students attentive to the topic being dealt by the teacher. To make the introduction appealing,
catchy, attractive and relevant, it is important to introduce the lesson effectively by using certain techniques. Effective introduction of lesson is a skill which can be developed by training. ASC should give due importance for the development of this skill. From the analysis of this item, it was revealed that all the selected four ASCs have realized the importance of this skill and given due emphasis for its development.

In all the four ASCs the participants having attended these programmes have expressed that programmes were helpful to a large extent in improving their skill of introducing the lesson.

- **Providing Illustrations**

  Giving illustrations and explanations is another teaching skill which is important for bringing home a point to the students. For easy understanding of complex concepts, illustrations and explanations are essential. The analysis of the data has revealed that in case of the ASCs of GNDU and PU majority of the teachers has expressed that the programmes of these staff colleges have helped them ‘to a large extent’ in improving this skill. Whereas the majority of the teachers who attended programmes from ASCs of HPU and KU, have expressed that these programmes were only moderately helpful. Therefore, it may be suggested that more opportunities may be provided for the development of this skill in these two ASCs.

- **Language ability**

  Skill of communication is dependent to a large extent on the language ability of the person. Irrespective of the teaching subject language invariably acts as a medium through which
the content reaches the students. A teacher with poor language fails to communicate the subject to his students effectively even with adequate knowledge of the subject. The analysis reveals that in case of ASCs of HPU, GNDU and KU the programmes conducted were helpful to a large extent, whereas in case of ASC of PU, the teachers having attended these programmes have expressed that the programmes were helpful only to some extent, implying thereby that more emphasis needs to be given to this aspect by providing opportunities for more and more interaction during the sessions.

- **Questioning skill**

  It is another teaching skill which contributes significantly to effective teaching. This skill includes framing of the questions and selecting type of questions as per the requirement. Questioning helps in the evaluation and active participation of the students. The analysis of data obtained from the four selected ASCs reveal that the programmes of ASCs, especially the OPs have been helpful in this regard from 'moderately' to a 'large extent' in different ASCs. In case of ASC of HPU and GNDU, majority of the teachers have expressed that the programmes were helpful 'to a large extent' in improving the questioning skill. However, in case of other two ASCs namely ASCs of PU and KU, majority has expressed that these programmes were moderately helpful in improving the questioning skill.

- **Attaining student participation**

  For making teaching learning process effective, active participation of the student is essential. Unless the students
are actively engaged in the process, they hardly receive the content which the teacher tries to communicate to them. Therefore, teacher should be skilled enough to attain student’s participation in this process. It has been revealed that majority of teachers in case of ASCs of HPU, PU and GNDU has found these programmes helpful to a large extent in improving the skill of attaining student participation. However, in case of KU the majority considered the programme as moderately helpful in improving this skill. Thus from the analysis of data of the four ASCs it may be concluded that these programmes are helpful from ‘moderately to a large extent’ in developing the skill of attaining student participation.

- **Skill to Use audio-visual aids**

To break the monotony of teaching and to make difficult concepts understandable to the students, the use of audio-visual aids is very effective. However, for this teacher must know ‘what’ audio-visual aid should be used and how and when it should be used. Thus, it is important to equip the teachers with the skill to make effective use of audio-visual aids in the teaching of different subjects. The ASCs are also making efforts to develop this skill among the teacher teaching at higher education level. The data collected from four ASCs reveal that these institutions have been helpful from very little to large extent. In case of ASC of HPU the programme has been found moderately to largely helpful in developing the skill of using audio-visual aids. In case of ASC of PU and GNDU majority of teachers considered the programmes of moderate help, whereas in case of ASC of KU, the majority considered the programme
'helpful to a large extent' or beyond. However, substantial percentage (35%) of teachers having attended the programme of KU, have also expressed that these programmes are of very little or no help in developing the skill of making effective use of audio-visual aids.

- **Classroom management**

  An effective classroom management is first pre-requisite for a good classroom interaction. It is not possible to impart instruction effectively in the class, despite thorough knowledge of the subject matter and other skills if the teacher fails to manage the class well.

  Majority of teachers having attended the programmes in the ASCs of HPU and GNDU consider these programmes 'very much' helpful or helpful 'to a large extent' in developing the skill of classroom management. In case of ASCs of PU and KU, the programmes have been considered moderately helpful in developing this skill. Thus, the latter two ASCs need to pay little more attention for development of this skill.

- **Effective student Evaluation**

  Student evaluation occupies a significant place in the whole teaching learning process. It helps the teacher in assessing the ability of the students and also provides feedback to the teacher about the quality of his teaching. Evaluation serves diagnostic purpose also. From the responses of the teacher to the item related to student evaluation, it was observed that in case of ASC of HPU, majority of the teachers found the programme attended by them as useful to a large extent in making effective student evaluation.
In case of ASCs of GNDU and KU, majority of teachers found the programme moderately helpful. Whereas in case of ASC of PU, majority of teachers considered the programme as of very little help in evaluating the learning outcomes of students effectively.

- **Personality Development**

  All dimensions of the personality of the teacher need to be developed fully in order to make the teacher role model for the students. This helps students to a large extent to develop desirable personality traits. Responses of the teachers having attended programmes in the ASCs reveal that in all the four staff colleges, majority of the teachers are of the opinion that ASCs play an important role in developing the personality of the teacher. As in all the cases the majority has expressed that the programmes had been helpful from ‘large extent’ to ‘very much’ in the development of teacher’s personality.

- **Interaction with the Community**

  The teacher’s role is not restricted only within the four walls of the classrooms but he is also expected to interact with the community outside and bring transformation in the society. The professional development programmes organized in ASCs are also expected to help teacher in establishing better communication with the community and in developing concern about the problems that society faces.

  From the analysis of responses to this item, it may be concluded that in the ASCs of HPU and PU, the majority of teachers having attended these programmes have considered them ‘moderately helpful’ or helpful ‘to a large extent’. In case of
ASC of GNDU, majority of teachers expressed that the programme has helped them 'to a large extent' in developing better interaction with the society and in understanding its problems. However, in case of KU, the majority has expressed that the programme was of 'little' or 'no help' in this regard. Thus we may infer that these programmes by and large help the teachers in developing better interaction with the society.

- **Attitude towards the profession**

  A teacher cannot have whole hearted involvement in his profession unless he/she possesses positive attitude towards it. The professional development programmes being conducted at ASCs among other things, should therefore be helpful in developing among teachers a positive attitude towards their profession. Majority of participants having attended professional development programmes in all the four ASCs considered these programmes as 'very much helpful' or 'helpful to a large extent' in this regard.

- **Improving relations with the student**

  Cordial relations between the student and teacher help in creating a congenial learning environment which invariably results in better learning. Therefore, establishment of better student teacher relation is emphasized in the professional development programmes at higher education level.

  Majority of the teachers having attended such programmes have expressed that these programmes proved to be much helpful to them in improving their relations with the students.
• **Improving relation with the colleagues/Head of Department**

For giving better performance in the teaching profession, a teacher should have cordial relation with colleagues as well as with the Head of Department/Principal. This will keep him free of emotional disturbances and unnecessary tension so as to concentrate fully on his profession. Professional development programmes therefore, should help the teacher to learn techniques of adjustment in the respective institution. Teachers having attended these programmes in four ASCs have expressed in majority that the programmes were very useful for them in developing cordial relation with the colleagues as well as the Head of Department.

• **Job Satisfaction (Perception)**

Majority of teachers in the ASCs of HPU and GNDU have expressed that professional development programmes attended by them were of much help in developing more job satisfaction among them. However, the majority of the teachers from the ASCs of PU and KU found these programmes ‘moderately helpful’ or ‘helpful to a large extent’. Considering these results it may be stated that the professional development programmes have been quite helpful in developing more job satisfaction among teacher.

• **Methodology of teaching at higher education level**

Majority of teachers from the ASCs of HPU and GNDU have expressed that the professional development programmes attended by them were helpful ‘to a large extent’ in acquiring the appropriate teaching methodology to teach at higher
education level. However, the majority of teachers from the ASCs of PU and KU found these programmes only of moderate help in this regard.

- **Awareness about the problem of Higher Education**

  The professional development programmes of ASCs of HPU and GNDU were helpful ‘to a large extent’ in creating awareness about the problem of higher education among the teachers as perceived by majority of the teachers who attended professional development programmes from these two ASCs. However, in case of ASC of KU the programmes were considered only of moderate help and in case of ASC of PU of very little help in this regard. It may be pointed out that in case of KU also, 20% teachers even consider these programmes of very little help in creating awareness about the problems of higher education.

- **Awareness about the Goals of Higher Education**

  Teacher teaching at higher education level must be aware and clear about the goals of higher education, so that he/she may relate his teaching with these goals. Therefore, professional development programmes conducted by ASCs should also aim at making the teacher aware of the goals of higher education. From the responses of the teachers, it may be concluded that majority of teachers having attended such programmes in the ASCs of HPU and GNDU considered the programmes very much helpful or helpful ‘to a large extent’ in developing awareness about the goals of higher education. However, in case of ASC of KU, the teachers considered these programmes only moderately helpful in developing awareness about the goals of higher
education and in case of ASC of PU, the majority has rated these programmes of very little help in creating awareness about the goals of higher education.

- **Updating subject knowledge**

  Knowledge in all fields is expanding at a very fast pace. New advancements are making the old knowledge redundant. Therefore, teacher must upgrade his knowledge in the teaching subject. ASCs organize programmes, especially the refresher course to update the subject knowledge of the teacher. It has been found that majority of teacher having attended such programmes in case of ASCs of HPU and GNDU considered these programmes helpful to a large extent or very much helpful, whereas in case of ASCs of KU and PU, the programmes have been rated to be moderately helpful and of ‘very little help’ respectively by majority teachers having attended these programmes from these two ASCs.

  It may therefore be pointed out that more attention should be paid to this aspects by these two ASCs in their Refresher Courses.

- **Latest research knowledge of the subjects**

  The role of professional development programme conducted by ASCs has not been found very encouraging in providing latest research knowledge of the subjects to the teachers. The percentage of teachers who considered these programmes as helpful to a large extent or very much helpful ranges from 30% to 40% only. In case of ASC of PU, majority of the teachers (55%) considered these programmes of very little
help in providing latest research knowledge of the subject. This aspect therefore needs attention of the ASCs.

- **Knowledge of computer and Information Technology**

  Computer and information technology are making inroads in all the fields. The vast resources of knowledge across the globe are now available through information technology. Ignorance about information technology will mean depriving the teacher of these resources. Therefore, providing knowledge of information technology should be an integral part of ASCs programme. However, the present investigation revealed that majority of teachers in all the ASCs find these programmes of very little or no help in imparting the knowledge of computer and information technology.

5.8 EDUCATIONAL IMPLICATIONS

- The Professional Development Programmes organized by ASCs are now becoming a regular feature. The quality of higher education in the country will be greatly influenced by the quality of these programmes.

  Participants are required to stay in the ASC for a duration ranging from 3-4 weeks. Therefore, for their whole hearted and effective involvement in the programme, it is important that they feel comfortable at the place where they are staying. Keeping in view the frequency of professional development programmes conducted by the ASC, it is suggested that funds be made available to ASCs to construct their own hostels so that ASCs may make the stay of participants reasonably comfortable.
• Provision of proper physical facilities during the programmes also contribute to the effectiveness of the programmes. An attractive conference room with adequate and proper seating arrangements has been found to help the participants to stay in the programme even for longer durations.

• A good library containing a rich collection of books pertaining to the topics which are usually dealt in the professional development programmes conducted by ASCs is essential for enrichment of the sessions. The participants can participate actively only when they go well prepared in the sessions. For this preparation, a good library is important. Therefore, the ASCs should not only acquire a good number of relevant titles for its library but should also ensure that the participants make optimal use of the same.

Further, the ASCs can organize some sessions in which participants are asked to make presentation by using the books available in the ASCs library.

It has been generally observed that the libraries maintained by the ASCs are not rich in material which can help in the subject upgradation of the participants. Therefore, the ASCs can collaborate with the university library where participants may be provided such subject related books.

• Supply of adequate reading material pertaining to the topics discussed in the professional development programmes is necessary so that the participants are able to take maximum benefits of the professional development programmes afterwards also.
• Audio-visual aids like TV/VCR should be judiciously used in order to make the deliberation of different sessions effective. Participants should also be provided enough opportunities to make use of the audio-visual aids. This will enable the teachers to make maximum use of such aids in their classrooms wherever available. This will considerably affect the effectiveness of classroom teaching.

• In all the professional development programmes organized by ASCs for university and college teachers a component of information technology (IT) should invariably be added. This will be of great help especially to the teachers who are not much aware about the use of information technology in enriching their subject knowledge as well as general awareness.

• Role of the teacher in the higher education is not limited only to teaching in the classroom but he is expected to do well in the research and extension activities also. For reaching out the people at large and also for disseminating the findings of the researches taken up by the teacher, he should be able to project his views through well written articles. Staff college by having its own publication can provide training to the participating teachers in this area by encouraging them to contribute materials to its publications.

• It has been observed that those sessions in which participants are engaged actively, are more lively and effective. Therefore, a substantial amount of time should be provided to the participant – centered sessions. These sessions are based on the maxim of learning by doing and materials learned this way is retained for a longer time. The activities of the
professional development programmes should be so organized that the participation of each participant is ensured.

- The change in the outlook and the personality of the participants as a result of professional development programmes depends up to what extent he has been inspired and motivated. Only such changes can result in the improvement of classroom teaching. To bring about such changes in the participants, resource persons associated with the programmes play a crucial role. The staff colleges therefore should associate only those people who have made significant contribution in the field of study and are also people of high integrity.

- The ASCs should make efforts to provide basic knowledge of different subjects to the teacher so that he may develop better understanding of his subject in the larger perspective.

- To make the curriculum transaction effective in the classroom, the teacher must be trained in certain teaching skills like communication skill, skill of providing illustration, skill of introducing lesson, skill of questioning, skill of attaining student participation, skill of using audio-visual aids, skill of classroom management, skill of effective student evaluation etc. Therefore, ASC should make necessary arrangements for giving enough practice to the participants in such teaching skills.

- The teacher teaching at higher education level can play an important role in transforming the society into truly democratic and learning society. For this it is important that teachers have an active interaction with the community outside the four walls of his institution. The professional development programmes
organized by the ASCs should prepare and motivate the teacher for interacting more and more with the community. This interaction may be direct or through the students the teacher teaches. The teacher can make his message reach the community through his students also.

- In all the professional development programmes of ASCs, the emphasis should be on developing positive attitude among the teachers towards their profession. The importance of teaching profession should invariably be highlighted. Similarly these programmes should help the teachers to draw satisfaction out of their job.

- The staff development programme should provide plenty of opportunities to the participants where they have to work together in accomplishing the task. This will provide them an experience to make adjustment among themselves. Such type of training will definitely help the teachers to develop better understanding of his colleagues which will lead to his/her better adjustment with them. This will keep the teacher free from many emotional disturbances which affect his/her teaching effectiveness.

- The programmes organized by ASCs for teacher teaching at higher level should make the teachers fully aware about the problems of higher education and also about the goals of higher education. This will help the teacher in making his teaching relevant in the perspective of these problems.

- The subjects specific refresher courses must devote much time on the latest developments in research in the concerned subject and also in updating the subject knowledge of the
teacher so that the teacher is able to teach effectively the syllabi which are changed from time to time as per the developments in the subjects.

- One of the important areas where the ASCs have not been found to pay proper attention is the information technology. In the present time when knowledge multiplies at a very rapid rate globally, the informational technology is becoming the most important media to have access to this knowledge. Information technology can thus be of great help to the teacher in improving his effectiveness in the subject of his teaching. This area has hither to been almost ignored by the ASCs. It is high time that this component is given the attention it rightly deserves.

5.9 SUGGESTIONS FOR FURTHER STUDY

Present study was conducted to evaluate the professional development programmes for the teachers teaching at the tertiary level. In view of its scope in terms of area, programmes, instructional procedures and evaluation techniques following suggestions are formed for further study.

- Present study was restricted to the four ASCs of the northern region of the country. Similar studies may be undertaken for the ASCs situated in other regions of the country.

- A study may be undertaken to see the impact of professional development programme in actual classroom practices.
• A study can be undertaken to investigate into the factors affecting the effectiveness of the Professional Development Programmes.

• A study can be undertaken to see the effectiveness of the Orientation Programmes conducted by the Academic Staff Colleges for the college and university teachers in relation to the achievement of the programme objectives.

• A study can be undertaken to see the effectiveness of the refresher courses conducted by the Academic Staff Colleges for the college and university teachers in relation to the achievement of the programme objectives.

• Case study of some of the ASCs adjudged as the best and those adjudged as poor (as per the evaluation made at national level by the NIEPA) may be undertaken in order to specify the factors which lead to effectiveness or otherwise of the ASC.

• Research may be conducted to see the growth and development of Professional Development Programmes for teachers at tertiary level in India.

• A study may be undertaken to see effectiveness of Professional Development Programmes for teachers at tertiary level in relation to some psycho-social variables.

• Attitude of teachers, educational administrators and policy makers towards these programmes is important for the success of these programmes. A study may be conducted to see the attitude of teachers, educational administrators and policy makers towards these programmes.
• A comprehensive survey study may be undertaken to analyze the content covered during various orientation programmes keeping in mind the educational needs at the higher education level.

• Some follow up studies may be undertaken in order to ascertain how far teachers are implementing innovative strategies, employing teaching aids and using content of different subjects in real classroom situations.

Needless to mention the ASCs are still in their childhood and require lot of improvements in their functioning. Therefore research endeavour in this area should be continuous process. Both good and bad experiences can prove to be useful in improving the functioning.