

## Academic Science and Research Practice in Waldorf Teacher Education

Waldorf teacher education is offered worldwide in a broad range of programs. Many of these are accredited, and maintain a high level of scientific rigor in their approach. This has not only to do with the discursive and self-reflective, trans-disciplinary approach taken in teaching the concepts and methodology of Waldorf education, but also in the research carried out by faculty members, which sometimes involves direct participation of student teachers.

Coursework in such programs involves not only an introduction to methods and contents related to school subjects, but also foundation studies in anthroposophy and comprehensive art practice. When specifically anthroposophical and Waldorf educational content is addressed, it is done in a way which takes account of established scientific methods and research results. In courses, this means not only referring to Rudolf Steiner's writings and corresponding secondary literature, but also contextualizing and reconstructing anthroposophical ideas and concepts in relation to the disciplines of natural sciences, philosophy, psychology, education, and social sciences as well as arts-based research approaches. When bridges can be built between different – and at first glance, seemingly incompatible – cognitive cultures, insights can arise that are not only valuable within a Waldorf cultural context, but are also enriching to more mainstream perspectives.

A contemporary approach to Waldorf teacher education demands that anthroposophical concepts (such as the "I") not be accepted as dogmatic contents of knowledge or even faith, but approached pheno-practically, i.e. by researching direct experiences and forms of mental activity. As such, concepts are used as working hypotheses for one's own observations and pedagogical interactions. Here, it is critical that lecturers focus on content that they are able to acquire through their own experience – according to scientific methodologies – and that they meaningfully set their own insights in relation to methods and research results from related academic disciplines.

Another central aspect of academic Waldorf teacher education is research and publication on themes relating to anthroposophy and Waldorf pedagogy. Here, three types of research can be roughly distinguished. The first type uses established methods of empirical research to examine educational practice in Waldorf Schools (e.g. Barz & Randoll 2007, Liebenwein 2012). The second type of research involves an examination of anthroposophy that takes critical viewpoints into consideration. Examples include Alanus University's "Expert Colloquia", in which critics of anthroposophy are invited to openly debate their arguments. Publications that address academic criticism of anthroposophy also fall into this category (e.g., Wagemann 2013). The third type of research focuses on topics and questions that are discussed in a broader academic context, demonstrating how methods and concepts deriving from anthroposophy cast new light on the subject matter.

Students can be involved in all three types of research, either in practice exercises, or – ideally – taking an active part in faculty research projects. This was the case, for example, in a research project in Mannheim that investigated perceptual reversals. Students were challenged to carry out a voluntary change of perception on



an image that could be perceived in two different ways, and to observe the mental activities that allowed them to do so. The results, which cast new light on the question of the relationship between mental and neuronal realms (the "mind-brain" problem) were presented in international publications, but also analyzed and discussed in coursework on Rudolf Steiner's epistemology (Wagemann, Edelhäuser & Weger, 2018). Another research project, based on participatory observation, grounded theory, and methods of narrative interviews, involved students in planning joint recreational activities for people with and without disabilities. Students acquired research data, and transcribed, sequenced, paraphrased, and interpreted interviews made with the persons involved (Drechsler, 2019).

The involvement of students in research projects helps them develop an exploratory attitude in dealing with knowledge, as well as an awareness of themselves as exploratory beings seeking to understand the world. In both of the above examples, the human being is both researcher and the subject being researched. Active participation in such research leads to an understanding of human consciousness not simply as reflective, but as an active and participatory agent within a scientifically based exploration of the world.

Johannes Wagemann Mannheim, Germany

Barz, H., & Randoll, D. (Eds.). (2007). Absolventen von Waldorfschulen [Waldorf school graduates]. Wiesbaden, Germany: VS Verlag für Sozialwissenschaften.

Liebenwein, S., Barz, H., & Randoll, D. (Eds). (2012). Bildungserfahrungen an Waldorfschulen. Empirische Studie zu Schulqualität und Lernerfahrungen [Educational experiences at Waldorf schools. Empirical study on school quality and learning experiences]. Wiesbaden, Germany: VS Verlag für Sozialwissenschaften.

Drechsler, C. (2019). Begegnungs-Räume. Begegnung und Beziehung in Inklusionspartnerschaften [Places of meeting. Encounter and relationship in inclusive partnerships]. Oberhausen, Germany: Athena Verlag.

Wagemann, J. (2013). In welchem Sinne kann ein Idealismus objektiv sein? [To what extent can idealism be objective?]. Research on Steiner Education, 3/2, 132-138.

Wagemann, J., Edelhäuser, F., & Weger, U. (2018). Outer and inner dimensions of the brain-consciousness relation: Refining and integrating the phenomenal layers. Advances in Cognitive Psychology, 14(4), 167-185.