

Case Study

Our school has around 800 students and a faculty of 108 teachers. Most of the teachers have been working here for over 10 years, so they know the school system well. Many of them have done research through Lesson Study and Action Research, and doing research is one of the requirements for teacher professional development at school. Despite this, there was a concern that research was often done mainly to meet the requirements of teacher attestation, rather than to improve teaching and learning. Additionally, there were also some new teachers who needed support in carrying out research and using it in their teaching practice. With this situation in mind, our school applied to take part in the NIS/Sshare project.

When it was time to form our team, we realised how important it was to choose the right people. Some members were selected based on their skills, research experience, and enthusiasm. However, during the second month of the project, we noticed that one team member was facing difficulties and was not able to fully take part in the research and discussions. After careful consideration, we decided to replace her with someone who had more experience in the field. This team member chose to continue her work within our school Action Research groups. In the end, our team included five members: the Principal, the Vice Principal, the Coordinator, an English and GPPW teacher, and a Computer Science teacher.

Within our team, we decided to hold weekly meetings to plan and discuss the research and its overall progress. This became one of the first enabling conditions that helped us work consistently and efficiently. It is also important to mention how the nature of our meetings changed over time, especially after the mentoring sessions with NIS/Sshare trainers or when we realised that some of our plans were too ambitious and impossible to complete within the time and resources we had. At first, our meetings mainly focused on planning actions and activities. Later, they became more reflective, and we started thinking more carefully about our next steps in the research process.

We also decided to practice distributed leadership within our team. Each of us took on leadership roles by being responsible for working with specific groups of colleagues or managing certain stages of the research. This approach allowed everyone to contribute equally to the team's work. In addition, these roles changed depending on the stage of the research, so that each member could use their strengths to move the project forward. We also established a rule to complete tasks within the agreed time so that delays on our part would not affect the overall progress.

Despite having administrators on the team, all members felt free to express their ideas, concerns, and suggestions. The principal and vice principal supported initiatives, especially when it came to decisions that involved the whole school. This open and supportive atmosphere had a positive impact on both teamwork and the research process. Because all members felt comfortable sharing their thoughts, the team was able to consider diverse perspectives and make more balanced decisions. Nevertheless, the principal's role and active participation in the team has a somewhat adverse impact. The intention to engage more teachers and take larger-scale actions at the school

level influenced the team's decision to involve the whole school and guided the selection of the research questions.

Initially, we did not fully understand the idea of NIS/Sshare. Since Action Research was one of the key concepts, we assumed that implementing it, or in our case, changing school teachers' attitudes towards it, was the main aim of NIS/Sshare. This assumption was also influenced by the appraisal practice from the previous academic year, which involved conducting Action Research but was not as effective as we had expected. However, after starting the initial data collection and especially after mentoring sessions with the NIS/Sshare trainer, we realised that the main focus is on quality learning and teaching, and how this can be achieved through conducting Action Research. As a result, the focus of our research was on learning and teaching experiences at our school.

Once we established the rules and roles within our team, we started the first phase of data collection in order to assess our starting point in teaching and learning. Our school has had a definition of high-quality learning and teaching (HQLT) for about two years. In the first year, the focus was on creating this definition together as a school community. There were meetings to discuss and explain it, and one-time workshops were held to see how different departments understood and applied it. In the second year, lesson observations began to check if the definition was being put into practice. Lesson observations took place twice during the academic year and aimed to monitor and support teachers in the implementation of the definition in their teaching practice.

As a result, we decided to focus more closely on this definition to explore its impact on teaching and learning at our school. At this stage, our research questions were still a bit vague and sounded like: "How can we measure the effectiveness of the HQLT definition?" and "How can we ensure its implementation?" To gather data on the current state of teaching and learning, we used a variety of data collection tools. First, we analysed the data to see whether there was alignment between the lesson observation form and the definition of high-quality learning and teaching. Then, we conducted interviews with representatives from different grade levels. Finally, we decided to use lesson observation records that were carried out at our school by different groups of teachers and administrators.

The comparison between the lesson observation form and the definition of HQLT showed that, although most aspects of teaching and learning included in the definition were present in the form, some important areas were still missing. For example, learner engagement in setting lesson objectives and developing descriptors were added by our team after completing the document analysis.

Interviews with students showed that their understanding and awareness of the definition of HQLT varied across grade levels, with Grade 12 students being the most aware and Grade 7 students the least aware. Nevertheless, the examples of effective teaching and learning practices shared by students demonstrated that, overall, their learning experiences at school are aligned with the HQLT definition and are guided by its principles. Some learners also mentioned that the best practices

they would like to see in more subjects involve more personalized assignments and greater support from teachers. Overall, these interviews suggested that more consistent efforts are needed to help learners better understand the definition of HQLT and the school's expectations regarding effective learning, as well as to improve learning practices at the school.

Lesson observations indicated that some teachers needed additional support with formative assessment, classroom management, and more effective use of resources. They also confirmed the student interview findings about the need for a more differentiated approach to teaching. This is how we identified the four areas which we would focus on during the action stage.

Once we received the results from the pre-intervention data collection and completed the literature review, we realized that our original research questions were difficult to answer and that our initial plans were too ambitious. In addition, interviews with students and meetings with colleagues who conducted lesson observations revealed that the definition of HQLT was still seen by some as a formality rather than a meaningful guide for practice. As a result, we decided to revise our research questions to: "How can we promote meaningful and productive discussions about high-quality learning and teaching among the faculty?" and "How can weekly professional development workshops help teachers more effectively apply key teaching strategies such as formative assessment and differentiation?"

The literature review was a stage we could have explored more thoroughly. Since most of us are experienced teachers, we relied heavily on our professional experience and knowledge when planning the research. However, after reading relevant studies related to our research problem, we realized that these sources could have provided valuable guidance during the data collection process and in planning a school-wide reform. In particular, we would have sooner realised how unrealistic our ambition to measure the effectiveness of the definition was and especially, ensuring its implementation in the classroom.

To encourage active discussion about HQLT among the faculty, we decided to dedicate Term 3 meetings to this topic. We introduced the idea during the all-faculty termly meeting, setting the stage for further activities. During this meeting, teachers had a chance to reflect on the definition of HQLT and see how it aligns with the new lesson observation form by comparing the definition and the form. Next, we organized an EdHackathon, where teachers worked in teams to solve different cases using a variety of teaching strategies and techniques. Apart from creating a discussion around high-quality learning and teaching, the aim of EdHackathon was also to create opportunities for teachers to practice their leadership and research skills. It also allowed us to understand the challenges teachers face in using research skills. For example, some teachers know how to conduct observations but struggle to analyse the results.

Next, we used the professional development hour, which is time allocated weekly to each subject department, for sessions focused on topics related to HQLT. These included formative assessment, differentiation, classroom management, and effective use of classroom resources. We also recognized the importance of involving teachers in decision-making, so departments were

encouraged to choose additional topics that would support their progress toward achieving HQLT. Additionally, two groups of expert teachers, who had been supporting their colleagues with formative assessment and differentiation since the beginning of the academic year, continued their work.

To measure the effectiveness of the chosen methods, we conducted a survey among teachers after the EdHackathon. Many respondents indicated that the event provided a valuable opportunity for teachers to reflect on their teaching practices and better understand the benefits of research-based teaching and learning. It also fostered collaboration between different subject departments, and participants noted how challenging it was to work on a complex problem within a limited timeframe. Additionally, the lesson we learnt as a team from EdHackathon is that when the right conditions are created, even novice teachers begin to deeply analyze their teaching practice.

Areas for improvement include the lack of clear evaluation criteria, which led to confusion among participants; therefore, SMART criteria should be shared in advance. Limited involvement of the administration reduced the likelihood of implementing proposed solutions, underscoring the need for their active participation throughout. However, some of the ideas were later implemented at the school level. Participants also suggested offering pre-hackathon training and post-hackathon reflection sessions. The use of different cases for each team made it difficult to compare results objectively, so a single case with multiple solution paths was recommended. Although this suggestion could simplify the evaluation process, we noticed that using only one case does not align with the purpose of the Ed-hackathon, which is to discuss a variety of cases and challenges that teachers encounter in their practice.

To assess the impact of the professional development sessions on teaching and learning, we conducted post-intervention lesson observations. These observations showed noticeable improvement, particularly in the area of differentiation and active learning. However, teachers still need more consistent support in applying the new strategies on formative assessment, differentiation, classroom management, and effective use of resources introduced during the professional development sessions, as well as enough time to adapt these strategies to their own teaching practice.

Another post-intervention data collection method we used was conducting interviews with the Heads of Subject Departments. This allowed us to gain their perspectives on whether they had observed any changes in how teachers talked about HQLT, as well as any impact on teaching practices. The interviews confirmed that teachers are now more confident in using differentiation in their classrooms. In addition, the Heads noted improvements in student engagement, the use of ICT tools, group work, and pair work. They also pointed out several ongoing challenges within their departments that could hinder the achievement of HQLT, especially, issues related to time, workload, and teacher burnout.

Having conducted this research, we can make some conclusions on the four concepts of NIS/SHARE:

- Regarding the enabling conditions for change, we believed it was important to allocate protected time for meetings and discussions. This allowed for more consistency in our work and ensured greater engagement from those involved in the change.
- Another important enabling condition related to time was respecting each other's time and trying to stick to deadlines so that we could all make progress with the work we were doing.
- A collaborative and trusting atmosphere within the team was also important. This let us feel freer in expressing our thoughts and asking for support when needed, which improved communication and problem-solving.
- Team members were chosen based on skills, experience, and motivation. A team change was made early on to improve participation and effectiveness, which helped the team work more efficiently.
- Distributed leadership and roles based on our strengths were factors that made our work more productive. However, it was important to mention that support and sometimes control were necessary in distributed leadership to keep everyone coordinated and focused.
- The principal and vice principal were actively involved, supporting initiatives and encouraging a whole-school approach. As a result, all team members felt supported during the research.
- Research based on reflection and flexibility was key. We often reflected on what we did well and were ready to adapt when we noticed the methods chosen were not effective.
- Using multiple data collection methods allowed for a more complete understanding of the situation and helped us make better-informed decisions.
- Including different voices, especially teachers' voices as the main participants in the changes, let us ensure the research was relevant and responsive to the real needs in the school.
- Starting small is important. This allows for better support of those leading the change and makes it easier to measure its impact.

Based on the conclusions, we identified the following steps for the coming academic year:

- We aim to expand our team to raise awareness about the NIS/SHARE project by involving a teacher who can act as a facilitator for other teachers, as well as the Vice Principal for Academic Affairs.
- We are planning to make changes to the definition of HQLT in order to make it more concise. At that point, it is too wordy and not student-friendly. However, this is just our assumption as a team. Based on our experience during the year, we are planning to first survey the school community to see if there is actually a need for this change and how different groups view it.
- To continue our work on improving learning and teaching, we are planning to support teacher professional development through recording and analysing video lessons and creating Professional Learning Communities (PLCs) among teachers led by expert

teachers. These expert teachers were identified during the lesson observations we conducted this academic year.