
Teachers' Perceptions of Students' Interest in Inter-Science Subjects in the Working Folks Grammar School System in Khyber Pakhtunkhwa

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DOI: <https://doi.org/10.70670/sra.v4i1.1918>

Abstract

This study examines teachers' perceptions of students' interest in Inter-Science subjects in the Working Folks Grammar School System in Khyber Pakhtunkhwa. Although these schools provide free education and multiple academic streams, students tend to prefer Pre-Medical and Pre-Engineering over Inter-Science. Using a descriptive survey design, data were collected from 252 teachers and principals through a questionnaire. The findings indicate that students show moderate interest and classroom engagement in Inter-Science but do not consider it as important as other streams, largely due to societal and career influences. The study concludes that improving awareness, teaching strategies, and career guidance can enhance students' interest in Inter-Science subjects.

Introduction

Education is a fundamental process that contributes to the intellectual, social, and physical development of individuals (Huang et al., 2025). It plays a vital role in shaping societies and fostering national development. In Pakistan, the education system includes various streams at the intermediate level, such as Pre-Medical, Pre-Engineering, Arts, Commerce, and Inter-Science. The Working Folks Grammar School System is a distinctive educational initiative established by the Government of Pakistan under the Workers Welfare Fund. Its primary aim is to provide quality education to the children of industrial workers, along with free facilities such as books, uniforms, and transportation.

At the intermediate level, students choose specific academic streams based on their interests and career aspirations (Terrin & Triventi, 2023). However, it has been observed that most students prefer Pre-Medical and Pre-Engineering streams, while Inter-Science receives comparatively less attention. Interest plays a crucial role in the learning process (Harefa, 2023). It is defined as a psychological state characterized by attention, engagement, and motivation toward a particular subject. Students' interest significantly influences their academic performance, subject selection, and future career paths (Harefa et al., 2023).

Interest is a sense of attachment or attraction towards a particular lesson or subject. While many people have interest in watching movies, other individuals have greater interest in reading novels. Interest is one of those conditions of learning, which must exist in both the teacher and student for teaching to be successful (Wahdi et al., 2024). One can define interest as the co-occurring of variance experiences exclusively different from

each other and the individuals involved in the process feel the objects helpful for further exploration and enjoyable (Draijer et al., 2024). Interest is the condition of individuals which needs great efforts, full attention and affects individuals face in a particular situation. Such interest refers to situational interest and the condition of individual is said to be his/her psychological state In the situation where there is combination of various type of individuals“ abilities and feelings for example their cognitive qualities, their excitement in doing the work, their focused attention during the work and the value they perceive regarding their work is their situational interest (Hidi & Renninger, 2026). This can be explained with the example suppose a student is likely to enjoy the pleasurable session of lecture about the importance of sports in human life. For this 2 the individuals will try to be more engaged in this class, they will be more captivated by their power and will value the relevance of the topic to their lives. In the situational interest individuals feels no bore ness, tiredness and they feel their attention and learning is taking place without efforts. Such type of interest of individuals refers to their engagement in the work they are performing, their determination towards their tasks and their self-regularization.

Despite its importance, limited research has been conducted on students' interest in Inter-Science subjects, particularly in the context of Working Folks Grammar Schools. This study aims to fill this gap by examining teachers' perceptions, as they are closely involved in observing students' behaviors, attitudes, and engagement in the classroom.

Objectives of the Study

1. To investigate teachers' and principals' perceptions of students' interest in Inter-Science subjects.

Research Question

- Q. What are the perceptions of teachers and principals regarding students' interest in Inter-Science subjects in the Working Folks Grammar School System?

Methodology

The research employed a descriptive research design using a survey technique to collect data. A self-developed questionnaire based on a five-point Likert scale (Strongly Agree to Strongly Disagree) was used as the research instrument, comprising 30 items divided into three sub-themes: students' feelings, values, and involvement related to Inter-Science subjects. The target population consisted of all male and female Principals and Subject Specialists in Working Folks Grammar Schools System in Khyber Pakhtunkhwa (24 male and 24 female schools). A universal sampling technique was applied, resulting in a sample of 252 respondents (48 principals and 204 subject specialists). The questionnaire was validated by five experts and its reliability was established using the split-half method, yielding a Cronbach's alpha of 0.79, which is acceptable. Data were collected personally by the researcher, with a return rate of 100% from principals and 99.55% from subject specialists. Data analysis was conducted using SPSS version 21, employing descriptive statistics (mean and percentage) and inferential statistics (independent sample t-test) to compare perceptions based on designation and gender.

Data Analysis for Objective 1 & Research Question

To investigate the perceptions of principals and teachers, the researcher analyzed responses to a 30-item questionnaire divided into three sub-themes: **Feelings, Values, and Involvement**. Data were collected from 48 principals and 204 subject specialists (total N=252) using a five-point Likert scale (Strongly Disagree to Strongly Agree). Descriptive statistics (percentages and means) were applied using SPSS version 21.

The analysis of respondents' perceptions yielded the following key findings:

A. Perceptions Related to Students' Feelings toward Inter-Science:

Item No.	Statement	% Agree / Strongly Agree	% Disagree / Strongly Disagree
1	Working with subject matter and problems of Inter-Science is among students' favorite activities	93.67%	1.18%
2	Students choose Inter-Science discipline because of its enjoyable and interesting nature	84.53%	14.28%
3	Students generally have fun when learning Inter-Science topics	93.66%	2.38%
4	Students are happy working on Inter-Science topics	72.22%	23.02%
5	Students enjoy acquiring new knowledge in Inter-Science	71.42%	25.00%
6	Students are interested in learning about Inter-Science	79.37%	15.87%
7	Students consider Inter-Science as an interesting field	79.36%	15.87%

According to the above tabulated data, 93.67% of respondents favored that working with Inter-Science problems is among students' favorite activities. Similarly 84.53% agreed that students choose Inter-Science because of its enjoyable and interesting nature. 93.66% agreed that students have fun when learning Inter-Science topics. Another set of 79.37% respondents have agreed that students are interested in learning about Inter-Science. However, 51.6% disagreed that Inter-Science students are in a good mood when involved in their classes. Based on the findings regarding students' feelings toward Inter-Science, it can be concluded that principals and teachers overwhelmingly perceive that students find the discipline enjoyable, interesting, and fun, with large majorities agreeing that working on Inter-Science problems is a favorite activity and that students choose this stream for its engaging nature.

B. Perceptions Related to Students' Values toward Inter-Science

Item No.	Statement	% Agree / Strongly Agree	% Disagree / Strongly Disagree
8	Students really see value in what they are learning in Inter-Science	88.49%	6.74%
9	Students prefer learning Inter-Science over leisure and amusement	88.10%	11.10%
10	Students are certain that studying Inter-Science has positive influence on their personalities	89.10%	5.95%
11	Students value the knowledge they have about Inter-Science	82.93%	9.13%
12	It is of great importance to students to become knowledgeable in Inter-Science	11.11%	87.70%
13	Compared to other subjects, learning Inter-Science is more important for students	1.18%	96.83%
14	Learning about Inter-Science has always been important to students	11.12%	82.92%

The above tabulated data depicted that 88.49% supported that students see value in what they learn in Inter-Science. Similarly 87.7% disagreed that "it is of great importance to students to become knowledgeable in Inter-Science". 96.83% respondents have disfavored that learning Inter-Science is more important than other

subjects. Similarly another set of 82.92% respondents have disfavored that learning Inter-Science has always been important to students.

Based on the above tabulated data, it is concluded that while a large majority of principals and teachers perceive that students see value in what they learn in Inter-Science, an even larger majority believe that students do not consider the discipline to be of great importance, more important than other subjects, or consistently important to them over time. This paradoxical finding suggests that students may recognize some utility or worth in Inter-Science content, yet they do not prioritize it above other academic disciplines nor attach enduring significance to it in their educational journey.

C. Perceptions Related to Students' Involvement in Inter-Science:

Item No.	Statement	% Agree / Strongly Agree	% Disagree / Strongly Disagree
15	Students try to attend Inter-Science seminars and conferences	94.84%	5.16%
16	Students talk outside class about what they learn in Inter-Science	78.18%	21.82%
17	In free time, students read Inter-Science related materials	80.96%	19.04%
18	Students are eager to gain knowledge beyond requirements	73.42%	26.58%
19	Students like the knowledge they learn in Inter-Science	75.4%	24.6%
20	Inter-Science makes students excited	57.53%	42.47%

The above tabulated data has revealed that 94.84% respondents have agreed that students try to attend Inter-Science seminars and conferences. Similarly 78.18% respondents have agreed that students talk outside class about what they learn in Inter-Science. Another set of 80.96% respondents have agreed that in free time, students read Inter-Science related materials. 73.42% respondents have agreed that students are eager to gain knowledge beyond requirements. Conversely, 75.4% disfavored that students like the knowledge they learn in Inter-Science, and 57.53% negated that Inter-Science makes students excited.

Based on the above tabulated data, it is concluded that principals and teachers perceive students as being highly involved in Inter-Science through active behaviors such as attending seminars, discussing topics outside class, reading related materials in free time, and seeking knowledge beyond requirements. However, despite this high level of behavioral engagement, a majority of respondents also perceived that students do not actually like the knowledge they learn nor find the discipline exciting, revealing a notable disconnect between students' observable involvement and their genuine affective attitude toward Inter-Science.

Discussion

The findings reveal a paradoxical pattern in principals' and teachers' perceptions of students' interest in Inter-Science. On one hand, an overwhelming majority of respondents perceived that students enjoy Inter-Science, have fun learning its topics, and actively engage in related activities such as attending seminars (94.84%), reading materials in free time (80.96%), and seeking knowledge beyond requirements (73.42%). These behavioral indicators suggest that Inter-Science effectively triggers and maintains situational interest, consistent with Hidi and Renninger's (2026) four-phase model.

On the other hand, a striking contradiction emerged: while students demonstrated high behavioral engagement, a majority of respondents perceived that students do not consider Inter-Science important compared to other subjects (96.83%), nor do they find it exciting (57.53%) or like the knowledge they learn

(75.4%). This disconnect between feeling-related interest (enjoyment) and value-related interest (personal importance) aligns with Lazarides et al., (2023) distinction between the two valences of interest. The findings suggest that Inter-Science students at Working Folks Grammar Schools System may find the discipline enjoyable but do not perceive it as practically valuable or career-enhancing, potentially due to societal preference for Pre-medical and Pre-engineering streams in Pakistan. Addressing this value deficit through utility-value interventions and career guidance may help transform situational interest into enduring individual interest.

Conclusion

Based on the findings of this study, it is concluded that principals and teachers perceive Inter-Science students as demonstrating high levels of behavioral engagement, including regular attendance at seminars, discussions outside class, voluntary reading of related materials, and eagerness to gain knowledge beyond curriculum requirements, indicating that Inter-Science effectively triggers situational interest. However, a striking paradox emerges as the same respondents perceive that students do not consider Inter-Science important compared to other subjects, do not genuinely like the knowledge they learn, and do not find the discipline exciting or practical for future careers. This disconnection between feeling-related interest and value-related interest suggests that while students may enjoy Inter-Science activities, they have not developed enduring individual interest in the discipline. The study further concludes that there are significant differences between the perceptions of principals and subject specialists regarding students' values and involvement in Inter-Science, but no significant gender-based differences exist except in the value dimension. Overall, Inter-Science at Working Folks Grammar Schools System successfully captures students' attention and participation but fails to establish perceived importance and practical relevance, which are essential for long-term academic persistence and career trajectory in the field.

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