Preparing future teachers for classroom innovation through action research

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The Sustainable Development Goal 4, Target C (SDG4.c), of the Education 2030 Agenda aims to substantially increase the supply of qualified teachers by 2030. In addition, SDG4.c asserts that teachers are key to achieving all SDG4 targets, beginning with SDG4.1, or universal access to ‘free, equitable, and quality’ primary and secondary education.

Given the primary role of teachers in realizing the SDGs, teacher education institutions (TEIs) have a unique role to play in preparing future teachers to be professionally qualified. Indeed, in fulfilling their missions to prepare qualified teachers for the teaching profession, TEIs currently feature long-established teacher education curriculums, some of which are based on our traditional thinking of what kinds of knowledge and understanding, skills and competencies, and values and attitudes teachers need to possess. Other such curriculums are more aligned with national teacher competency and teaching standards frameworks.

This paper highlights the importance of the skills, values and attitudes of future teachers to conduct classroom-based action research, as this kind of research is critical for forging future classroom innovations that will ultimately contribute to more inclusive and quality teaching and learning for all.

1. Action research – a practitioners’ research for teachers

There are basically two fundamental types of research. One is basic research, entailing an induction process which starts with collecting comparable data from more than two samplings to generate, validate or falsify hypotheses on the cause and effect of more than two factors. The other is applied research, which is a deduction process to apply hypotheses into attribution analysis, and identification and implementation of solutions.

Basic research to generalize educational theories should be the responsibility of researchers working at faculties of education or other research entities. By contrast, teachers are practitioners that facilitate and manage learning in the school and classroom settings. Their already hefty teaching workload does not allow them to do much basic research, which would distract from their primary responsibilities and require broader sampling beyond their schools and classrooms.
What teachers clearly continue to lack is the capacity to do applied research of the kind that would enable them to apply the theories and hypotheses they have learned from their initial teacher training and past experiences to their daily practices in schools and classrooms.

Action research is a specific type of applied research that can help teachers continually diagnose teaching and learning gaps and find, try out and evaluate solutions for making schools and classrooms better places for both teachers and students. As such, action research is the basis for evidence-based innovations in schools and classrooms.

2. The teacher as researcher – enhancing the professionalism of the teaching profession

Compared to medical doctors and lawyers, the social status and professionalism of the teaching profession have yet to improve. This ‘status gap’ is due mainly to teachers’ still needing to integrate action research into their daily work. By notable contrast, research, investigation and diagnoses have already been an integral part of the daily work of those in the medical and legal professions.

Together with the International Labour Organization (ILO) and our Member States, UNESCO is committed to raising the social status of the teaching profession. However, we can improve the social status of teachers only if we can enhance the profession by increasing the degree of complexity, evidence base, operational autonomy and mechanisms for continuous improvement of teachers’ daily work.

Through action research, teachers can deal with their daily work with a more enquiring attitude and adjust their behaviours according to the evidence and the kinds of solutions they implement. This is what we want for teachers: an increased capacity for monitoring and improving teaching and learning processes via continuous problem identification and solution implementation.

Decentralization and increasing operational autonomy on the frontline of teaching in many countries have provided great potential for teachers to use action research to improve the quality of teaching and learning in their schools and classrooms. Indeed, decentralization and teachers’ increasing operational autonomy are critical for raising the social status and professionalism of the teaching profession.

3. Becoming sensitive teaching professionals via problem-solving

Teachers’ action research aims to promote problem-solving and continuous improvement in schools and classrooms. It starts with identifying problems against agreed upon standards or criteria, such as national curriculum standards or professionally agreed criteria. In preservice training, future teachers should be equipped with crucial principles and values of the teaching profession, as well as subject-based curriculum standards, so that they can integrate them with their own principles, values and standards.
The more both national and professional standards are internalized by teachers, the more teachers will be alert to problems and irregularities in their daily work. TEIs must develop preservice training courses that connect abstract principles, values and standards with the operational scenarios of schools and classrooms. Collaborating with schools and teachers is critical in developing and implementing such courses at TEIs.

The same applies to the theories and hypotheses taught at TEIs, as they can help future teachers identify possible causes of and solutions to problems. The main difference between new and experienced teachers is that when facing a problem, the former has fewer solutions in their toolbox. By comparison, the latter have more potential solutions, and they are more sensitive to recognizing the most appropriate and effective solutions from their past problem-solving experience.

Baseline assessments of teaching problems are vital through qualitative and quantitative measures so that after a certain period of solution implementation, teachers can evaluate the effectiveness of the solutions employed with periodic assessments. Eventually, all the successful problem-solving cases can be collected by, and taught at TEIs to benefit future teachers.

4. Developing a culture of peer learning for future teachers

Peer learning is part of teachers’ action research and can provide opportunities for collective problem diagnosis, solution identification, and the implementation of effective monitoring and evaluation mechanisms. We should nurture future teachers with relevant skills, mentalities and attitudes to support peer learning.

Teachers working in the same subject area and at the same grade levels at school may face similar problems that entail similar possible solutions. TEIs should pay more attention to the collection of potential problems and their possible solutions according to subject and grade level and embed them into the teacher education curriculum.

It is also important for TEIs to plan school practicum activities for future teachers based on a peer learning perspective throughout the whole action research process. They should learn to work with new peers, mid-career teachers and senior teachers on their way to becoming more sensitive teaching professionals.

Conclusion

Action research is a type of applied research that fits well with teachers as practitioners in schools and classrooms. Action research can help enhance the social status and professionalism of the teaching profession by increasing the complexity, evidence base, operational autonomy and available mechanisms for continuous improvement of teachers’ everyday work.

Action research can also help teachers to be more sensitive to problems and solutions in schools and classrooms through constant problem identification and problem-solving. As preservice teacher training providers, TEIs should reflect on their existing curriculum and
explore ways to integrate action research-related skills, values and attitudes into their teacher education programmes, so that we can better prepare future teachers for classroom innovation through action research.

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