JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A STUDY OF PARENTS' OPINIONS ABOUT PROJECT-BASED LEARNING IN RELATION TO STUDENTS' LEARNING MOTIVATION

Dr. Ramanpreet Kaur[1] and Kajol Rajpurohit[2]
[1] Associate Professor, Department of Education, Oriental University, Indore (M.P.), India
[2] M.Ed. Scholar, Department of Education, Oriental University, Indore (M.P.), India

ABSTRACT

Background
Project-based learning (PBL) gives children opportunities to use what they can learn in the classroom through practical tasks. When these tasks continue at home, parents observe their children's interest and the help they need. Parents' experiences can therefore offer useful insights into both the benefits of project work and the difficulties families face.

Objectives
To understand parents' views on the educational value of PBL, their observations of children's learning interest, the challenges associated with project work and their suggestions for improvement.

Method
A descriptive cross-sectional survey was conducted among 96 parents of students in Classes V–VIII at Narayana e-Techno School, Surat, using convenience sampling. The questionnaire comprised 34 closed-ended statements and one open-ended question. Closed-ended responses were summarized using frequencies and percentages.

Results
Among 96 parents, 95.8% agreed that PBL supported subject understanding, 92.7% recognised benefits for practical skills, and 63.5% reported greater learning interest after projects. Overall satisfaction was high (99.0%), despite concerns about costs (97.9%), simultaneous assignments (96.9%) and stress (91.7%). Most parents supported topic choice (91.7%) and opposed replacing PBL with traditional teaching (58.3%).

Conclusions
Parents generally valued PBL but reported concerns about costs, workload and stress. Better project planning, affordable materials and age-appropriate activities may address these concerns. The findings reflect parental perceptions rather than measured improvements in student outcomes.

Keywords
Project-based learning; traditional teaching; student interest; parents views

I. Introduction

School projects give children opportunities to explore classroom topics through practical tasks. These tasks may involve investigating a question, collecting information, developing a model or presenting ideas. The learning process involves more than completing an assignment; it requires students to think about what they are doing and explain what they have understood. Kokotsaki et al. (2016) described PBL as an approach characterised by student autonomy, investigation, collaboration and reflection. The usefulness of project work depends partly on how it is planned and supported. A completed model or presentation does not, by itself, show how much a child has learned. Attention also needs to be given to the child's participation, decisions and understanding throughout the task. Blumenfeld et al. (1991) highlighted the potential of projects to support learning while explaining how task design and guidance can help sustain students' motivation and

thinking. Similarly, Kokotsaki et al. (2016) identified teacher support and a balance between inquiry and direct instruction as important considerations in implementing PBL. Children's interest is another aspect of the project experience. Some children may willingly explore a topic, discuss their ideas and continue working when difficulties arise. Others may need more assistance to understand the task or organise their work. Examining these experiences requires attention to both the opportunities offered by projects and the support children receive. Meaningful choices and suitable guidance are relevant considerations when planning activities intended to encourage participation (Blumenfeld et al., 1991; Kokotsaki et al., 2016).

When project work continues at home, parents observe parts of the learning process that may be less visible in the classroom. They may notice whether their child begins willingly, shows curiosity, explains ideas or frequently asks for help. Their observations can provide useful information about children's involvement and the demands associated with completing projects. Parents may also need to arrange materials, clarify instructions or help children manage deadlines alongside routine homework. Understanding these experiences is necessary because appreciation of PBL can coexist with concerns about its cost, workload or suitability. Examining parents' views can help identify were clearer expectations, better coordination or additional support may be useful. The present study was therefore undertaken to describe parents' experiences of PBL at Narayana e-Techno School, Surat. Its practical purpose was to identify perceived benefits and difficulties that could inform consideration of project planning, family support and communication between school and home

II. Review of Related Literature

Research suggests that project-based learning (PBL) can support understanding, collaboration and learning interest when tasks are appropriately designed and guided (Blumenfeld et al., 1991; Kaldi et al., 2011; Kokotsaki et al., 2016). Chen and Yang (2019) reported positive effects on academic achievement, while Wijnia et al. (2024) found context-dependent motivational benefits across problem-based, project-based and case-based learning. Filippatou and Kaldi (2010) also reported learning and motivational gains among pupils with learning difficulties. Studies of parental perspectives identify both benefits and challenges. Souto-Manning and Lee (2005) reported perceived improvements in children's motivation and family involvement. However, Kılıç and Özel (2022) found that excessive parental assistance could reduce students' responsibility. Kılıç and Özmen Ulu (2021) examined student, parent and teacher perspectives, while Shome and Natarajan (2013) highlighted workload and organisational constraints in Indian schools. These findings inform the present survey of parents' perceptions of children's learning interest, support needs and the practical demands of project work.

III. Research methodology

3.1 Research design and setting

The study adopted a descriptive cross-sectional survey design to assess parents' opinions about project-based learning and their perceptions of students' learning interest. It was conducted at Narayana e-Techno School, Surat.

3.2 Participants and sampling

Parents of students studying in Classes V–VIII were recruited using convenience sampling. Of the 120 parents approached, 96 voluntarily participated, yielding a participation rate of 80%. Eligibility criteria included parents should know how to read, write and understand English, as the questionnaire was administered in English language**.**

3.3 Data-collection instrument.

Data were collected using a researcher-developed parent questionnaire comprising 34 closed-ended statements and one open-ended question. Each closed-ended statement offered three response options: Agree, Neutral and Disagree. Questions 1–12 addressed perceived learning benefits, Questions 13–27 covered challenges and support, and Questions 28–34 examined overall opinions and preferred improvements. Question 35 invited parents to share their experiences and suggest improvements to project-based learning.

Questions 6 and 19 specifically addressed parents' perceptions of their children's learning interest. Responses were analyzed individually rather than combined into a standardized measure of learning motivation**.**

3.4 Data-collection procedure

Questionnaires were administered through paper forms. All the participants were informed about the purpose of the study and instructions for completing the questionnaire before commencing the data collection

3.5 Statistical analysis

Responses from 96 parents were summarized using frequencies and percentages. Percentages were calculated using the number of valid responses to each statement as the denominator. Findings were presented in tables with brief interpretations based on each statement's wording.

III. RESULTS

3.1 Perceived Educational Benefits and Learning Interest

Among the learning-benefit statements, agreement was highest for subject understanding, reported by 92 parents (95.8%), followed by real-world skills, reported by 89 (92.7%), and teamwork, reported by 85 (88.5%). Seventy-four parents (77.1%) agreed that PBL supported problem-solving, while 71 (74.0%) perceived better knowledge retention than through traditional teaching. Greater learning interest after projects was reported by 61 parents (63.5%). Responses concerning creativity and time management were more divided. Although agreement was the largest response category for both statements, it remained below 50%. Exactly half of the respondents agreed that PBL promoted hands-on learning

Table 1. Perceived Learning Benefits

Item, abridged	Agree, n (%)	Neutral, n (%)	Disagree, n (%)
Q1. Development of problem-solving ability	74 (77.1%)	16 (16.7%)	6 (6.3%)
Q2. Development of real-world skills	89 (92.7%)	5 (5.2%)	2 (2.1%)
Q3. Better subject understanding	92 (95.8%)	4 (4.2%)	0 (0.0%)
Q4. Promotion of hands-on learning	48 (50.0%)	31 (32.3%)	17 (17.7%)
Q5. Working with classmates	85 (88.5%)	8 (8.3%)	3 (3.1%)
Q6. Greater interest in learning after projects	61 (63.5%)	21 (21.9%)	14 (14.6%)
Q7. Better time management and responsibility	45 (46.9%)	22 (22.9%)	29 (30.2%)
Q8. Expressing ideas and thoughts	53 (55.2%)	31 (32.3%)	12 (12.5%)
Q9. Opportunities to explore creativity	43 (44.8%)	30 (31.3%)	23 (24.0%)
Q10. Better knowledge retention than traditional teaching	71 (74.0%)	17 (17.7%)	8 (8.3%)
Q11. Exploring topics in depth	67 (69.8%)	26 (27.1%)	3 (3.1%)
Q12. Improved written and verbal communication	55 (57.3%)	15 (15.6%)	26 (27.1%)

3.2 Practical Challenges and Support

Project costs and simultaneous assignments were the most frequently reported practical concerns. Ninety-four parents (97.9%) agreed that projects were costly, while 93 (96.9%) reported difficulty managing several projects assigned at the same time. Eighty-eight parents (91.7%) agreed that projects sometimes added unnecessary pressure or stress, and 86 (89.6%) reported difficulty balancing projects with other academic work.

Seventy-five parents (78.1%) considered projects too challenging for students to manage independently. However, responses to the separate statement about completing projects without parental help were divided: 46 parents (47.9%) agreed, 22 (22.9%) were neutral and 28 (29.2%) disagreed. Views on the adequacy of materials, technology and guidance were also closely divided. Most parents disagreed that group work created conflict or an uneven workload (55.2%) and that their children lost interest during long projects (59.4%).

Table 2. Practical Challenges and Support

Items	Agree, n (%)	Neutral, n (%)	Disagree, n (%)
Q13. Insufficient attention to core academic skills	80 (83.3%)	11 (11.5%)	5 (5.2%)
Q14. Projects too challenging to manage alone	75 (78.1%)	7 (7.3%)	14 (14.6%)
Q15. Sufficient time to complete projects	49 (51.0%)	10 (10.4%)	37 (38.5%)
Q16. Difficulty balancing projects with academic work	86 (89.6%)	7 (7.3%)	3 (3.1%)

Q17. Group conflict or uneven workload	38 (39.6%)	5 (5.2%)	53 (55.2%)
Q18. Difficulty understanding how to support the child	34 (35.4%)	23 (24.0%)	39 (40.6%)
Q19. Loss of interest during long projects	15 (15.6%)	24 (25.0%)	57 (59.4%)
Q20. Adequate materials, technology and guidance	31 (32.3%)	33 (34.4%)	32 (33.3%)
Q21. PBL might always prepare children for examinations or standardized tests.	16 (16.7%)	4 (4.2%)	76 (79.2%)
Q22. Project completion without parental help	46 (47.9%)	22 (22.9%)	28 (29.2%)
Q23. Projects too complicated for the child's age	42 (43.8%)	9 (9.4%)	45 (46.9%)
Q24. Difficulty with the regular curriculum because of projects	50 (52.1%)	37 (38.5%)	9 (9.4%)
Q25. Unnecessary pressure or stress	88 (91.7%)	4 (4.2%)	4 (4.2%)
Q26. Difficulty managing simultaneous projects	93 (96.9%)	2 (2.1%)	1 (1.0%)
Q27. Projects are costly	94 (97.9%)	2 (2.1%)	0 (0.0%)

3.3 Overall Views and Preferred Improvements

Ninety-five parents (99.0%) expressed satisfaction with PBL. Ninety-four (97.9%) supported scheduling projects to avoid examinations, and the same number favoured more creative or enjoyable activities. Eighty-seven parents (90.6%) supported projects suited to children's age and curriculum, while 88 (91.7%) supported allowing children to choose topics of personal interest.

Fifty-six parents (58.3%) disagreed that traditional teaching should replace PBL, while 34 (35.4%) remained neutral. Nevertheless, only 25 parents (26.0%) agreed that PBL prepared their children for future challenges, compared with 55 (57.3%) who disagreed.

Table 3. overall views and preferred improvements

Items	Agree, n (%)	Neutral, n (%)	Disagree, n (%)
Q28. Schedule projects to avoid examinations	94 (97.9%)	2 (2.1%)	0 (0.0%)
Q29. Match projects to age and curriculum	87 (90.6%)	8 (8.3%)	1 (1.0%)
Q30. Satisfaction with PBL	95 (99.0%)	1 (1.0%)	0 (0.0%)
Q31. Include more creative or enjoyable activities	94 (97.9%)	2 (2.1%)	0 (0.0%)
Q32. Preparation for future challenges	25 (26.0%)	16 (16.7%)	55 (57.3%)
Q33. Allow children to choose topics of interest	88 (91.7%)	7 (7.3%)	1 (1.0%)
Q34. Replace PBL with traditional teaching	6 (6.3%)	34 (35.4%)	56 (58.3%)

3.4 Open-Ended Suggestions

The fieldwork summary recorded suggestions to connect projects with classroom subjects and real-life problems, allow reasonable completion times, and use project work alongside conventional teaching. As individual written responses and theme frequencies were not supplied, these suggestions were described without counts or direct quotations.

IV. Discussion

Parents viewed PBL positively in relation to subject understanding, practical skills and teamwork. These perceptions are broadly consistent with research examining its educational potential. Chen and Yang (2019) reported a positive overall effect of PBL on academic achievement compared with traditional instruction. However, their meta-analysis examined achievement outcomes, whereas the present survey measured parental opinions. High agreement in this study therefore cannot be interpreted as evidence of equivalent achievement gains.

Krajcik et al. (2023) provide further evidence from a cluster-randomised trial of project-based elementary science teaching. Students receiving the intervention achieved higher science test scores and reported greater collaboration and self-reflection. Their intervention included curriculum materials and teacher professional learning, illustrating that evidence for PBL often concerns a supported instructional programme rather than project assignments alone. Differences in participants, setting and measurement limit direct comparison with the present parent survey.

Interest and independent completion showed different patterns in this study. While 63.5% of parents reported greater interest after projects, 47.9% agreed that their children could complete projects without parental help. Interest in an activity does not necessarily imply readiness to complete every aspect independently. Blumenfeld et al. (1991) discussed the importance of project design and instructional support in sustaining motivation and learning. This provides a useful perspective on the present findings, although the survey did not establish why children needed assistance. The separate response totals also cannot show whether the same children were both interested and independent.

Overall satisfaction was high despite widespread concerns about costs, workload and stress. Parents may value what projects offer while finding their practical demands difficult to manage. The findings suggest that schools should review the coordination of assignments, material requirements and expectations about parental involvement. These recommendations arise from reported concerns; their effectiveness was not tested in this study. Nor can the separate responses establish that costs or simultaneous assignments caused the reported stress.

The concern about insufficient attention to core academic skills also merits consideration. Kokotsaki et al. (2016) identified teacher guidance, effective group processes, aligned assessment and a balance between direct instruction and inquiry as factors supporting PBL implementation. In the present setting, reviewing how projects connect with classroom teaching and assessment may help address parents' concerns. However, the survey does not establish whether the difficulties arose from project design, scheduling, communication or other circumstances.

The contrast between current creativity ratings and preferred improvements was notable. Fewer than half of the parents agreed that PBL encouraged creativity, while almost all wanted more creative or enjoyable activities. Most also supported topic choice. Patall et al. (2008) found that providing choice could support intrinsic motivation and related outcomes, although effects varied across conditions. Their findings offer a rationale for considering limited, meaningful choices within projects, such as selecting a topic example or presentation format while maintaining common curriculum objectives. They do not demonstrate that these changes would necessarily improve outcomes in this sample.

The findings should be interpreted within the limits of a convenience sample from one school. Responses represent parental perceptions and may be influenced by expectations, recall and individual experiences. Some statements combine several concepts, particularly the item covering materials, technology and guidance, making it difficult to identify which component shaped the response. Participant-level data were not supplied for the present analysis, preventing examination of relationships between individual responses. No causal effect of PBL or statistical relationship between parental opinions and student motivation can therefore be concluded.

V. Conclusion

Parents generally viewed PBL favourably, particularly for subject understanding, practical skills and teamwork. High satisfaction was accompanied by concerns about project costs, simultaneous assignments, academic workload and stress. Views on creativity, time management, resources and independent completion were more mixed.

The findings support reviewing project planning, affordability, curriculum alignment and guidance for families. Offering age-appropriate activities and meaningful choices may also address parents' stated preferences. These conclusions describe the surveyed parents' experiences and should not be interpreted as proof that PBL improved student outcomes.

VI. Limitations and Future Recommendations

- **Limitations**

The use of convenience sampling at a single school limits the generalisability of the findings. Responses reflected parents' perceptions rather than direct assessments of students' learning or motivation. The cross-sectional design also prevented assessment of changes over time or establishment of causal relationships.

- **Future Recommendations**

Future studies should include multiple schools and a larger sample, with the sample size justified by the research objectives. Validated questionnaires, objective measures of student outcomes, and feedback from students and teachers would strengthen the evidence. Longitudinal or controlled studies could assess whether improved project scheduling, affordability and guidance enhance students' learning experiences and outcomes.

VII. Declarations

Funding: This study received no external funding.

Conflict of interest: The authors declare no conflicts of interest.

REFERENCES

Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist, 26*(3–4), 369–398. https://doi.org/10.1080/00461520.1991.9653139

Chen, C.-H., & Yang, Y.-C. (2019). Revisiting the effects of project-based learning on students' academic achievement: A meta-analysis investigating moderators. *Educational Research Review, 26,* 71–81. https://doi.org/10.1016/j.edurev.2018.11.001

Filippatou, D., & Kaldi, S. (2010). The effectiveness of project-based learning on pupils with learning difficulties regarding academic performance, group work and motivation. *International Journal of Special Education, 25*(1), 17–26. https://files.eric.ed.gov/fulltext/EJ890562.pdf

Kaldi, S., Filippatou, D., & Govaris, C. (2011). Project-based learning in primary schools: Effects on pupils' learning and attitudes. *Education 3–13, 39*(1), 35–47. https://doi.org/10.1080/03004270903179538

Kılıç, İ., & Özel, M. (2022). A qualitative examination of parents' views on the applicability of the project-based learning approach in science courses. *African Educational Research Journal, 10*(2), 190–199. https://doi.org/10.30918/AERJ.102.22.031

Kılıç, İ., & Özmen Ulu, M. (2021). Examination of teacher, student and parents' views in the implementation of project based learning approach in life science lesson. *Trakya University Journal of Social Science, 23*(1), 449–470. https://doi.org/10.26468/trakyasobed.810648

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools, 19*(3), 267–277. https://doi.org/10.1177/1365480216659733

Krajcik, J., Schneider, B., Miller, E. A., Chen, I.-C., Bradford, L., Baker, Q., Bartz, K., Miller, C., Li, T., Codere, S., & Peek-Brown, D. (2023). Assessing the effect of project-based learning on science learning in elementary schools. *American Educational Research Journal, 60*(1), 70–102. https://doi.org/10.3102/00028312221129247

Patall, E. A., Cooper, H., & Robinson, J. C. (2008). The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings. *Psychological Bulletin, 134*(2), 270–300. https://doi.org/10.1037/0033-2909.134.2.270

Shome, S., & Natarajan, C. (2013). Ideas of and attitudes towards projects and changing practices: Voices of four teachers. *Australian Journal of Teacher Education, 38*(10), Article 5. https://doi.org/10.14221/ajte.2013v38n10.5

Souto-Manning, M., & Lee, K. (2005). "In the beginning I thought it was all play": Parents' perceptions of the project approach in a second grade classroom. *School Community Journal, 15*(2), 7–20. https://files.eric.ed.gov/fulltext/EJ794807.pdf

Wijnia, L., Noordzij, G., Arends, L. R., Rikers, R. M. J. P., & Loyens, S. M. M. (2024). The effects of problem-based, project-based, and case-based learning on students' motivation: A meta-analysis. *Educational Psychology Review, 36,* Article 29. https://doi.org/10.1007/s10648-024-09864-3