The Finnish Education as an Individualized Service System with a Reference to Students with Special Educational Needs

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The paper deals with some educational aspects of going to school in Finland concerning students with special educational needs/services. We proceed from empirical observation. Then, the general context is given to interpret the data and extend the observed added value of individualized educational support. The latter, in its turn, requires the identification of a special need and the existence of suitable educational options. These two pieces of information need to match optimally: early birds get the biggest harvest, and even if special education is never too late, the service needs become more challenging and the solutions — more expensive. The core of this complicated dual process is the decision making with more or less complete information of both the needs and the available palette of educational actions. The fundamental dilemma is to navigate between two poles: if a pupil is left out by such educational measures which could have helped him/her to become a full member of society and economy, we have a moral problem. If the economical-educational complex is not providing the best research-supported educational tools, we also have a pedagogical problem. However, it is not universally proved that full integration is the best way; neither is it proved that we need an entire set of segregated and specialized schools for several different kinds of special needs.

Keywords: special educational needs, school education reform, individual educational support

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Финское школьное образование как индивидуализированная система: акцент на детях со специальными образовательными потребностями

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В статье рассматриваются некоторые образовательные аспекты обучения в финской школе, касающиеся учащихся с особыми образовательными потребностями. Мы опираемся на эмпирическое наблюдение. Затем вводим общий контекст в целях интерпретации данных и определения индивидуальной образовательной траектории, что, в свою очередь, требует выявления конкретных потребностей и наличия подходящих вариантов обучения. Эти два направления должны быть оптимально интегрированы: успех приходит к тому, кто начал раньше. При этом, несмотря на то, что получение специального образования никогда не поздно, потребности усложняются, а их удовлетворение становится все более затратным. Суть этого сложного двойного процесса заключается в принятии решений в условиях наличия более или менее полной информации, как о потребностях, так и о доступной палитре образовательных мероприятий. Фундаментальная дилемма состоит в определении баланса между двумя полюсами: если ученик остался вне таких воспитательных мероприятий, которые могли бы помочь ему стать полноправным членом общества и экономики, мы сталкиваемся с моральной проблемой; если же, с точки зрения экономики и образования, не удается обеспечить лучшие, научно-обоснованные образовательные средства, мы сталкиваемся с педагогической проблемой. При этом нужно иметь в виду, что до сих пор не доказано, что полная интеграция детей со специальными образовательными потребностями является наилучшим способом заботы о них, равно как и не доказано, что оптимальным решением являлся бы полный набор специализированных школ для различных видов особых потребностей.

Ключевые слова: особые образовательные потребности, реформа школьного образования, индивидуальная образовательная поддержка.

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Introduction

The paper deals with some educational aspects of going to school in Finland concerning students with special educational needs/services. We proceed from empirical observation. Then, the general context is given to interpret the data and extend the observed added value of individualized educational support. The latter, in its turn, requires the identification of a special need and the existence of suitable educational options. These two pieces of information need to match optimally: early birds get the biggest harvest, and even if special education is never too late, the service needs become more challenging and the solutions — more expensive. The core of this complicated dual process is the decision making with more or less complete information of both the needs and the available palette of educational actions. The fundamental dilemma is to navigate between two poles: if a pupil is left out by such educational measures which could have helped him/her to become a full member of the society and economy, we have a moral problem, if the economical-educational complex is not providing the best research-supported educational tools, we also have a pedagogical problem. However, it is not universally proved that full integration is the best way; neither is it proved that we need an entire set of segregated and specialized schools for several different kinds of special needs.

The added-value of special education

As a part of Helsinki Longitudinal Study, a random sample of 1st graders was arranged in 2007. In 2016 the 9th grade was included until matriculation examination or graduation from vocational studies in 2021. In the beginning the number of subjects was 744. When they moved, for different reasons, to other schools in Helsinki, also their new classmates were assessed with our computer-supported tests, and, finally all the 9th grade students of Helsinki City were included (N=3 887). In longitudinal studies, there is inevitably some loss of individual trajectories (we have not estimated the scores for lost students). The status of receiving some form of special education services was registered during the years. The scales of the learning-to-learn framework [3] were designed for the 1st, 4th, 6th, 9th graders and for 16+ students (sampling was enough to combine the data from different grades). In the sets, cognitive scales (for all testing years) and scales measuring school-related attitudes, beliefs, and motivations (for all testing years, but not from the 1st grade) were performed. The teachers estimated the reading skill of their 1st grade students.

In the research [8], the empirical data are from 1st grade (cognitive tests, one of them is the Geometrical Dictation by Elkonin, Analogical Reasoning, and Visuo-Spatial Memory) and the 4th grade (attitudes: interest in learning, interest in having high school marks, and self-evaluation of the effort; a set of cognitive tasks, classified by factor analysis into reading, mathematical and reasoning skills — Piagetian Formal Operational Thinking, as an example). Also, the status of receiving any form (Tier 1, 2 or 3, see later) of special education, the gender and education of mother and father was registered (Fig. 1).

Cognitive scores estimated in the 1st grade, and the beliefs in the 4th grade, as well as cognitive outcomes in the learning-to-learn subdomains of reading, math and reasoning skills [8].

The model is constructed so that when searching for what happens with pupils in special education, we compare pupils with SEN with other students with similar scores but not receiving special education support. What can we see in the results? SEN pupils are more often boys (-.07), from less educated families (-.14), were less competent already at 1st grade (-.40), were less competent readers at the beginning of the school path (-.26), and had lower belief scores at grade 4 (-.11), but were able to do better than predicted in cognitive scales at grade 4 (+.12). This estimation (+0.12) is the added value of the work with SEN in Finland, and to speculate, it almost covers the lost impact of having less-educated parents and gender differences.

It may be relevant to point out that the added value result or any similar one does not mean that pupils with special needs and also pupils with the lowest performance levels would become “normal or average”. They are already less compe-
tent, and they remain so — they are not cured, in a sense. However, our evidence shows that all students develop during the school years, and there does not seem to be a negative interaction effect. The latter would mean that the differences between pupils in SEN and other pupils would increase. The evidence is given in the following figure (data from another large scale study, where we followed all students in the Greater Metropolitan Area from 7th to 9th grade; the output variable is a combined scale of achievements in Finnish and Mathematics, standardized in z-scores; \( N=\text{over 4000 pupils} \)).

The point is that the Standards (0) and the SENs (1; 11%) both acquire new competencies, but the group differences do not change (no statistical interaction). Furthermore, there is no question that pupils with special needs would not be less competent than the others. It shall also be considered that within standard pupils, there are many with the same values of variables as pupils with SEN, i.e., they have not been identified or for some other reasons are not given any of TIER 2 or 3 services.

**Finnish Education: some facts**

Finnish education for children under 16 years of age comprises a nine-year comprehensive basic education preceded by one year of pre-primary education. After completing basic education, approximately 97 percent of students continue their non-compulsory upper secondary education (Fig. 3).

**The new curriculum since 2016**

The schools started to implement the new curriculum in 2016—2017 at grades 1—6, followed by grades 7, 8, and 9 in fall 2017, 2018, and 2019 respectively. That means the first students who received the basic school certificate fully corresponding to the new curriculum graduated in spring 2020, that is, in

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**Source:** HELSINKI-LONGITUDINAL STUDY (2021) Vainikainen et al; From 1st to 4th

**Fig. 1.** Modelling development from 1st grade to 4th grade, paying the attention to being in special education in relation to gender and education of the mother.
the 21st century. The standard figure is given above in Fig. 3 with some facts. One can easily misinterpret a fact that Finland is a small country, but even if the scale matters, it does not determine the solutions of schooling of big countries to include segregated systems of special education.

**Special Education**

The current role of special education in Finland dates back to the origins of the comprehensive school reform in the late 1960s. The idea of the new comprehensive school as education for all abolished the earlier ability-based tracking and with teaching of the same curriculum for the whole age cohort in non-differentiated classes. The second major reform of Finnish special education took place in 2011, with a discrete amendment to the Law on Basic Education and the current National Core Curriculum, NCC of 2004, introducing a three-tier model based on a strong emphasis of early intervention [5; 6]. Reflecting the special education reform of 2011, the NCC 2014 includes a separate chapter on the support of learning and special education, based on principles of neighbourhood school attendance, early intervention, rules for decision-making, and continuous evaluation of the students’ response to intervention. A significant tool is the multi-professional Student Welfare Group (SWG), obligatory in every school [5; 11; 17]. There are reasons to believe that the well-established provision of support for learning and special education has contributed to Finnish students’ high achievement in the OECD PISA
The Finnish Education

- Basic education still mostly divided to two separate entities of
grades 1–6 and grades 7–9
- Age-cohort 60 000, together 540 000 students
- About 3000 schools
- Average expenses 8000 e/student

Processes: Intensified support (LP, Learning plan), Special support (ILP, Individual Learning Plan)
Practical tools like modified textbooks, computers, visualization, auditing.
Collaboration and roles: students, parent and guardians, teachers (preschool, class teachers, subject-teachers, special teachers); principals; and multi-professional student well-fare group.
In the way, the Finnish Model has been outlined, elements which are in common with the RTI-model applied in US-debates. We can use this Model to discuss the numbers and the flow of decisions on pupils and students when their placement/services are at least annually inspected (Fig. 4).

General support refers to measures that can be started easily, whenever a teacher observes some learning problems, or parents have noticed and informed teachers, or the pupil himself informs of the need for some support. The student-welfare group does not need to be informed of the Tier 1 support, but often it is discussed. However, Tier 2 and Tier 3 decisions are made in the SWG, where the rector/principal is the chairman. The numbers (% of TIER 1, 2 studies across the years [1; 7; 14]. Ministry of Education launched The Special Education Strategy, SES (Nov 2007), passed in the Parliament 2010, and still relevant, with some later changes. The main ideas of the strategy are the following:
- Inclusion, into the nearest school
- Intensified support of a new concept (every child is entitled; no special education referrals if not given this type of support first). This support is not just the work of special education teacher but every teacher (class-teacher, subject-teacher)
- Systematic, evidence-informed teaching and pedagogical evaluation
- Multi-professionality
- Co-teaching
- Flexible groupings, differentiation, and individualization of teaching
- Emphasizing pedagogical instead of psychological/medical.

These have been described also in this way:
Principles: Early intervention, Neighbourhood school, Inclusion
Structure: 3-step model (general, intensified, special support)
or 3 pupils) have been rather stable since introducing the new system. We have interpreted this to mean that the need is not much higher than the combined Tier 2 and 3 (compare 19%) prevalence; however, considering the wrong direction of the causal interpretation of statistics, the real need might be higher. Furthermore, the future needs cannot be really predicted before the fact, i.e., the observed problems of teaching in the 21st century framework, which required greater numbers of graduate students from secondary and even tertiary education. If the special education — perhaps named as individualized service systems [5; 7; 10] — is not reorganized to pay attention to all students, our educational systems may not answer society’s need for an educated and competent workforce.

The most general conclusion

We have characterized the Finnish educational system as the individualized service system [5]. In most general terms, the welfare state is in transition. It is acknowledged that schooling in the broadest sense — the acquisition of the capacity to study in primary and secondary school; the application and development of that capacity throughout all the phases of working life — is a necessary condition for employability, and through it, active and honourable membership in society. Furthermore, redistributive transfers from market “winners” to market “losers” — the insurance mechanism at the heart of the traditional welfare state — are diminishing in relative importance as a guarantor of decent social inclusion. However, it is still relevant as a component of social security. Finally, we concluded that the relatively recent but widespread idea of life-long learning for diverse students and the increasing emphasis on skill development for different groups at risk of exclusion from the labour market focus on the same aspect. A welfare state must provide effective enabling or capacitating services tailored to particular needs to equip individuals and families to mitigate risks against which they cannot be reliably insured.

References
1. Ahtiainen R. Shades of change in Fullan’s and Hargreaves’s models: Theoretical change perspectives regarding Finnish special education reform. Helsinki Studies in Education, no. 13. Helsinki: University of Helsinki, 2017. 212 p.
2. FNBE. National Core Curriculum for the Basic Education. Publications 2016:5. Helsinki: National Board of Education, 2016. 21 p.
3. Hautamäki J., Arinen P., Eronen S., Hautamäki A., Kupiainen S., Lindblom B., Scheinin P. Assessing Learning-to-learn:
A framework. Evaluation 4/2002. Helsinki: National Board of Education, 2002. 62 p.
4. Hienonen N. Does class placement matter? Students with special educational needs in regular and special classes. Helsinki Studies in Education 87/2020. Helsinki: University of Helsinki. 2020. 120 p.
5. Sabel C., Saxenian A., Miettinen R., Kristensen P.H., Hautamäki J. Individualized service provision in the new welfare state: Lessons from special education in Finland. Sitra Studies, 62. Helsinki, 2011. 70 p.
6. Thuneberg H., Hautamäki J., Ahtiainen R., Lintuvuori M., Vainikainen M.P., Hilasvuori T. Conceptual change in adopting the nationwide special education strategy in Finland. Journal of Educational Change, 2014. Vol. 15(1), pp. 37—56.
7. Thuneberg H., Vainikainen M. P., Ahtiainen R., Lintuvuori M., Salo K., Hautamäki J. Education is special for all: The Finnish support model. Gemeinsam leben, 2013. Vol. 21(2), pp. 67—78.
8. Vainikainen M.-P., Gustavson N., Koivuhovi S., Hautamäki J. The development of learning outcomes during the first four years in primary school. In Vainikainen M.-P., Räimä I., Hautamäki J. (Eds.). Learning-to-Learn in Helsinki City. A 9-year follow up. Helsinki: Helsinki Studies in Education, 2021, in print.
9. Vainikainen M.P., Hautamäki J. Three Studies on Learning to Learn in Finland: Anti-Flynn Effects 2001—2017. Scandinavian Journal of Educational Research, 2020, pp.1—16. DOI: 10.1080/00313831.2020.1833240
10. Vainikainen M.-P., Rimpelä A. Nuorten kehitysympäristö muutoksessa. Peruskoulujen oppimistulokset ja oppilaiden hyvinvointi erityyvällä Helsingin seudulla [The Contexts for Development are Changing: Learning Outcomes and Well-Being in Segregating Metropolitan Helsinki] Helsinki Studies in Education 363. Helsinki: University of Helsinki, 2015. 142 p.
11. Vainikainen M.P., Thuneberg H., Greiff S., Hautamäki J. Multiprofessional collaboration in Finnish schools. International Journal of Educational Research, 2015. Vol. 72, pp. 137—148.
12. Vainikainen M.P., Thuneberg H., Marjanen J., Hautamäki J., Kupiainen S., Hotulainen R. How do Finns know? Educational monitoring without inspection and standard setting. Standard Setting in Education. Springer, Cham, 2017, pp. 243—259.

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