

Support for research through the implementation of school-university institutional teaching collaboration initiatives

María José Latorre-Medina

University of Granada

Francisco Javier Blanco-Encomienda

University of Granada

Abstract

In recent years, numerous studies and experiences have been developed in the field of teacher education that promotes professional development. These include works that manage to create and maintain a network, a community of practice or other forms of collaborative work among teachers, whether from the same educational level or from different institutions and levels. Most of these are joint work experiences carried out around the practical component in initial teacher training in which a methodology is used that falls within the broad field of qualitative research. Although all these studies reveal a field of work in which the productive relationships among the university, the educational centers, and their community are evident, none have addressed the professional growth of teachers through bidirectional training exchange between public early childhood and primary education centers and the university. This is a new format or formula that has proven to be effective and that allows further progress to be made in the field of initial and continuing teacher training. Aware of the benefits derived from this, the University of Granada (Spain) launches an initiative in the 2020-2021 academic year with the implementation of the experimental program HERMES. The main purpose is to create networks and working groups between teachers from schools and universities to facilitate the implementation of joint training, innovation and/or research projects in the next academic years. The bidirectional training stays between the educational center and the university give the Program an innovative profile within our country. This paper focuses its attention on it¹.

Keywords: collaboration networks; research support; school; training exchanges; university.

1. INTRODUCTION

In recent years, numerous studies and experiences have been developed in the field of teacher education that promote professional development. These include works that manage to create and maintain a network, a community of practice (Rubio, Vilà, & Sánchez, 2018) or other forms of collaborative work among teachers, whether from the same educational level or from different

¹ Part of this paper has been developed in Latorre, M.J. & Blanco, F.J. (2022). From university to school and from school to university: A joint cooperation experience. In A. Burgos et al. (2022). *Integration of new methodologies/methods/examples of best practices in the pedagogy studies process* (pp. 15-27). Workshop at the Vilnius University, Lithuania. <https://hdl.handle.net/10481/78541>

institutions and levels (García & Barrios, 2019; Latorre, García, Bermúdez & Sánchez, 2021; Madrid & Mayorga, 2014; Martínez & Gil, 2014). Most of these are joint work experiences carried out around the practical component in initial teacher training (Madrid, Mayorga and Del Río, 2013; Mérida *et al.*, 2020) in which a methodology is used that falls within the broad field of qualitative research (e.g., action research, ethnography, biographical-narrative research).

Although all these studies reveal a field of work in which the productive relationships among the university, the educational centers, and their community are evident, none have addressed the professional growth of teachers through bidirectional training exchange between public early childhood and primary education centers and the university. This is a new format or formula that has proven to be effective and that allows further progress to be made in the field of initial and continuing teacher training. Reports of such an experience can only be found in the Autonomous Community of Aragon which, in 2019, and on an experimental basis, launched a pioneering training program entitled “HIPATIA” by which the professional development of teachers is facilitated through training exchanges, made possible by a collaboration agreement between the Department of Education, Culture, and Sport of the Government of Aragon and the University of Zaragoza.

Aware of the benefits derived from this, the University of Granada joined this initiative in the 2020-2021 academic year with the implementation of the experimental training and innovation program “HERMES”. This project came to life due to a collaboration agreement between the Provincial Directorate of the Ministry of Education and Vocational Training in Ceuta and the Faculty of Education, Economics, and Technology of Ceuta (University of Granada) and also places the focus on the field of professional development through training exchanges. Following in the footsteps of HIPATIA, these exchanges are intended to encourage the reflection of the participating teachers on the teaching practice developed in both contexts (school and university), share teaching methodologies, and update the scientific, pedagogical, and methodological knowledge of teachers from different institutions and educational levels.

2. FOLLOWING THE FOOTSTEPS OF HIPATIA

Three years ago, the Government of Aragon issued a resolution of February 7, 2019, from the General Directorate of Personnel and Teacher Training, which established an experimental basis for the “HIPATIA” training program in collaboration with the University of Zaragoza, that is, training for the professional development of teachers through training exchanges during the 2018-2019 academic year.

This is an agreement between the Department of Education, Culture, and Sports of the Government of Aragon and the University of Zaragoza, which aims to establish, on an experimental basis, the HIPATIA training program, a pioneering proposal at national level for the professional development of teachers through two-way training exchanges. These exchanges take place between public centers of Infant and Primary Education (CEIP), public centers for adults (CPEPA), rural grouped centers (ARA), rural centers of educational innovation (CRIE) and special education centers (CEE) and also the three Faculties of Education of the University of Zaragoza where teaching degrees are taught.

The main purpose of this agreement is to create networks and working groups between teachers from schools and universities to facilitate the implementation of joint training, innovation and/or research projects in the next academic year. The aim of these projects is to promote training and research for the professional development of university and schoolteachers in their own professional skills (scientific, didactic, methodological, digital, innovation, research and improvement, teamwork, management, and organization) that may lead to methodological changes in classrooms and reference centers (schools and universities).

3. COMMITTING TO HERMES

After assessing the potential of the predecessor program and the derived benefits for all involved—including teachers and educational institutions—the University of Granada joined this initiative in the 2020-2021 academic year with the launch of the experimental training and teaching innovation program HERMES.

3.1. Start-Up: Establishment of a Cooperation Agreement

On March 17, 2021, a collaboration agreement was signed between the Ministry of Education and Vocational Training, through its Provincial Directorate in Ceuta, and the University of Granada (Ceuta Campus) establishing, on an experimental basis, the "HERMES" training and innovation program: professional development for teachers through training exchanges.

This agreement aims to establish, on an experimental basis, the "HERMES" training and innovation program which, following in the footsteps of HIPATIA, also focuses on the professional growth of teachers through training exchanges. These exchanges will be bidirectional between the public centers of Early Childhood and Primary Education (CEIP) and the specific center of Special Education (CEE) of Ceuta and the Faculty of Education, Economics and Technology of Ceuta of the University of Granada, where the degrees in Early Childhood Education and Primary Education are taught.

In order to select the schools that wish to participate in the experimental program, the Provincial Directorate of the Ministry of Education and Vocational Training in Ceuta will publish an annual call for participation.

In accordance with this agreement, from the 2020-2021 academic year to date, two calls have been made, with the publication of their corresponding resolutions, for the participation of public Early Childhood and Primary Education Centers (CEIP), the Special Education Center (CEE) of the Autonomous City of Ceuta and the university Faculty of Education, Economics, and Technology at Ceuta.

3.1.1. Call for participation in the HERMES program during the academic year 2020-2021

The instructions that aim to regulate the call of the HERMES Program during its first year of operation, in its most experimental phase (academic year 2020-2021), specify the following:

- a) Two educational centers will be selected and will participate in this first call. A maximum of two teachers per educational center, who are career civil servants with definitive destination, may participate.
- b) A maximum of four university professors may participate, two per school.

3.1.2. Call for participation in the HERMES program during the 2021-2022 academic year

In the second year of implementation, instructions are published again in order to regulate the call for the "HERMES" Program during the 2021-2022 academic year. These instructions specify the following:

- a) Four educational centers will be selected and will participate in this first call. A maximum of two teachers per educational center, career civil servants with a permanent position, may participate.
- b) A maximum of eight university professors may participate, two per school.

3.2. Purpose of the Collaboration Agreement

Conceived and designed with the same purpose as the Aragonese agreement, the main purpose of this agreement is to contribute to the creation of connections and networks between schools and universities to generate joint innovation, research and/or action projects in the classroom. In addition, the observation of the management, planning, use of methodologies and organization of other centers during the exchanges can be a source of inspiration for implementing new teaching-learning formats that improve the quality of teaching offered in both institutions.

3.3. Participants

The centers and teachers wishing to participate in the HERMES Program must be accredited and recognized as internship training centers and internship tutors, in accordance with the provisions of Order ECD/1039/2017, of October 24, 2017. In addition, in order to be selected, they must have tutor internships to students of the Degrees in Early Childhood Education and Primary Education taught at the Faculty of Education, Economics, and Technology at Ceuta.

University professors from the Faculty of Education, Economics, and Technology of Ceuta who teach in the Early Childhood Education and/or Primary Education degrees and who intend to develop an innovation or research-action project or action in collaboration with the selected center may participate.

3.4. Content and Structure of the Program

HERMES is based on bidirectional training stays between participants from public schools and the headquarters of the University of Granada in Ceuta. The centers will exchange experiences in best practices of methodology, coordination, management, research, planning and organization.

The action of the Program consists of providing university teachers with the possibility of actively observing the work carried out in the classrooms of public schools. Moreover, it provides the teachers at these schools with the opportunity to observe the work of university

teachers with the aim of generating actions and/or joint research and innovation work that will result in an improvement in the learning of the students (of the CEIPs and the university) and the participating teachers.

According to the planning of the exchanges, a maximum of two university teachers will exchange the proposed center, observing the classroom work developed by the teachers, interacting, and collaborating actively, thus ensuring that they learn from each other. Subsequently, the teachers at that school (maximum two teachers per school) will take part in a training exchange at the University.

As an innovative feature, HERMES includes the delivery of a final report of the training experience. Once the exchanges are completed, this report will be made jointly by the teachers who have developed the same project and will include a brief assessment of the experience, detailing the objectives achieved, the degree of development of the action plan set and the future lines of collaboration and repercussions of such experiences.

3.5. Creation of a Selection, Follow-Up, and Evaluation Committee

The Hermes call for proposals also involves the creation of a Selection, Monitoring and Evaluation Committee, which will be responsible for evaluating the applications submitted in accordance with the criteria established in each call, the monitoring of the exchanges, and the final evaluation of the program.

3.6. Program Recognition and Certification

The participation of teachers from each center in the HERMES training and innovation program will be recognized by the University of Granada with 20 hours of training and two hours of lectures. As in HIPATIA, participating schools will receive by e-mail a graphic file of their participation that they can download and display in their schools, social networks, and websites.

The University of Granada, through the Vice Rectorate for Teaching, will issue the corresponding certification to university teachers, based on the report submitted, which must include, at least, a brief summary of the actions carried out during the training stay.

4. MAKING HERMES VISIBLE

All the joint and coordinated work actions that have been carried out to date by the teaching staff involved in the experience (university and external centers) are presented below. Although each of them was designed to achieve specific objectives, they all have certain outcomes in common: a more realistic and contextualized way of teaching in the university environment has been favored and it has been possible to take some of the advances generated by the university research and transfer these to the education center.

4.1. Examples of School-University Teaching Collaboration Experiences for the 2020-2021 Academic Year

Within the HERMES Project, four school-university joint work proposals were successfully carried out in the 2020-2021 academic year, which focused on the following topics:

- a) First experience of teaching collaboration entitled *"Encouraging reading Children's and Young People's Literature and the School Reading Project"*. This is an innovation and action-research project based on the observation, planning, and development of methodologies to encourage reading through children's and young people's literature (LIJ) within the framework of the Center Reading Plan. This line of action, in the area of Didactics of Language and Literature, has allowed future teachers to learn about successful methodologies for encouraging reading and developing the reading habit, as well as specific teaching practices focused on children's literature and encouraging reading.
- b) Second experience of teaching collaboration entitled *"How to teach Mathematics in Primary Education: from planning to reality"*. This project, developed in the area of Didactics of Mathematics, has allowed future teachers to become familiar with, firsthand, the way in which the teaching practice is really worked on and developed, day after day, in mathematics sessions in an educational center. This includes how classes are programmed and organized, the timing, the sequencing of explanations and activities, the methodology followed, materials and resources used to facilitate understanding of the area, evaluation, typical responses, and behaviors of students at that stage, frequent situations, possible difficulties that may arise and how to deal with them.
- c) Third experience of teaching collaboration entitled *"Classes for EmocionArte"*. This project essentially consisted of creating virtual exhibitions in the university classroom with some of the works developed by the children's education students of the participating educational center, creating bidirectionality in learning and synergies in the objectives developed. In general terms, the project, which revolved around the area of Didactics of Social Sciences, has made it possible to work on and promote emotional intelligence through art (identifying and relating different emotions with artistic works) in future teachers and early childhood education students.
- d) Fourth collaborative teaching experience entitled *"Inclusive learning through physical education in primary schools"*. This innovation project, which revolves around the area of Didactics of Musical, Plastic, and Bodily Expression, was conceived to raise awareness among future teachers and students of primary education in the field of educational inclusion. Among the results obtained is the design of an inclusive didactic unit, with an innovative character, within the programming of the subject Physical Education, entitled "The guides of the colors", which is aimed at the visually impaired students at the participating school.

4.2. Examples of School-University Teaching Collaboration Experiences during the 2021-2022 School Year

In the last academic year, three proposals for collegial work on the following topics are also being successfully developed:

- a) First experience of teaching collaboration in environmental education and sustainability. Still in the development phase, this project, framed within the area of Zoology, aims to familiarize future teachers and students of primary education with a series of educational practices and innovative teaching-learning methodologies within the field of natural sciences and their didactics.
- b) Second experience of teaching collaboration focused on ICT and its didactic application. Also in the development phase, this project, which falls within the area of Didactics and School Organization, focuses on the knowledge and application of computational thinking strategies in the infant and primary education stages, the knowledge and participation in the European eTwinning initiative and the educational center involved. Finally, the project focuses on the knowledge and development of educational actions within the "Classroom of the Future" project implemented in the participating center.
- c) Third experience of teaching collaboration entitled *"Teaching family diversity and its implications for teaching practice: an experience of teaching collaboration between CEIP Valle Inclán and the Faculty of Education, Economics, and Technology at Ceuta"*. This project involves aspects of training, innovation, and research, and is located within the area of Didactics and School Organization. This project revolves around the teaching and learning process of an issue of current concern among many teachers of early childhood education, that is, family diversity. Is the school prepared to deal with family diversity? What is the treatment of family diversity in early childhood classrooms? How do future early childhood education teachers evaluate the academic training they have received on family diversity? Will they know how to deal with it pedagogically in their future classrooms? These have been the key axes and questions that have shaped the lines of collaborative work. Among other sources of evidence, unpublished pedagogical materials have been created for the educational treatment of family diversity in infant classrooms in order to include, make visible, and reinforce this concept in the school environment.

5. CONCLUSIONS

From our knowledge and professional involvement in the HERMES Project in Ceuta (University of Granada, Spain), we encourage those responsible for the university community to get involved in these experiences. Any initiative undertaken in this line would be of great interest for the improvement of teaching practice and professional development of teachers, of any institution and at any educational level.

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