Case Study: Transforming School Practice through Action Research

Our school began conducting research in 2020 as part of the SHARE project under the academic guidance of professors from Cambridge. **The project focused on four main directions:**

1. Action Research Methodology
2. Teaching and Learning
3. Creating Enabling Conditions for Advancing the Project
4. Leadership and Change

As a key step, we revised the school's mission and vision. Our mission is "Developing Leadership," and our vision is expressed as: "We Support. We Inspire. We Empower."

The research began with small steps: observing a single student. This stage became a kind of school of methodology—we learned how to formulate research questions, collect data, conduct interviews with focus groups and individuals. Among our early findings was the importance of group work, interdisciplinary links, and lesson planning focused on students' needs. However, at the time, our project lacked a set timeframe, did not rely on literature sources, and we conducted observations throughout the entire academic year, which made it difficult to draw concrete conclusions.

In the next stage, we expanded the research focus by involving entire classes. We began recording video lessons and, for the first time, turned to academic literature. Reviewing scholarly sources helped us understand the different types of engagement (behavioral, emotional, cognitive) and how to identify them. **A new practice emerged:** students themselves reviewed the video lessons and gave us feedback.

We realized that students are capable of giving meaningful, constructive feedback about teaching methods, and that students' and teachers' perceptions of engagement often differ. **This led to the next research cycle—studying the "Student Voice."**

To hear this voice, we started conducting interviews with focus groups. It was important not only to collect opinions, but also to create an environment in which children could speak openly and honestly. We learned that only a safe and trusting atmosphere can yield reliable data. **Before the interviews, we explained:**

- Participation is voluntary
- There are no right or wrong answers
- Their opinions are important
- Responses will remain confidential and will not affect assessment

We followed these interview rules:

1. Voluntary participation
2. Guarantee of anonymity and confidentiality
3. Equal opportunity to speak—no one should dominate
4. Non-judgmental environment
5. Open, neutral questions that enable free expression

The interviews were conducted in a comfortable and quiet setting. We adapted the language to the students' age level and used visuals and game elements. This approach helped us gain a deeper understanding of the student experience and laid the foundation for the next cycle—**teacher reflection on their own practices.**

Thus, we came to understand that action research is a spiral process. Each cycle raises new questions, and each new question becomes the next stage of research.

Project Roles and School Team

The school project is implemented by a team of five key participants, each with a clearly defined role:

- **The School Principal** acts as the project's general manager. They provide overall support and ensure the strategic alignment of the project with the school's development. The principal allows teachers to work in a single shift, flexibly manages schedules for conferences and seminars, and provides financial support for overseas trips. Their leadership ensures sustainable conditions for developing a research culture at school.
- **The Deputy Principal** coordinates all internal processes related to project implementation. They monitor deadlines, support teachers at every stage of the work, and organize discussions on project progress during pedagogical council meetings. Thanks to this support, the project gains a stable organizational foundation within the school.
- **The Project Coordinator**, an English teacher, organizes research team meetings, manages documentation, and provides methodological support based on the Cambridge model. They consult participants and maintain research quality. This academic year, they are conducting their own study on developing emotional intelligence among 5th and 8th-grade students.
- **The Mathematics Teacher** is responsible for developing surveys, questionnaires, and feedback tools. They lead the research group working on the topic "Planning Lessons Based on Student Voice." Their task is to determine how involving students in planning education impacts motivation and learning effectiveness.
- **The Kazakh Language Teacher** runs a literature podcast where professional articles and books are discussed and leads the data laboratory that collects and analyzes research results. They also organize reflective sessions for educators and promote a culture of reading professional literature within the staff.

Clearly defined roles and areas of responsibility reduced confusion and improved team performance, demonstrating the value of distributed leadership.

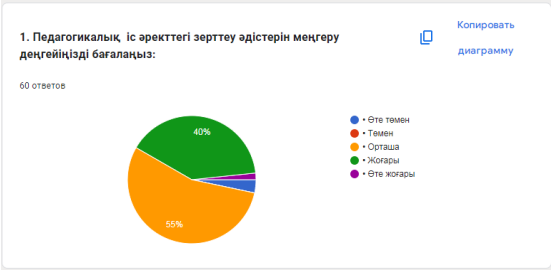
Survey on Research Culture at School (2024–2025)

At the beginning of the 2024–2025 academic year, we conducted a survey among teachers to evaluate the "Research Culture in the School." The survey included 10 open and closed questions about the frequency of participation in research, availability of resources, barriers, and needs. Responses were collected anonymously, enabling an objective overview.

Results:

1. **Attitudes Toward Research Culture:**
    - High level: 60% (36 people)
    - Medium level: 30% (18 people)
    - Low level: 10% (6 people)

Analysis: Most teachers highly value research culture, indicating awareness of its role in professional development.



2. Frequency of Participation in Research:

- Weekly: 10%

- Monthly: 25%
- Quarterly: 30%
- Once or twice a year: 20%
- Never: 5%
  Analysis: Regular participation is low. The main reason—lack of time.

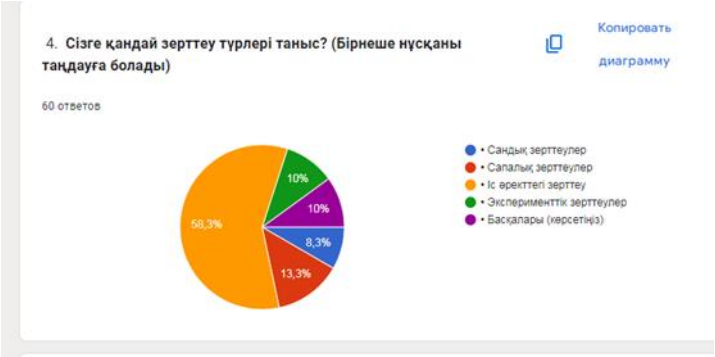
3. Personal Opinions on Participation:

- Frequent participants view it as a way to develop essential knowledge and skills.
- Infrequent participants cite lack of time and resources.
  Analysis: Administrative support is needed to increase engagement.

4. Types of Research Conducted:

- Action research: 40%
- Qualitative research: 20%
- Quantitative research: 15%
- Experimental research: 10%
- Other: 15%

Analysis: Action research is the most popular, likely due to its practical relevance.



5. Access to Resources:

- Sufficient access: 70%
- Limited access: 30%
  Analysis: Overall access is good, but some teachers note constraints.

6. Publications:

- Never published: 58.3% (35 people)
- Published once: 25% (15 people)
- Published several times: 16.7% (10 people)
  Analysis: Publication activity is low, indicating a need for more motivation and support.

7. Application of Research Findings:

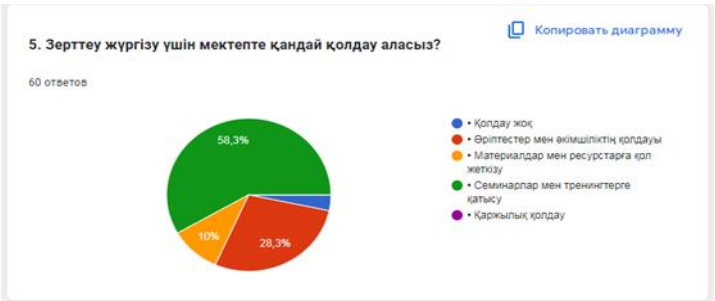
- Sometimes applied: 30%
- Rarely applied: 50%
- Not applied: 20%
  Analysis: More support is needed to implement findings into practice.

8. Key Barriers to Conducting Research:

- Lack of time: 45%
- Lack of knowledge and skills: 30%
- Lack of motivation: 20%
  Analysis: Main challenges are time constraints and insufficient methodological knowledge.

9. Additional Support Needed:

- Training in research methodology: 50%
- More time: 30%
- Financial incentives: 20%
  Analysis: Teachers prioritize training as the most important support.



10. Support from Administration and Colleagues:

- Support exists: 25%
- No support: 15%
  Analysis: Some support is present but needs strengthening, especially from leadership.

Overall Conclusion:

Teachers are interested in research and building a research culture, but time limits, low motivation, and lack of support reduce its impact. To address this, a trusting and open school environment is needed where teachers can share challenges. A follow-up survey is planned at the end of the year. If results don't improve, it will be time to reflect on the "Teacher Voice" project.

Developing Common Criteria of Effective Lessons

Monitoring the quality of teaching revealed that the school lacked unified criteria for what constitutes an effective lesson. This issue became a topic of discussion during methodological association meetings. Through collaboration, teachers developed a set of shared principles representing the school's vision of effective teaching. As a result, 11 agreed-upon principles of effective lessons were formulated and adopted as a reference point for the entire teaching staff.

Research Projects in the 2024–2025 Academic Year

During the academic year, four studies were conducted involving 14 teachers and 126 students. All studies were based on principles of collaborative planning, lesson observation, surveys, focus group interviews, and pedagogical reflection.

1. Developing Emotional Intelligence in English Lessons (Grades 5 and 8)

Goal: Increase student engagement and improve retention of learning materials.

Strategies used: Mood tracking, storytelling, games, reflection, and art-based exercises. A "House of Emotions" inspired by Plutchik's emotion wheel helped students recognize, express, and regulate their emotional states.

Implementation and Monitoring: Observation protocols were kept to monitor student behavior during lessons. These records helped identify frequent discipline violators. Male teachers held individual conversations with these students, which led to noticeable improvements in behavior. One particularly influential student—the informal "leader"—was transferred to another class that maintained high academic expectations. This change, combined with a new learning environment, positively impacted his behavior and academic progress.

Outcome: Students demonstrated increased focus, active participation, and greater emotional awareness.

This experience reflects the ideas in Carol Dweck's book *Mindset*, where fostering a growth mindset—believing that abilities and behavior can improve with effort and support—led to positive changes in both engagement and discipline.

2. "Student Voice" Project (Grade 9)

Context: The study focused on students with low motivation in mathematics. Through surveys and interviews, feedback was collected on how to improve math lessons. Based on the findings, new task formats and assessment strategies were introduced.

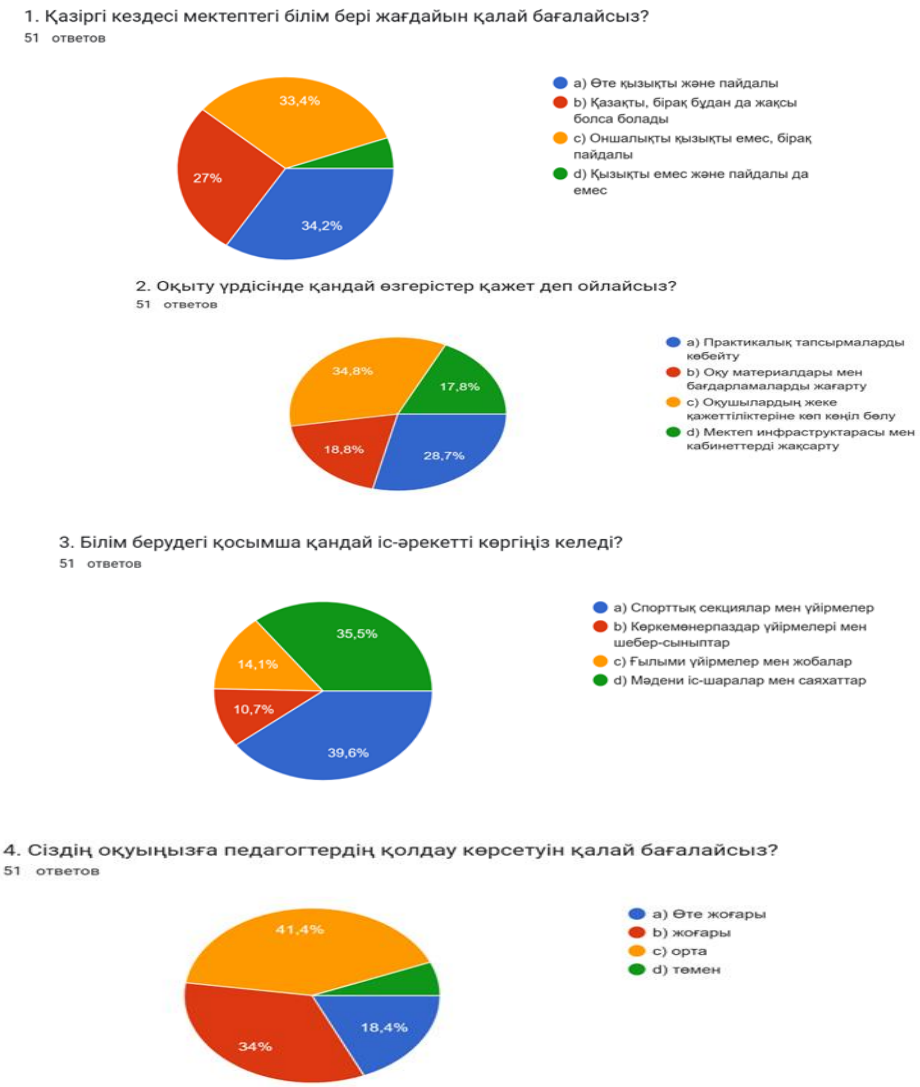
Reflection from the researcher:
At the start of 2024–2025, I began teaching 9th-grade math. Student engagement was very low. They were uninterested in the topics, unwilling to participate in board work, and even when lessons were made more interactive—with group tasks and digital platforms—only 2–3 students engaged while others remained passive.

I then asked myself: "Where should I start? What literature could help me?"
I turned to the professional book *"Visible Learning for Teachers"* by John Hattie—one of the most respected scholars in education research. This book:

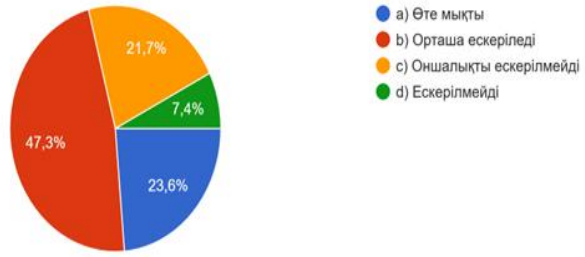
- Demonstrates how various teaching strategies can significantly improve student achievement when applied effectively.
- Offers a dual perspective—teacher and student—on the learning process, covering planning, teaching, and assessment.
- Includes checklists, exercises, and examples of best teaching practices.

Actions Taken:

- Developed a plan
- Conducted surveys at the beginning and end of the year (initial survey had 5 questions and involved 51 students)



5. Мектеп әкімшілігі тарапынан Сіздің пікіріңізбен ұсыныстарыңыз қаншалықты ескеріледі?
51 ответов

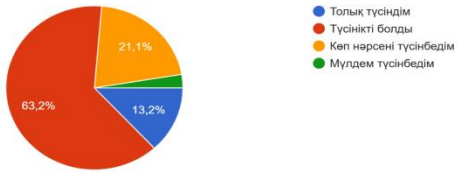


After analyzing these questionnaires, I realized the need to communicate with students, share ideas, and involve them in feedback by asking questions. I interviewed the students, relying on the help of "critical friend".

I also conducted surveys at the beginning and end of the year to track progress.

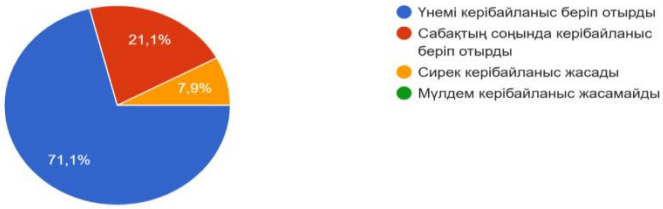
The questionnaire consisted of 10 Questions. 37 students took part.

1. Осы жылы математика сабағы сізге қаншалықты түсінікті болды?
38 ответов



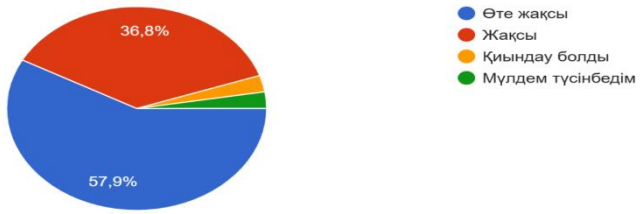
2. Сабақтарда сіз өзіңізді көрсете алдыңыз ба?
38 ответов

3. Мұғалім сабақта керібайланыс беріп отырды ма?
38 ответов



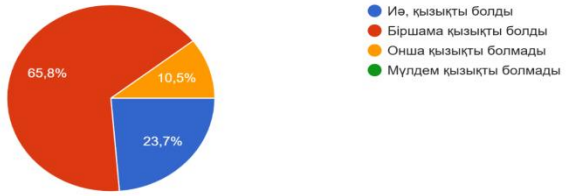
4. Мұғалімнің сабақ түсіндіруі:

38 ответов



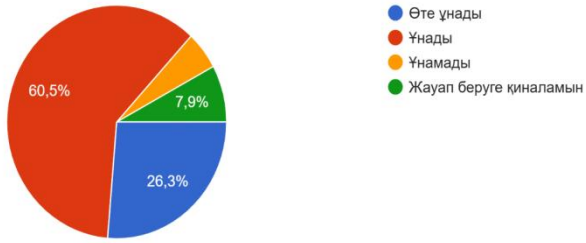
5. Биылғы сабақтар сізге қызықты болды ма?

38 ответов



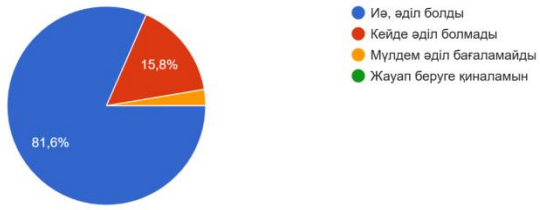
6. Мұғалімнің сыныппен жұмыс жасауы сізге ұнады ма?

38 ответов



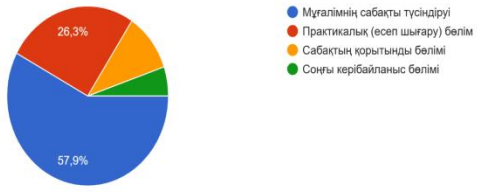
7. Мұғалімнің бағалауы әділ болды ма?

38 ответов



8. Сізге сабақтың қай бөлімдері ұнады?

38 ответов



Outcome:
The interventions increased student activity. Students began to express their opinions more openly and confidently. In group work, they learned to evaluate one another fairly and provide detailed feedback. Academic performance improved by 15%. The research will continue next academic year.

3. Teacher reflection for Effective Learning (10 classes)

Teachers of the Kazakh language studied the impact of constant reflection on the educational process. The methodology included reflective journals and collective discussions. The result was a shift in planning to a student-centered approach and improved understanding of students ' educational needs.

From the report of the teacher: *"I first conducted an interview with the team that asked me. I listened to their thoughts and talked about the problems in front of me. There are many problems identified during the conversation, including the main ones, which I selected as follows:*

1. students have low interest in classes;

2. does not focus on classes;

3. individual students are not active in the lesson;

4. performs the task slowly;

5.poor listening skills.

Now, to solve this problem, each teacher draws up a research question for himself, draws up a lesson plan, and focuses on the systematic planning of tasks around this research question. The research questions compiled by colleagues around their problems are as follows:

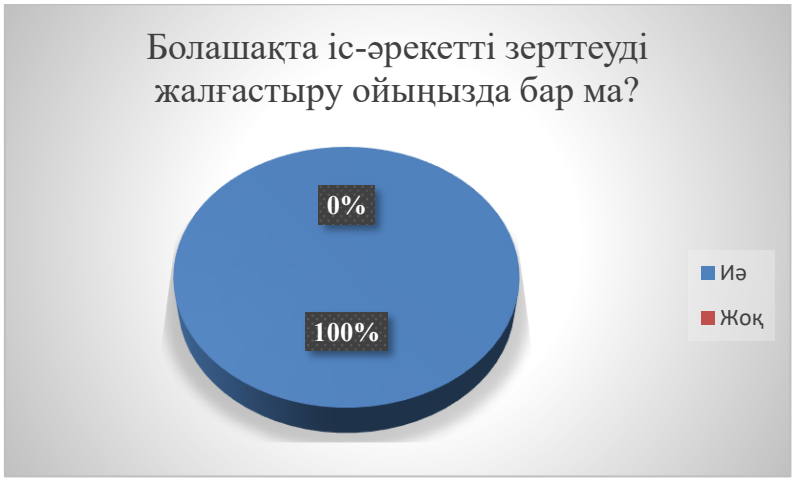
1. How to increase the student's interest in the subject?

2. How can I improve my student's pronunciation skills?

3. how to form a student's attention to the lesson?

4. What is the role of active methods in the lesson?

After some time of work on these research questions, colleagues were interviewed. It was noticed that the survey had an influence on the study of activities. These works contributed to the development of research skills of our colleagues and will continue. Below is the result of the survey.



In order to support the development of a research culture among colleagues, I recorded short podcasts on action research and uploaded them to social media platforms (Instagram, Facebook) and my YouTube channel.
https://www.facebook.com/share/v/15LFmAivfu/
https://www.facebook.com/share/v/19JcBsd1M7/
https://youtube.com/@ali_kon?si=JpEMOPlPyUqbL7xK

In conclusion, through the role entrusted to me, I tried to convey with evidence that it is important to conduct action research in order to improve the way I teach my colleagues about it in our community. I emphasized the need to work continuously around the research question. Judging by the plans for the future, I believe that in the new academic year, action research will become more systematic and results-oriented.

4. Improving Reading Skills of Primary School Students (Grade 2)
The research aimed to improve reading speed and comprehension using adaptive strategies like paired reading, visualization, and step-by-step reading. Teachers observed growth in conscious reading skills and vocabulary.

In February 2025, a series of Grade 2 lessons in Kazakh language and literature grouped students by level and established conditions for effective group work. Some leader students disrupted participation, prompting the introduction of group rules.

In class 2 “G”, methods like “Canon”, “Open Microphone”, spiral reading, video clips, and digital assessment were used. Differentiation and paired work boosted engagement. Observers tracked progress of students A, B, and C and gave feedback.

Action Research helps teachers share experiences, choose effective methods, and better understand students. It enhances education quality while supporting students’ self-identity and self-assessment.

Challenges and Solutions

1. **Resistance to Change**
   → *Solution:* Gradual implementation, success sharing, mentoring, and team support.
2. **Uneven Participation**
   → *Solution:* Foster responsibility through joint planning, role sharing, and involvement.
3. **Lack of Monitoring**
   → *Solution:* Regular meetings, checklists, journals, and analytical reports.
4. **Limited Professional Reading**
   → *Solution:* Provide podcasts, literature suggestions, and discussion forums.
5. **External Motivation Dependence**
   → *Solution:* Emphasize professional growth and offer platforms for sharing work.
6. **Time Constraints**
   → *Solution:* Integrate research into lessons, offer flexible schedules, and redistribute tasks.
7. **Superficial Problem Discussion**
   → *Solution:* Promote openness, treat mistakes as learning, encourage trustful dialogue.
8. **Staff Turnover**
   → *Solution:* Document experiences and mentor newcomers.
9. **Too Many Initiatives**.
   → *Solution:* Prioritize and align with school strategy.
10. **Emotional Burnout**
    → *Solution:* Reflect regularly, celebrate small wins, manage workload, and offer support.
11. **Weak Inclusive Education Skills**
    → *Solution:* Offer training, involve experts, analyze cases, and adapt methods.

Conclusions and Lessons Learned

- **Mindset Shift:** Lessons became spaces for interaction and engagement.
- **Teaching Evolved:** Emphasis on student voice, reflection, and emotional climate.
- **Teamwork Grew:** Teachers collaborated in research groups.
- **Research Culture Formed:** Data collection and analysis became routine.
- **Leadership Shared:** Every teacher could lead change.

Teachers learned to:
✓ Formulate research questions and test change through small steps
✓ Use data tools: videos, surveys, interviews, focus groups, reflection
✓ Base decisions on data, not intuition
✓ Collaborate, negotiate, and support each other
✓ Build open, trust-based professional dialogue