ENACTMENT OF SUBJECT SPECIALISTS CONCERNING INSTRUCTIONAL PLANNING AND STRATEGIES; A GENDER BASED COMPARATIVE STUDY

Malik Amer Atta[1], Asif Jamil[1], Muhammad Ayaz[2]
[1]*Institute of Education & Research, Gomal University, Dera Ismail Khan, Pakistan*
[2]*Institute of Education & Research, University of Science and technology Bannu, Pakistan*

ABSTRACT
Basic persistence of the study was agender based comparative study on enactment of subject specialists concerning instructional planning and strategies. Data collected from twenty one randomly selected higher secondary schools. The respondents of this research study were head teachers, students and subject specialists from sampled schools. Arithmetic mean, standard deviation, Co-efficient of variation and t-test applied to analyze the data. Direct selected subject specialists performed better and consistent than promoted subject specialists regarding instructional planning and strategies.

INTRODUCTION

Teaching is considered to be the noblest of all the professions. It is termed as the professions of Prophets. Teachers play a deep-seated and dynamic role in teaching learning process. In educational research one of the most difficult problems is that recognizing the effectiveness of teacher i.e. discriminating between more effective and less effective teachers in schools. In teaching learning process teacher is the main architect in the renovation and progress of nation so the perfection of teacher is essential for the perfection of students.

Recent trends in education emphasize the importance of curriculum, syllabus, content, teaching methods, guidance, counseling, audio-visual aids, motivation, readiness, facilities etc but teacher's role still remains crucial in determining the instructional planning and strategies that takes place in classroom situation. It is not sufficient that the teachers have only medals, certificates and degrees, but it is too much essential that they should have some enviable and desirable level of mastery of instructional planning and strategies of subject matter. If we wish to improve and to meet the growing needs of future generation than it is indispensable to raise the quality of standard of teachers. In any society teaching is a challenge that requires long hours of hard work and preparation. It requires skill in planning and skill in the classroom instruction. There are certain identifiable skills that make one teacher more effective than another, in the light of this statement some say that effective teachers are born with the skill to teach other scoffs at this notion and declare that it is possible to develop and train someone to be an effective teacher.

National Educational Policy (1998-2010) Secondary education (ix-xii) is a vital and central sub-sector of the whole education system in the country. On the one hand secondary education provides middle level workers for the country and on the other hand secondary education provides suitable input for the higher level of education. In teaching learning process quality of higher education which is necessary for the development of nation and produce high quality professionals in different fields depends upon the quality of secondary education. So secondary education need to be organized in such a way that it should prepare the individual for the pursuit of higher education and also make them able to adjust with their practical and

daily lives meaningfully, successfully and productively. The secondary education is a stage where a student enters adolescence, this is the most crucial, essential and significant stage of life. (P.37-47)

Statement of the Problem

Through this study the researcher attempted to compare the performance of subject specialists regarding instructional planning and strategies. Focal point of the study was "gender based comparative study on the performance of subject specialists regarding instructional planning and strategies at higher secondary schools in southern districts of Khyber Pakhtunkhwa".

Objectives of the study

The objectives of the study were:

1. To compare the performance of promoted in-service and commission selected subject specialists regarding instructional planning and strategies at higher secondary school level in southern districts of Khyber Pakhtunkhwa.
2. To put forward recommendations for action and future research.

Hypothesis of the study

Following null hypothesis developed and tested.

H_0: There is no significant difference between the performances of promoted in-service and commission selected subject specialists regarding instructional planning and strategies.

LITERATURE REVIEW

Instructional Planning & Strategies

Moore (2003) key to effective teaching is planning. Teacher must plan well to teach well. Essentially, planning can be thought of as a sequential decision making process. You must decide sequentially on answers to the following:

1. What subject matter should be taught in the classroom?
2. What are the desired learner outcomes in the classroom?
3. What teaching material will be needed in the classroom?
4. What is the best way to introduce the subject in the classroom?
5. What is the best instructional policy for the proposed learning in the classroom?
6. How should the lesson be closed in the classroom?
7. How should the students be evaluated in the classroom? (P.9)

A thorough examination of the pre-instructional and planning process reveals that it is a major undertaking requiring a number of skills, specifically, you must be able to:

1. Make accurate observation.
2. Write objectives.
3. Select instructional material.
4. Plan appropriate cognitive sets (set induction).
5. Select appropriate teaching strategies.
6. Plan appropriate closures.
7. Determine and develop proper evaluation.

Whether you are a future teacher or an experience one, you need to develop and refine these pre-instructional skills. The results will be more effective planning and increased student learning. Once you have planned a lesson, you must implement it. Implementing a lesson so that maximum learning takes place is a difficult task that requires special skills essential to all teachers. (P.11).

Mohanty (2003) elaborate that in teaching learning process teachers are the main agents who translate abstract into concrete and dreams into realities in each and every society. Any type of

message, content or subject matter, with the help of suitable methods, tools and techniques this message may be converted to the individuals effectively and efficiently. All the educationists are agreed that it is a teacher who can communicate the curriculum in a right way to the students by using perfect instructional planning and strategies. Mutual interaction effect the entire personality of the students such as standard of work, emotional power, intellectual power, attitude and values. (P.333).

Dilworth (1991) explain that active instructors who are knowledgeable in the subject matter are better, able to establish objectives for themselves and for their pupils than those teachers who are less proficient in academic content. Thus, planning alone cannot overcome the knowledge deficit of a teacher in a particular subject area; it can give better results with the help of appropriate instructional planning and strategies. These objectives or goals must be further transformed into appropriate lesson plans, as well as into flexible alternative and instructional strategies that can be used to achieve the objectives and goals (P.29).

Farris (1996) explain that in teaching learning process classroom time must be productive learning time for students if and only if a teacher uses appropriately instructional planning and strategies. Teacher can get the most out of the time you have with students by planning lessons and activities that fit within any time constraints as well as the available learning materials (P.218).

Airasian (1994) explain that educational planning requires a description of the teaching-learning strategies that will be used during the lesson. The heart of the teaching process is based on the strategies teachers use with their pupils. Lesson plan should prepare in such a way that it assess the success of the lesson (P.77).

Moore (2003) explains that effective teaching process requires that a specific message be encoded and transmitted by one person and received and accurately decoded by a second person. This is a continuous, two-way process in any interactive encounter. The listener is continuously decoding the information being sent and returning a message that is often nonverbal. For effective teaching the teacher should use different teaching strategies, teaching methods, and techniques which in classroom teaching situation. Use of effective methods, strategies, techniques and use of audio-visual aids are the indicators of teacher's performance in classroom situation. If a teacher plans his lesson before teaching it enables a teacher to teach effectively (P.173).

Mohanty (2003) explain that in the perspective of many teachers the teaching is not a complex process only if they have competencies, knowledge, skills and the way to use instructional planning and strategies. The teachers should mastery in methodology, pedagogy, and different skills of teaching; understand classroom management and adolescent psychology in teaching learning process. In teaching learning process it is felt necessary to equip the teachers with various teaching methods and models. The teachers should encourage trying out the innovated methods found useful and favorable for the better performances of students. Proper guidance and supervision should be provided to the teachers because methods may be varying from subject to subject and topic to topic. Suitable knowledge and practice of fundamental principles of teaching

methods help the teachers to improve their performance in classrooms situation (P.335).

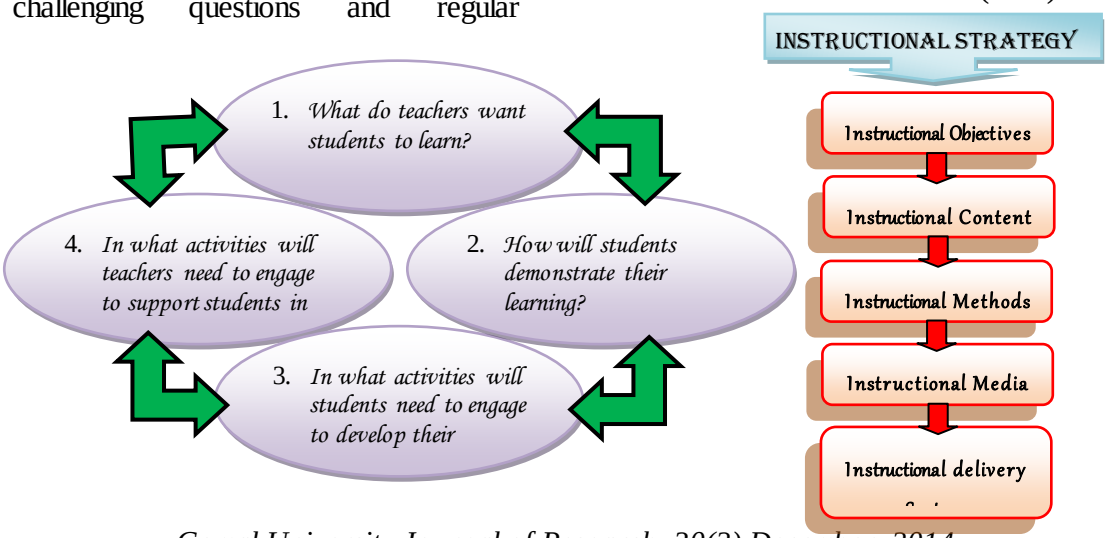
Lowman (1987) explain that excellent teaching motivates and stimulates student's imaginations with exciting ideas and rationale discourse. In the perspective of excellent teaching student's satisfaction, enjoyment and motivation are important criteria for successful teaching (P.139).

Mohanty (2003) explain that instructional activities use of right method and suitable strategies according to the topic is important for improving the quality of education. By the use of dynamic methods of teaching such as project and problem-solving methods need to be adopted by the successful teachers for improving the quality of education. Use of interactive and innovative methods like seminar, brain storming and workshop should be tried out in order to improve the teaching learning process. Interactive methods of teaching enhanced learning. Effective teacher use introduction of lesson, lesson planning, testing the previous knowledge of the students, question-answer techniques, proper use of audio-visual aids, caring the learners' listening, reading and writing skills of the students, set induction, chalk board writing, explanation of difficult concepts, use of simple language, challenging questions and regular evaluation of the students' work etc (P.338).

Brophy and Good (1979) elaborate that students learn basic skills faster and score higher on standardized tests when they receive instruction directly from the teacher in an organized manner. So effective teaching and desirable learning depend upon the way and methodology of teaching and it is considered as an influence and indicator of the teaching effectiveness of a teacher.

Ellington et al (2005) elaborate that within the context of the various teaching methods that can be employed as vehicles for mass instruction, it is possible to make use of a wide range of audiovisual media. Thus it is important that audiovisual media should be carefully chosen for use in particular teaching or training situations because of their suitability and not merely because they 'happen to be available' (Pp.71-77).

Ellington et al (2005) elaborate that an important advantage of teacher or institution-centered strategies is that they enable institutions to make relatively efficient use of their accommodation and equipment resources and effective use of staff time. A set time-table allows a teacher to tackle a course or syllabus in such a way that the teaching programme fits into the timetable available. (P.30)



METHODOLOGY OF THE STUDY

Population

Entire Students of 1st year and 2nd year, all commission selected and in-service promoted subject specialists working in different Government sector higher secondary schools, along with all the Principals of respective schools in southern districts of Khyber Pakhtunkhwa comprised the population of the study.

Government of Khyber Pakhtunkhwa (2011) annual statistical report of Government schools, number of Government higher secondary schools by Districts in Khyber Pakhtunkhwa (p.52), Enrolment of students in Govt. Schools (p.89-90), and teaching staff in Govt. Schools (p.92-132)

The Description of Population:

Southern Districts	# of Schools	Principals	Teachers	Pupils
Bannu	10	10	74	276
D.I.Khan	11	11	89	404
Karak	08	08	76	237
Kohat	10	10	86	635
Lakki	09	09	82	657
Tank	01	01	05	071
Total	49	49	412	2280

Sample

Total twelve higher secondary schools were selected randomly from three sampled Districts. From each higher secondary school two subject specialists (one promoted and one commission selected) as a sample teacher and all the Principals selected through random sampling technique. Four colleagues' teachers working with each promoted and selected subject specialists since last two years, and ten students of each sample teacher also selected by random sampling technique.

The description of the sample is given below:

Districts	Principals	Sample Teacher	Colleague teachers	Pupils	Total
D.I.Khan	4	8	16	40	68
Lakki Marwat	4	8	16	40	68
Bannu	4	8	16	40	68
Total	12	24	48	120	204

Sampling Techniques

Multistage, Stratified and Simple random sampling techniques were used to collect the data. So sampling was done in case of selection of students, colleague teachers and sample teachers i.e. promoted and commission selected subject specialists and Principals of higher secondary schools.

Gay (2003) in his book "Educational research" explains sample size as below:

Population Size	Sample Size
< 100	entire population
~ 500	50% (250)

~1,500	20% (300)
> 5,000	400

Curry, Dr. John (2007) explain Sample Size Rule of Thumb as below

Size of	Sampling

Population	Percentage
10-100	100%
101-1,000	10%
1,001-5,000	5%
5,001-10,000	3%
10,000+	1%

RESEARCH INSTRUMENT

A five points Likert type rating scale developed, pilot tested and validated, instrument was used to collect the data regarding performance of subject specialists regarding instructional planning and strategies. This scale was filled by twenty students, ten subject specialists (SS) and four head teachers (Principals) of four different higher secondary schools for tryout purposes (Pilot testing). The main objective of pilot study was pre-testing of instrument (Rating scale) on a small sample. The rating scale was improved in the light of feedback, difficulties and ambiguities pointed out by the students, subject specialists, Head teachers and in consultation with the experts of relevant field.Items of the rating scale were identified with the help of literature, administration personnel of the education department and experts of different department. These indicators of teacher's performance were given to thirty eight expert educationists for their opinion and comments to check the content validity. The instrument improved in the light of their comment and observations. Initial psychometric analysis, using Cronbach alpha coefficient yielded an internal consistency coefficient of .88 for the research instrument. For more clarification researcher also calculated the split half reliability co-efficient i.e. 0.85.

Cronbach's alpha a commonly accepted rule for describing internal consistency

Cronbach's alpha	**Internal consistency**
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Scoring Procedure

The responses of each sample were counted separately. The data were converted into quantitative form. Each response was given quantitative value accordingly i.e.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
5	**4**	**3**	**2**	**1**

Data Analysis

In this research work the scores of all samples were calculated, summed and mean scores were calculated, "t" test and co-efficient of variation was used as statistical technique.

Upton & Cook (2004), "The ratio of the standard deviation to the mean is called co-efficient of variation" a term introduced by Karl Pearson in 1896. (P.71)

Chaudhary (1996) "The statistic co-efficient of variation is also used to compare the performance of two candidates" (p.106).

Alam (2000) "Consistency or stability is used as terms opposite to variation (or dispersion). A data is considered more stable if it has less variation and likewise it is less stable if variation is more". (p.151)

Applied test formulae are as under:

$$t = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{S_p\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \qquad \text{with } v = (n_1 + n_2 - 2)\,\text{d.f.} \qquad \text{Where} = \bar{x}_1 = \frac{\sum x_1}{n_1} \,\&\, \bar{x}_2 = \frac{\sum x_2}{n_2}$$

$$\text{Pooled estimate } S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \qquad \textit{Where} \qquad S_1^2 = \frac{\sum x_1^2}{n_1} - \left(\frac{\sum x_1}{n_1}\right)^2 \,\&\, S_2^2 = \frac{\sum x_2^2}{n_2} - \left(\frac{\sum x_2}{n_2}\right)^2$$

$$Co - efficient\ of\ Variation\ for\ Promoted\ SS = C.V_A = \frac{S_1}{\bar{x}_1} \times 100$$

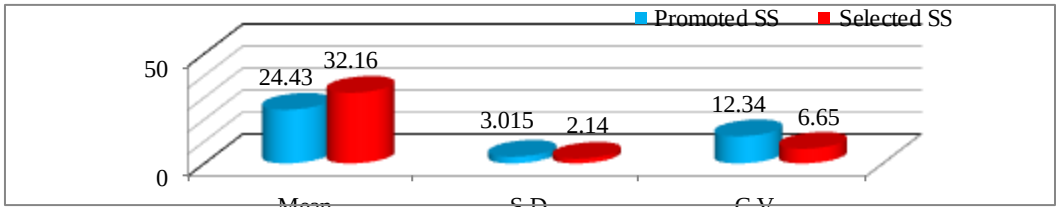
$$Co - efficient\ of\ Variation\ for\ Selected\ SS = C.V_B = \frac{S_2}{\bar{x}_2} \times 100$$

ANALYSIS & INTERPRETATION OF DATA

Comparison of performance of promoted & direct selected male and female subject specialists regarding instructional planning and strategies (the data collected through rating scale for students)

Group	N	Mean	S.D	C.V	d.f	α	t-tabulated	t-calculated
Promoted SS	21	24.43	3.015	12.34	40	0.05	2.021	9.58
Selected SS	21	32.16	2.14	6.65				

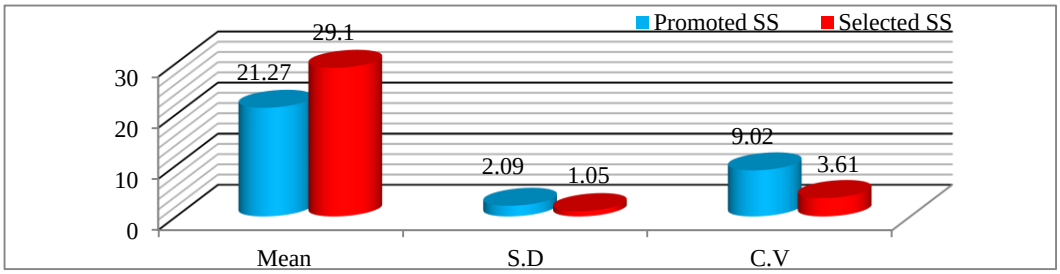
The above table indicates that the t-Calculated value 9.58 is greater than the t- tabulated 2.021 so we reject null hypothesisand accepts alternative hypothesisand concludes that there is significant difference between the performances of promoted and selected subject specialists regarding instructional planning and strategies. Also the above table show that Co-efficient of Variation of selected subject specialists is less than the promoted subject specialists so there is consistency in the performance of selected subject specialists regarding instructional planning and strategies.



Comparison of performance of promoted and direct selected male and female subject specialists regarding instructional planning and strategies (the data collected through rating scale of colleagues' teachers)

Group	N	Mean	S.D	C.V	d.f	α	t- tabulated	t-calculated
Promoted SS	21	21.27	2.09	9.02	40	0.05	2.021	15.34
Selected SS	21	29.10	1.05	3.61				

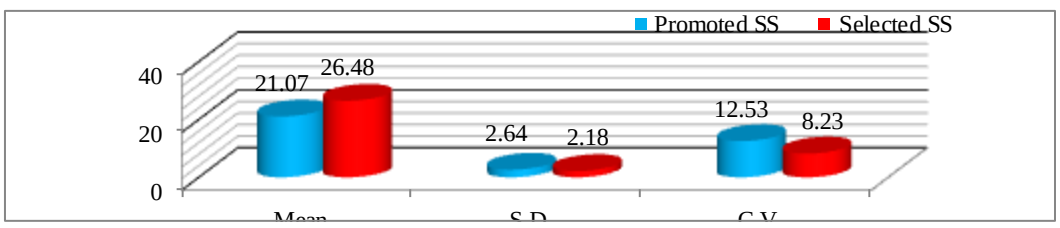
The above table indicates that the t-Calculated value 15.34 is greater than the t- tabulated 2.021 so we reject null hypothesisand accepts alternative hypothesisand concludes that there is significant difference between the performances of promoted and selected subject specialists regarding instructional planning and strategies. Also the above table show that Co-efficient of Variation of selected subject specialists is less than the promoted subject specialists so there is consistency in the performance of selected subject specialists regarding instructional planning and strategies.



Comparison of performance of promoted and direct selected male and female subject specialists regarding instructional planning and strategies(the data collected through rating scale of head teachers)

Group	N	Mean	S.D	C.V	d.f	α	t- tabulated	t-calculated
Promoted SS	21	21.07	2.64	12.53	40	0.05	2.021	7.24
Selected SS	21	26.48	2.18	8.23				

The above table indicates that the t-Calculated value 7.24 is greater than the t- tabulated 2.021 so we reject null hypothesisand accept alternative hypothesisand conclude that there is significant difference between the performances of promoted and selected subject specialists regarding instructional planning and strategies. Also the above table show that Co-efficient of Variation of selected subject specialists is less than the promoted subject specialists so there is consistency in the performance of selected subject specialists regarding instructional planning and strategies.



DISCUSSION

Regarding analysis, the null hypothesis "there is no significant difference

between the performances of promoted and selected subject specialists regarding instructional planning and strategies" was tested. The given hypothesis was rejected because t-values of the view point of student's, colleague teacher's and head teachers were calculated as 9.58, 15.34 and 7.24 respectively which were more than the standard t-value i.e. 2.021 at 0.05 level of significance. It was concluded that the selected SS performed better regarding "instructional planning and strategies". The better performance of the selected SS may be due to the recent exposure to the pedagogy and better interaction during the teacher training.In-service promoted and commission selected subject specialists, both are appointed in the higher secondary schools of Pakistan, both provide equal chances of serving as a teacher in the higher secondary schools. Prime duty of these teachers is to educate the younger generation who can very rightly be termed as the learners of a very crucial stage.

The teachers are not only supposed to make them good individuals but to make them good citizens of the country. In this way, higher secondary education demands for committed and dedicated teachers. Attainment of the above objectives and fulfillment of such national needs largely depend upon the capacities and capabilities of teachers. This duty is attributed upon both, the In-service promoted and commission selected subject specialists.

Shah, (2007) in his M.Phil research study entitled "A Comparison between the Performance of in-service promoted and directly selected (By the public Service Commission) Secondary School Teachers in Rawalpindi District" concluded that the commission selected SSTs perform comparatively much better regarding classroom teaching. (p.67)

FINDINGS

Findings from the rating scale of students

The t-calculated value of the students was calculated as 9.58 found more than that of the tabulated t-value that was observed as 2.021 at the 0.05 significance level. The mean score of promoted subject specialists group on rating scale for students was 24.43 and 32.16 selected subject specialists group, which indicates that there was significant difference in the mean performance score of promoted and selected subject specialists, the difference being in favor of selected subject specialists. The co-efficient of variation of promoted and selected subject specialists is 12.34 and 6.65 respectively. Since C.V of selected subject specialists is less than the promoted subject specialists so there is consistency in the performance of selected subject specialists regarding instructional planning and strategies.

Findings from the rating scale of colleagues

The t-calculated value of the students was calculated as 15.34 found more than that of the tabulated t-value that was observed as 2.021 at the 0.05 significance level. The mean score of promoted subject specialists group on rating scale for colleagues was 21.27 and 29.10 of selected subject specialists group, which indicate that there was significant difference in the mean performance score of promoted and selected subject specialists the difference being in favor of selected subject specialists. The co-efficient of variation of promoted and selected subject specialists is 9.02 and 3.61 respectively. Since C.V of selected subject specialists is less than the promoted subject specialists so there is

consistency in the performance of selected subject specialists regarding instructional planning and strategies.

Findings from the rating scaleof Head teachers

The t-calculated value of the students was calculated as 7.24 found more than that of the tabulated t-value that was observed as 2.021 at the 0.05 significance level. The mean score of promoted subject specialists group on rating scale for head teachers was 21.07 and 26.48 of selected subject specialists group, which indicates that there was significant difference in the mean performance score of promoted and selected subject specialists the difference being in favor of selected subject specialists. The co-efficient of variation of promoted and selected subject specialists is 12.53 and 8.23 respectively. Since C.V of selected subject specialists is less than the promoted subject specialists so there is consistency in the performance of selected subject specialists regarding instructional planning and strategies.

CONCLUSIONS

On the bases of findings it is concluded that commission selected subject specialists performed better than the in-service promoted subject specialists regarding instructional planning and strategies.

RECOMMENDATIONS

On the basis of findings and conclusions following recommendations were made:

1. All the in-promoted and commission selected subject specialists may be provided in-service professional training on pedagogy and contents on periodical basis to enable them to perform effectively during their classroom teaching.
2. Monitoring system may be introduced in the higher secondary schools for all the teachers.

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