Empirical research on Waldorf education

Pesquisa empírica sobre a pedagogia Waldorf

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ABSTRACT

Waldorf education began in 1919 with the first Waldorf School in Stuttgart and nowadays is widespread in many countries all over the world. Empirical research, however, has been rare until the early nineties and Waldorf education has not been discussed within educational science so far. This has changed during the last decades. This article reviews the results of surveys during the last 20 years and is mainly focused on German Waldorf Schools, because most investigations have been done in this field. Findings are reported with respect to the following central aspects of Waldorf education: the holistic and integrative approach, the self-governance in the organization of the Waldorf schools, the Waldorf curriculum, and the principle of class teachers from 1st to 8th grade. Furthermore, Waldorf education also provides its own unique teacher training. All of these aspects have been explored and evaluated from different points of view and with different methods. The results show strengths as well as weaknesses of Waldorf education in the daily practice in schools, which indicates the kinds of challenges Waldorf education will have to face in the upcoming decades. The authors themselves have contributed in several investigations to the field of Waldorf education.

Keywords: Waldorf education; Waldorf teacher training.

RESUMO

A educação Waldorf teve início em 1919, com a primeira escola Waldorf em Stuttgart, e atualmente é muito comum em diversos países por todo o mundo. Entretanto, as pesquisas empíricas têm sido raras até o início da década de 1990 e a educação Waldorf não tem sido debatida nas ciências educacionais desde então. Isso tem mudado durante as últimas décadas. O

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presente artigo revisa resultados de pesquisas conduzidas nos últimos 20 anos e concentra-se principalmente em escolas Waldorf na Alemanha, pois a maior parte das investigações foi conduzida nesse contexto. Os achados são relatados em função dos seguintes aspectos centrais da educação Waldorf: a abordagem holística e integrativa, o autogoverno na organização das escolas Waldorf, o currículo Waldorf e o princípio de professores de classes entre a 1ª e a 8ª Série. Além disso, a educação Waldorf também oferece formação de professores específica. Esses aspectos têm sido explorados e avaliados por diferentes perspectivas e métodos. Os resultados ressaltam forças bem como limitações da educação Waldorf na prática escolar cotidiana, apontando os tipos de desafios que a educação Waldorf precisará enfrentar nas próximas décadas. Os próprios autores colaboraram em várias investigações no campo da educação Waldorf.

Palavras-chave: educação Waldorf; formação de professores Waldorf.

Introduction

In March 2015 the Bund der Freien Waldorfschulen² counted 234 Schools in Germany and 1,056 Schools worldwide across 61 countries³. Although the number of Waldorf Schools has increased worldwide since 1950 (see HILLER, 2007), empirical research projects were still rare until the early nineties. As consequence, Waldorf education has not been discussed within education science so far (BOHNSACK; KRANICH, 1990; PASCHEN, 2010). This has changed during the last two decades. In a Meta research project (BÖHLE; PETERS, 2010, 2011) almost 100 empirical studies concerning Waldorf education were found. In this survey only projects within the period 1990 to 2009 were considered. Most of these investigations, 72 in number, had been published in the German language. This article will therefore be mainly focused on the results of the German publications.

Especially in Germany Waldorf Schools have a long tradition and experience with respect to their pedagogical work, which may be characterized by the following representative aspects for Waldorf education (see RANDOLL; VEIGA, 2013):

- a social and integrative approach;
- self-governance based on collegial teamwork;
- the Waldorf curriculum:
- 2 See: http://www.waldorfschule.de (last access: March 4, 2015).
- 3 See: http://www.freunde-waldorf.de (last access: March 4, 2015).

- a class teacher until the 8th grade;
- Waldorf teacher training.

This article will review empirical results from the last 15 years with respect to the five aspects mentioned above (FRIELINGSDORF, 2012; RANDOLL, 2010). Findings showing the productivity of Waldorf Education will be presented as well as results showing the problems and challenges on the other hand.

Social and integrative approach in Waldorf Education

Rudolf Steiner (1976) had the intention to initiate a School, in which parents with an academic background as well as parents who belong to the "working class" could find a place where their children would learn together. Especially in Germany, however, the proportion of parents with an academic background is comparably high among Waldorf parents (LIEBENWEIN; BARZ; RANDOLL, 2012; BARZ; RANDOLL, 2007; ULLRICH, 2009). Therefore, it is not surprising, that the percentage of Waldorf students graduating with an Abitur (High School diploma) is much higher than the average in German schools (BARZ; RANDOLL, 2007). According to the recent Waldorf student study about 70% of the Waldorf students strive for the Abitur (LIEBENWEIN; BARZ; RANDOLL, 2012). Furthermore, the percentage of students with a migrant background within Waldorf Schools (16.4%) is much less than that found in public schools by Baier and Pfeiffer (2005).

Taking into account that Waldorf Schools do not receive a complete financial funding by the government, which public schools do, Waldorf Schools in Germany cannot be blamed for leaving the "integrative policy" out of their own intention. In this context, an integrative initiative with a double qualification should be mentioned (SCHNEIDER; ENDERLE, 2012), where a job training for those students is offered, who do not go for the Abitur. Financial support, however, turns out to be a crucial point for these initiatives, because the government based support is not sufficient and needs to be extended by other founders (BRATER; HEMMER-SCHANZE; SCHMELZER, 2008).

Accordingly, Waldorf Schools are sometimes regarded as schools for the elite, at least in Europe. In a study asking parents' motives for choosing a Waldorf School for their children, Barz and Randoll (2007) found the following intentions⁴:

4 The answers given to an open question in a questionnaire and they were quantified after constructing categories.

- the special pedagogical background (46.3%);
- bad experiences in public schools (19.3%);
- the anthroposophical background (11.3%);
- tradition within the family (for example: siblings or parents went to Waldorf Schools);
- recommendations (4.7%).

Waldorf Schools therefore are an important alternative for parents, who are looking for an educational context, which they perceive as not being available in public schools. The findings from Keller (2008), that 40% of Waldorf students are lateral entrants, also underline this point of view.

On the other hand, it can be discounted, that the German Waldorf Schools are a specialist training ground for anthroposophists, as it was posited by Prange (2000). Indeed the percentage of Waldorf parents with an anthroposophical background is very small and furthermore declining (EBERTS, 2007). Moreover, according to the survey of Waldorf alumni (BARZ; RANDOLL, 2007) students regarded their own schools as open and tolerant toward all world religions.

Self-governance

Self-governance is a special property of Waldorf Education⁵. Ullrich and Idel (2012) point out that self-governance is based on Steiner's idea of social threefolding. With respect to the organization of Waldorf Schools this implies the absence of a director or other hierarchical structures. Furthermore the whole faculty is engaged when decision making concerning pedagogical, financial and organizational questions is done. Wienert (2003) also describes the structure of the weekly conferences in a threefolded way, as there is a pedagogical, technical and internal part of the conference. Self-governance has to be distinguished from grassroots democracy; the main idea is to foster the teachers' autonomy for their own classroom activities. Therefore pedagogy and organization should be in the hands of the same person. This empowers teachers' influence and participation with respect to the whole school, which in turn leads to a stronger feeling of coherence and self-efficacy. Though this requires additional effort and work that teachers have to cope with. On the other hand, it can be seen that the arising autonomy from this practice strengthens their resilience (PETERS, 2013).

⁵ Self-governance is also part of the organization in "Free Alternative Schools" (Freie Alternativschulen).

Findings in the Waldorf teacher survey (RANDOLL, 2013), which was based on 1,807 questionnaires and several group interviews, unveil further aspects of self-governance, which have to be rated as critical. From the teacher perspective the following crucial aspects have been addressed:

- decision making shows not enough efficiency;
- exchange of information is not always sufficient;
- subgroups within the faculty do not participate in the weekly conferences:
- communication and agreements often do not have enough transparence;
- opinion leader sometimes has strong influence in the faculty.

Self administration also requires competencies with respect to personal management and communication – besides the pedagogical aspects. Therefore, it seems to be necessary to delegate at least some crucial decisions to a group of experts who have the competence for the upcoming task. In the so called "Mandate Model", which is already practiced in an increasing number of schools, a practical approach to this idea can be seen. The evaluation of this model (RANDOLL, 2012) shows an advantage for this kind of practice. On the other hand, there are also many schools, in which the "classical model" of self administration is practiced very successfully. However, this can certainly be related to the competencies of the acting personalities finally. As a conclusion, the recommendation can be given that professionalization with respect to personal management and organizational development should be taken more seriously into account.

Waldorf curriculum

In the Waldorf teacher survey (RANDOLL, 2013) several open questions were asked concerning the teachers' motives for choosing Waldorf education. The central motives were – besides the fact that most teachers want to support the students' development – certain aspects of Waldorf education like the curriculum and the holistic approach. Though Steiner himself did not develop a Waldorf curriculum, he gave many hints and impulses during the faculty meetings in the first Waldorf School, which were systemized by Stockmeyer (1976). Two recent publications concerning the curriculum should also be mentioned and the first is: "Entwicklungsaufgaben und Kompetenzen" (GÖTTE; LOEBELL; MAURER, 2009); the other is a new edition of the Waldorf curriculum by Richter (2010). One central idea within Waldorf Education is that emotional and personal de-

velopment is a fundament for a healthy growth of the intellect. Therefore, class teaching passes through the psychological levels of will, emotion and thinking in order to lead the students from "hand to heart" and from "heart to mind". The importance of crafts and arts arise from this orientation also.

Various studies indicate that Waldorf students feel a stronger identification with the content of the teachings as students in non-Waldorf public Schools (LIEBENWEIN; BARZ; RANDOLL, 2012; BARZ; RANDOLL, 2007; RAN-DOLL, 1999). Waldorf students do not get their learning motivation from grades and other certifications based on achievements. By contrast, they are more interested in the subject and experience more meaningfulness in the teachings. According to their own statements, they also go through a positive development of their personality with respect to creativity, self esteem and tolerance among other aspects. Furthermore, the phenomenological oriented approach in nature science has a positive impact on a deeper understanding - besides some deficiencies with respect to methodical and didactical techniques (see ULLRICH, 2008). For example, the PISA results in Austria in 2006 suggested a better understanding in physics among Waldorf students (WALLNER-PASCHON, 2009). On the other hand the artistic orientation of Waldorf education has the effect that there is an over-average number⁶ of graduates from Waldorf Schools finding their jobs in artistic and therapeutic professional groups (BONHOEF-FER; BRATER; HEMMER-SCHANZE, 2007). Further on, student-teacher relationships are more cherished in Waldorf Schools, from students and teacher perspective as well, which is due to the absence of grades, the variety of social activities (theatre projects, class trips and monthly presentations) and, last not least, probably also to the teachers' professional ethos. As consequence it is not surprising that Waldorf students show a higher identification with their Schools than students from other public Schools.

Besides these positive findings a number of critical results have to be quoted, too. For instance, the support using private coaching is much more frequent among Waldorf students in comparison to students of other public Schools (LIEBENWEIN; BARZ; RANDOLL, 2012; BARZ; RANDOLL, 2007; RANDOLL, 1999). Asked for reasons, students state gaps in earlier classes, missing abilities and the method of teaching as well (LIEBENWEIN; BARZ; RANDOLL, 2012). Subjects to which this applies include, above all, mathematics alongside foreign languages. With respect to the reasons for this, only hypothesis can be given: High expectations of parents are just as possible as the fact that students who are able to graduate by Abitur within the system of Waldorf Schools would not have the chance to achieve the same level of

6 Compared to the German Mikrozensus.

graduation in other public Schools. The latter aspect can be underlined by the fact that private coaching is widespread among lateral entrants.

Further critical aspects are:

- Waldorf students experience a lack of performance requirement and complain about insufficient feedback for their personal efforts;
- Classroom teaching is focused on the academically weak students, which leads to a mental understimulation among other students. 38% of students in the students group from 9th to 12th grade feel unchallenged frequently according to the survey of Liebenwein, Barz and Randoll (2012);
- Many Waldorf students criticize the lack of theoretic retrievable knowledge as well as the fact that they did not learn how to learn on their own;
- Waldorf students give a critical feedback with respect to achievements in foreign languages;
- Waldorf students do miss references to actual social topics, especially with regard to politics and history;
- On the other hand, sports, politics and natural sciences do have the importance and deepening as they should have from the students' viewpoint;
- Many students do not experience the coherence of Eurhythmy (LIE-BENWEIN; BARZ; RANDOLL, 2012; BARZ; RANDOLL, 2007; RANDOLL, 1999).

It is obvious that quality of classroom teaching is a topic. With respect to methodical training researchers note that especially the variety of different didactical approaches is missing in classroom teachings (see ULLRICH, 2008). Also according to Liebenwein, Barz and Randoll (2012) teacher-centered is still common in Waldorf Schools.

German Waldorf Schools have to balance two aims: the Waldorf curriculum and the graduation in form of the Abitur. In order to fulfill the second aim an adaption to the curriculum of other public Schools is necessary, because the guidelines are given by the government. Not least because many Waldorf students (or parents) strive to attain the Abitur as a door opener to university, meaning that Waldorf Schools have to cope with this balance of two different curricula. Although predominantly high School teachers are faced with this problem, it can be easily seen that balancing the curricula requires a good communication between the teachers of high School, middle School and lower School. In fact, this often does not work out in the pedagogical practice in Schools. In the Waldorf teacher survey (RANDOLL, 2013), in which about 26% of all German Waldorf teachers participated, a difference between the younger and older generation of Waldorf teachers could be seen. The older teachers are closer connected to Anthroposophy and to tradition (for example the principle of class teachers

from 1st to 8th grade and a critical position with respect to an academic teacher training). Younger teacher are open to reforms and new ways, but they often fail in realizing their ideas against the tendency to tradition (RANDOLL, 2013).

Class teacher principle

During the first 8 grades in Waldorf Schools students start the day at School with their class teacher having so called main lessons (approximately two hour in the morning with one subject over a period of three or four weeks). The structure of main lessons is also common in high School teaching, except for the fact that beginning with grade 9 a specialist teacher will teach the block while the class teacher has to cover many different subjects. Besides they often teach another subject, which does not appear during the main lesson blocks (as sports, arts and eurhythmy). This implies that students will spend a lot of time with their class teachers (KELLER, 2012). Class teachers, therefore, are not only supposed to do a lot of preparation, but they also have to maintain a fostering relationship to each of their students. Grasshoff, Höblich, Stelmaszyk and Ullrich (2006) as well as Helsper (2007) have done several case studies in order to explore the personal matching between students and teachers at the end of the 8th grade, especially with respect to the polarity of closeness and distance. Unsurprisingly they discovered both opportunities and risks associated with this approach. Opportunities exist in the fact that students experience continuity and emotional security (see also IDEL, 2007). On the other hand, the close and intense relationship between the class teacher and his pupils can be crucial for students when the personal matching is not free of conflicts.

Actually a discussion has been initiated by the question of whether a period of 6 years might be more appropriate with respect to the fact that today's students bring along other leaning attitudes. Therefore some Schools have begun to integrate more high School teachers during the main lessons in 7th and 8th grade. Nevertheless, the period of 8 years is still favored among teachers and students as well. 65.1% agreement among students from 9th to 12th grade and 74% approval from alumni have been found by Liebenwein, Barz and Randoll (2012) respectively by Barz and Randoll (2007). In general teachers also support the traditional class teacher principle. In the Waldorf teacher survey 76.3% voted for a period of 8 years (RANDOLL, 2013). However, among students a range of experiences can be found: On the one hand three of four students confirm from a retrospective point of view that classroom teachings were interesting and they attest a good preparation with respect to their class teachers. On the other

hand, only 38.8% of the students liked the fact of having so many subjects with the same teacher. More than 50% of the students would have preferred more classes with specialist teachers.

Further findings have been taken from an exploratory study during the term 2011/2012, which is based on a data set of 423 students (GRAUDENZ; PETERS; RANDOLL, 2014). In this investigation the 8-year class teacher system also came in for more approval than disapproval from the Waldorf students. The reasons that caused the class teacher experience to be seen in retrospect as positive were: a good teacher-pupil relationship, involving a high degree of mutual trust; a teacher who meets the students' wishes and needs in an open and flexible way. Looking more closely at the results, however, the opinions of the students go through many modifications. The main aspects were the following ones:

- Students spoke of being "over-protected" by their class teacher right into class 8:
- Since most Waldorf schools are single-streamed, the students are usually dependent on one central figure during the class teacher period;
- By class 8 at the very latest the class teacher's ability to attend to the students' learning needs and to attain the requisite standards of achievement is no longer adequate at least from the students' point of view;
- According to students, lessons even in class 8 all tend to be teacher-dominated too often, while opportunities for group work or forms of self-motivated study are fairly rare;
- Many students did not feel well prepared for the transition to upper classes.

As a conclusion, it can be said that the class teacher system is an important and established aspect of Waldorf education. It ensures stable teacher-pupil relationships and emotional security over a long period of time. The class teacher himself has to face a lot of challenges and demands during this time. Therefore it is not surprising that class teachers often feel more burdened than other Waldorf teachers (RANDOLL, 2013; PETERS, 2013). So it seems worthwhile to discuss the possibilities of an earlier integration of High School teachers at least in the 8th grade in order to improve the transition to upper classes.

Waldorf teacher training

In Germany the association of Waldorf schools offers a special teacher training. With 230 Schools (in 2012) each school contributes with about 37,000

euros. There are different possibilities to absolve the training⁷, full time and extra occupational. Teachers who accomplished their training in Waldorf specific seminars without having a university degree receive authorizations for teaching restricted to Waldorf Schools. According to Rohloff (2011) about 40% of Waldorf teachers do not have a Waldorf specific training, which raises the question of how Waldorf education can be conducted in an appropriate way under these circumstances. In the Waldorf teacher survey (RANDOLL, 2013) 46.3% of Waldorf teachers stated to have a university degree plus a Waldorf specific training. other 21.5% absolved the teacher training via an in-job training. Another notable finding in this context is that only one in two teachers with Waldorf specific training claimed to have a sufficient preparation for the profession as a Waldorf teacher. On the other hand, among the Waldorf teachers with a state examination⁸, which includes a one year traineeship at least, the ratio is better than two thirds (RANDOLL, 2013). This indicates the conclusion that besides technical qualification concerning the subject and the Waldorf ethos teachers also need a professionalization with respect to a questioning understanding of science.

Finally, Waldorf colleagues are threatened by overaging. The average age in 2012 was 49.2 years and the peak in the distribution of all given ages can be marked at 55 years (RANDOLL, 2013). There is, as consequence, an immense challenge to find a sufficient number of young and well trained Waldorf teachers in the next decade. Adaptation of salaries to public standards could be one helpful step, because the willingness among younger aspirants to make sacrifices due to their ideals is less strong than within the older generation. Another demand can be seen in a stronger orientation towards social reality and nowadays children's experience realm (STÖCKLI, 2011).

Conclusion

Outcomes and efficiency of public Schools in Germany have been criticized widely. Städtler (2010) even talks about a bluff concerning education and he proposed reducing/downsizing the curricula by 10%. The author presents the following five (unrealistic) hopes underlying the educational system in Germany:

- We leave School with a reliable knowledge that will be valid for many years;
- 7 For closer description see: <www.waldorfschuleinfo.de>.
- 8 In Germany the regular way for becoming a teacher is the graduation via "Staatsexamen".

- During School knowledge is growing in an organic way, step by step;
- All disconnected facts will combine (in a miraculous way) to something we call "education9";
- Drill at School will lead to a transfer of competences;
- School will prepare us for life somehow.

These false hopes imply deficiencies within our system of education, to which Waldorf education could give answers, because they look back on a long experience dealing with a holistic process of leaning and personal development. They establish a coherent learning environment, in which students – as mentioned above – appreciate teaching as meaningful. Therefore is would be desirably to open these "treasures" to a wider public field. But there is one condition for the Waldorf side, too: Academic levels of educational science have to be accepted as a basement for a constructive dialogue. As an example the institute for teaching methodology at Kassel¹⁰ can be mentioned. Zech (2012) analyzed the Waldorf curriculum with respect to history and presented an approach, which gives a meaningful combination of the Waldorf curriculum with the concepts of German Public Schools.

If Waldorf education wants to be regarded as an alternative to public education, it is necessary to face the critical questions of educational science. This attitude could be a basis for a transparent articulation of the Waldorf specific experience without presuppositions. If Waldorf education can present evidence on a scientific level, a dialogue can be established and the transfer of Waldorf achievements into the public School system becomes possible. In order to proceed on this path, it would not be necessary that Waldorf education abandon its spiritual background.

Finally, some brief references will be given to surveys in other countries, because most of the findings presented so far were related to the situation in Germany. In England, Woods collected data of English Waldorf School with respect to subjects, structure, enrollment and other basic data (WOODS; ASHLEY; WOODS, 2005). For the United States, Mitchell, Baldwin and Gerwin (2005) and Mitchell and Gerwin (2007a, 2007b) published studies on Waldorf graduates. Further information about other projects can be found on the homepage of the "Research Institute for Waldorf Education¹¹" offering an online library. In Sweden, Dahlin also presented a survey questioning alumni (DAHLIN, 2007). This evaluation deals with former Waldorf pupils in higher education, the civic-moral competences developed by Waldorf pupils, how Waldorf schools

⁹ The German noun here is Bildung.

¹⁰ Institut f
ür Fachdidaktik.

¹¹ Available at: <www.waldorfresearchinstitute.org>.

care for children with learning problems, and questions concerning Waldorf teacher training. In Denmark, another alumni survey has been elaborated by Hansen (2003). Documents of these and further investigations can be found on the platform called Waldorf Research Educators Network ("wren")¹².

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