



Guidelines for research governance to enhance the circulation of research in teacher education

Introduction

A key aim of the Erasmus+ RECITE project is to generate impact by producing locally adapted research strategies and a generic guide to establishing research governance strategies beyond the immediate reach of the project. It will also use teacher education as an example of how innovative strategies can transform research cultures and produce real benefits for its ultimate beneficiaries - children and young people. These benefits include:

- 1) Better achievement through enhanced teaching and learning methods based on up-to-date research and refined in practice situations.
- 2) More inclusive practices as a result of 'deep internationalisation' of teacher education, meaning that national approaches to teacher education are informed by knowledge and experience of international actors.
- 3) Better use of digitalisation through reference to the many international projects in this area.

The motivation for producing generic guidelines is to establish innovative and sustainable research governance strategies in and beyond partner institutions. Governance strategies are needed to strengthen the quality of teaching in schools through collaboration between municipalities, research departments, teacher education and schools. The aim of these strategies is to enhance the possibilities for knowledge flow and spread between the different fields and between the macro and micro levels of education. The governance strategies presented here are based on

partner institutions' local action plans developed during the ReCiTe project to improve the local circulation of research in teacher education. The different examples presented here are indicative of the different conditions of teacher education environments and illustrate a range of approaches to enhancing the circulation of research in different environments. By drawing on examples from particular environments, we hope to create a more robust basis for the transnational guidelines, guidelines that are intended to reach a broader audience and strengthen the chances of creating sustainable changes in research culture generally.

Guideline 1: Reconceptualising relationships between educational stakeholders

The first guideline highlights the importance of re-conceptualising the relationships between educational stakeholders. Reconceptualising this relationship is central to Responsible Research and Innovation initiatives that highlight the **social responsibility** of educational researchers to share research and to engage with educational stakeholders including practitioners, educational authorities and policy-makers. This reconceptualisation involves recognising teachers and other educational stakeholders as key collaborators in research, not merely as targets of research. Recognising that educational stakeholders provide important perspectives on the day-to-day workings and relationships of educational communities can help to avoid educational research becoming a siloed practice, with publications released into the ether with no particular target in mind beyond an indexed journal. Engaging with educational stakeholders should help educational researchers to produce research that is meaningful and useful to educational practitioners and decision-makers, and responsive to questions, dilemmas and interests that arise in the field. Through this reconceptualisation, opportunities for educational research become greater, the potential impact of research is improved and teacher education provides a better connection between the theory and practice of education.

The examples from the RECITE partners suggest different ways of reconceptualising this relationship. For example, adopting a **practice-based research** (Jenset, Klette & Hammerness, 2018) approach helps to recognise the fundamental presence of practitioners in the conceptualisation and research of educational phenomena. Practice-based research considers educational practitioners neither subjects nor objects of research, but collaborators with experiences and perspectives that contribute to the development of educational research. Practice-based research can contribute to the ongoing development of individual teachers,

community understanding and further research. Another approach is **research-based practice** (Puustinen, Säntti, Koski, & Tammi, 2018) which emphasizes the need for educators to be aware of why they work in the way that they do and requires educators to maintain this awareness avoiding the potential danger of adopting habitual practices that work, but are not educationally beneficial. Research-based practice creates a good basis for collaboration between educators and researchers, as educators working in the field can struggle to find the time and resources to conduct research on their own practice, and in turn researchers can benefit from ongoing engagement with the field.

Practice-based research and research-based practice offer two different approaches to addressing the educational researcher-educational practitioner relationship. While practice-based research emphasizes the importance of practice as part of research, research-based practice highlights the importance of research informing practice. These alternative approaches can be considered as a reformulation of the **theory-practice conundrum of education** (Khan, 2017). Whichever approach is adopted, however, they draw attention to the need for educational stakeholders to look beyond their immediate environment, to draw on different resources and to develop education through community-based activity. Recognising the link between theory and practice means that theories, policies and recommended practices remain anchored in and sensitive to the needs and character of education as a lived, albeit institutionalised, relationship that is contextualised by curricular and temporal demands. Reconceptualising relationships between educational stakeholders is an important step towards reforming relationships between educational stakeholders as partners in the ongoing development of education. The second guideline addresses how to go beyond good intention to action.

Guideline 2: Clear and sustainable structures to support stakeholder relationships

Clear and sustainable structures invested in the circulation of research are needed to transform intentions into actions. A first step in the development of clear and sustainable structures is to increase the visibility and viability of engagement between stakeholders by including collaborative activities in official work plans and working hours. Official recognition of collaborative activities can make it easier for partners to earmark specific periods of time for collaboration and to even be released from other duties in order to facilitate the collaboration.

Educational stakeholders are often physically located away from each other with teachers in schools, teacher educators in universities and educational authorities in municipal headquarters. In these different environments, stakeholders follow different daily and annual timetables. The LAPs of ReCiTe partners highlight the importance of having a coordinator or steering group to avoid the disjunctures between different environments from undermining collaborative efforts. Coordinators can be responsible for a number of key tasks, such as:

1. **maintaining regular contact with different stakeholders and partners**, keeping each other informed, organising regular meetings as anchor points for maintaining channels of communication that sustain and extend partnerships, for example, by celebrating achievements and successes together, as well as organising dissemination days such as Annual Research Conferences, Open Days or seminars.
2. **gathering and connecting interests** by, for example, conducting surveys that indicate needs in schools and teacher education as well as potentially valuable projects, arranging gallery walks and discussions between prospective collaborators
3. **facilitating potential collaborations**. Existing networks for school leaders and educational managers working in municipalities can play a particularly important role by 'leading from the middle', identifying areas for development and facilitating contact between researchers with adequate backgrounds and competences and practitioners in the field. Leading from the middle is a practical way to generate practice-based research questions relevant at a systemic level or for a large number of schools.
4. **recognising the strengths of different partners**. Educational stakeholders bring different experiences and skills to collaborative relationships. With regard to the provision and management of funding, for example, educational researchers might be more familiar with application procedures, such as writing funding applications, whereas practitioners are more likely to be able to say what is feasible within a particular community.
5. **supporting micro- well as macro projects**. Coordinators play an important role in recognising and valuing different types of initiatives, whether action research projects within one classroom or school, or larger projects in which a number of teachers and schools collaborate to form a network.

The different kinds of activities that coordinators can carry out play an important role in ensuring that projects and partnerships are genuinely co-created projects. This role also requires flexibility and sensitivity regarding the dynamics of different partner communities, but by bringing partners together, communities can begin to take shape. Moreover, coordinators can perhaps draw attention to the potential of existing structures, as outlined in guideline 3.

Guideline 3: Making the most of existing structures

One important example of an existing structure that can support the circulation of research in teacher education is the relationship between universities and practice schools (övningskolor). Practice schools, especially schools that are affiliated with universities, have been of special importance in the development of education as they are in close contact with the university and the day-to-day practice of education. Practice schools are crucial as providers of teaching practice, especially with teachers that have received training as mentors at the university and share a mutual commitment to the development of education through long term collaboration between university and schools. This existing structure, however, needs to be maintained as an active partnership which can be supported through the adoption and adaptation of innovative practices and activities.

Several of the LAPs developed within the RECITE project highlight the value of teaching practice periods as crucial links between practice schools and university-based teacher education. Practice periods can be considered as integrated internships that provide intensive, practical opportunities to develop educational understanding and expertise. If students carry out research-based learning in practice schools, direct connections can be developed between the theory and practice of education, expanding the transfer of knowledge both to schools and universities, and preparing future teachers for engaging with research as part of their future professional practice.

One example of maximising the practice school-university relationship is the **integrated semester practicum** (ISP) implemented as part of a bachelor's degree in primary education. As a fourteen week initiative, twelve student teachers have approximately ten weeks to become familiar with the school environment and socially integrate with school staff. During the four days a week in school, the student teachers are supported by school-based mentors, training advisors and the school management with at least two guided class visits per subject. The weekly university-based day is an opportunity to engage with subject-related didactics, technical disciplines and educational science and to reflect on any lesson recordings carried out with the agreement of the school. The final stage of this practicum involves the school adoption days during which time the student teachers take on the responsibility for running the school and school-based mentors have the opportunity to attend university-based seminars. The school adoption week provides an important opportunity for student teachers to gain a bigger picture of a school community, beyond the boundaries of individual classrooms, and a valuable opportunity for collaborative reflection between educational

stakeholders from the university, the practice school, the state education authority and the regional council.

An initiative such as the integrated semester practicum seeks to make educational expertise visible and to foster a sustainable change in the research culture and enacted theory-practice relationship. Educational expertise can also become more visible through the use of video-based approaches. Once student teachers are familiar with video analysis and aware of the distinction between description and evaluation, they can learn how to identify key moments in video data (Steffensky & Kleinknecht, 2016; Aeppli & Löttscher, 2016). With permission, empirical video data can be gathered with portable video glasses (glasses with audio and video recording) and GoPro cameras (action cameras). This data can be compiled to bring together different perspectives, such as the perspective of the teaching student and the perspective of an observing student or a fixed camera installed in the room. Using different perspectives, retrospective descriptions can be generated that alternate between the perspectives of different actors providing rich data for reflection and research.

Expertise can also be made visible and available for critical thinking and development through other activities as well that bring theoretical observations and practical experiences into dialogue with one another. In **professional biography activities** participants confront their own role as teachers and their individual understanding of teacher professionalisation. For example, statements from three generations of teachers presented to student teachers can provide useful material for the consolidation of thinking and different perspectives on current problems and challenges. Professional biography activities can also involve working with foundational texts, as well as reflective questions on professionalism and teacher identity in relation to personal own goals and ideals. Class- and student-specific case studies can help to raise awareness regarding the role and actions of different educators in everyday school life. Moreover, professional biography activities can invite students to consider how they see themselves as prospective teachers during the practical work placement and what teacher they would like to be after completing their teacher education.

Oral reflection can also make expertise visible. The competence model of Blömeke, Gustafsson and Shavelson (2015), for example, highlights how teacher actions are based on cognitive and affective predispositions. These predispositions influence teacher perception, interpretation and decision-making in specific situations and lead to observable teacher actions and performance. As teacher actions interact with the actions or reactions of individual students, groups or entire classes, complex classroom structures are formed which influence the cognitive and motivational-affective processes of students (Schweer, 2017). If pre- and

inservice educators learn to identify actor-specific consequences of interaction in challenging situations, oral reflection on these incidents is an important part of peer tutoring as existing competencies and emotional experiences are brought together. Following lessons, this oral reflection can be divided into five successive phases (Aeppli & Lötscher, 2016):

- (1) **Experiencing**: student teachers or teachers can record their emotions in writing or via an audio file naming, ad hoc, one to three key moments during the course of the lesson.
- (2) **Presenting**: describing the teaching situations with the selected key moments, if possible based on teaching videos. If possible, descriptions of specific interactions should also include the accompanying emotions of the teachers. This is best achieved if the teaching process and context are described in detail.
- (3) **Analysing**: involves looking at the situation from different perspectives, including the perspective of pupils, the teacher and observers. The aim of the phase is to promote multi-perspective thinking in relation to complex teaching sequences and the use of problem-solving strategies in relation to given situations. Over time it should become easier to recognise interactions as they occur and the interdependence of actions and interactions (Dewey, 1993).
- (4) **Developing alternatives**: the earlier steps of description and analysis facilitate the formulation of potential, alternative courses of action which should be discussed and based on theoretical understanding.
- (5) **Applying**: alternative courses of action should then be tried out as quickly as possible in subsequent lessons to facilitate further reflection and ongoing development.

While it is important to guide student teachers with the reflection process to begin with, it is also important to increasingly encourage independent analysis on a regular basis. During an integrated semester practicum, for example, student teachers should reflect on at least one challenging situation a day in twos or threes following the five phases and developing as many alternative courses of action as possible. This five-phase sequence can also be used as the basis for **written reflection** which can help to explicitly draw on theoretical knowledge and develop reasoned arguments. Through these activities student teachers, as well as experienced educators, can learn to look from different perspectives and to become more aware of the cognitive and affective dispositions that inform their actions and interactions. Moreover, these approaches encourage educators to regularly reflect on and to develop their educational practice, as well as to make their experiences and expertise visible to other educators in a manner that supports the overall development of educational communities.

Guideline 4: Disseminate activities and findings in accessible formats/channels

The obligation for academics working in education to publish in international journals can undermine the circulation of research in teacher education in various ways. This fourth guideline specifically addresses the need to disseminate research activities and findings in formats and through channels that are accessible to different educational stakeholders. In the RECITE LAPs this need is recognised by efforts to publish research-based findings and activities through the actions of municipalities and universities. The municipal journal “Lärorik”, for example, has four issues a year and is an inspirational journal for teachers and staff in pre-school and the compulsory school system as well as special needs education. The main purpose is to disseminate good ideas and best-practice examples from the organisation. Articles included in Lärorik draw on current research and development projects and include interviews with local and national researchers. An example university-based journal is ‘Venue’, an online journal that aims to stimulate the qualified exchange of knowledge and ideas between school-based staff and educational researchers. Articles in Venue are relatively short, but provide opportunities for researchers and teachers to share information about their research or proven experience with other stakeholders in an accessible format. These two initiatives have different points of departure since Lärorik starts out from current developments at school level and then reaches out to researchers for interviews or for comments and observations on the underlying scientific basis of a project whereas the articles in Venue usually start out from the researchers’ point of view and then by sharing research results engage in a dialogue with other stakeholders. Both journals contribute in different ways to the dissemination and exploitation of educational research at school level.

Identifying alternative channels that reach teachers and educational decision-makers can require time and investment. Concrete steps are needed to establish channels of communication and collaboration between different educational stakeholders. Teachers and researchers need to be aware of the range of options that exist for sharing popularised articles on research activities, initiatives and findings or more targeted publications. Targeted publications include, for example, the publication of the Siirtolaisuusinstituutti (Migration Institute of Finland) or Kieli, koulutus ja yhteiskunta (Language, Education and Society) specifically targeting language policymakers and language educators. Moreover, recognised or curated spaces are needed where educational stakeholders can give their input from the field as part of the circulation of research: educational researchers need to be aware of the questions, concerns and interests that are current in the field, as well as contemporary areas

of research. Stakeholder-oriented publication channels should also be included in the funding or ranking mechanisms of universities in order to encourage investment in these channels. Maintaining the circulation of research in teacher education cannot rely on the goodwill or freetime investments of educational researchers; indeed, the circulation of research can only be sustained through equitable and reasonable partnerships and commitments - the focus of the final guideline.

Guideline 5: Maintain equal partnerships

An important part of maintaining equal partnerships is the explicit recognition of different roles and forms of knowledge. Long term partnerships between practice schools and universities, for example, explicitly recognise the value of different roles and responsibilities of teacher educators, educational researchers and teacher practitioners. It is only through collaborative partnerships, however, that educators can develop understanding and expertise in the different ways of doing and knowing that inform educational practice. The different perspectives and contrasting areas of expertise of participants can be brought together in a shared vision of developing the teacher profession and contribute to better learning. Maintaining equal partnerships can be achieved through the continuous negotiation of what constitutes a common “core problem of practice” to be investigated within a community. Adaptation, relational trust, reciprocal respect, relevance and equality are key words that inform successful partnerships. These values can be considered as the foundation for a collaborative, equitable partnership with didactical inquiries and experiments at the centre. As different partners all contribute from different perspectives and expertise, all partners benefit creating - a win-win-win situation.

Student teachers are also important educational stakeholders and partners in educational development. A significant amount of pressure is often placed on student teachers as well as recent graduates to implement up-to-date approaches and to refresh pedagogical understanding in established educational communities. This is a significant demand, especially when novice teachers have to wrestle with the immediate demands of educational practice as well as facing regular evaluation and often public scrutiny. Nevertheless, investment in and developing understanding alongside student teachers creates the foundation for future collaboration. One approach would be to provide research training opportunities that include student teachers as well as in-service teachers, teacher educators, post-graduate researchers and school leaders. This approach strengthens a shared sense of professional identity in which all participants learn more about the who, what, why and how of research activity within and beyond their particular community.

Another important consideration in the development of equal partnerships is to raise the profile of teacher involvement by, for example, establishing collaboration through official university channels and holding regular events for sharing knowledge and listening to educational stakeholders (see Guideline 2). Developing the coordination of research and development activities can also help develop partnerships by avoiding, for example, the one-sided, over-use of schools as data sources or venues for research projects rather than valued collaborators. Student teachers can help facilitate communication between school-based and university-based partners if they are involved in research and development projects. Coauthored book projects, such as the recently published *Co-created knowledge development in school: Where practice and research meet* demonstrate how new knowledge can be generated through school and university, teacher and researchers collaborations, in this instance developing practice-based research that contributes to professional development and school development.

Developing equal partnerships can require a cultural shift with regard to the role of research in university-school partnerships. This shift can be facilitated by improving communications between stakeholders, for example, regarding the research activities in different departments or units or identifying specific research groups or communities that have shared interests. Providing opportunities for meta-research into the relationship between practice, teaching and learning, and research at your institution/unit can help to build the bigger picture of educational development and awareness of the different kinds of activities and collaborations that belong to different communities. Moreover, increasing the transparency of research governance structures is an important cultural shift that creates opportunities for discussions with potential 'influencers' in the research ecosystem. Including school students and student teachers wherever possible, as well as local education authorities acknowledges the value of different educational stakeholders and the importance of engaging with different perspectives and educational expertise.

Conclusion

From the outset the RECITE project has sought to demonstrate how changes in governance structures and relationships can lead to the systematic co-creation of understanding and ongoing circulation of research between educational stakeholders. By 'governance', we mean the structures and relationships that determine what kinds of research are performed, and how the results are used. The Local Action Plans that underpin this research governance strategy provide examples of how different university partners have sought to collaborate with, and to learn from, a wide variety of educational stakeholders. We hope that the five guidelines

outlined here inspire and enable the ongoing development and circulation of research between a wide variety of educational stakeholders, contributing to the development of education for all.

References

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