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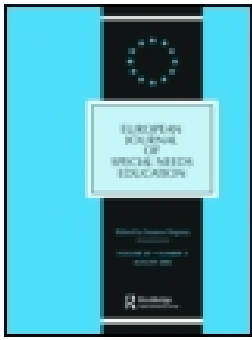


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## Tiered intervention: history and trends in Finland and the United States

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### ABSTRACT

This study explores the similarities and differences of relatively newly established tiered intervention models for the support of students with special needs in the United States (response to intervention) and in Finland (learning and schooling support). The current models in both countries consist of several tiers with fairly similar definitions. Despite the similarities, the history and political meaning of the tiered models are different in these countries. However, in both countries, part of the underlying political expectation is that the change to tiered intervention will promote inclusive education, but also diminish the number of special education students, and at the same time decrease the rising costs of special education funding. It is evident that there have been educational as well as political and financial objectives behind the restructuring in both countries. We conclude with a discussion on policy implications.

### ARTICLE HISTORY

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Comparative education; inclusive and special education; tiered intervention; response to intervention; Finland; the United States

### Introduction

For years, the educational options for children with special educational needs have been widely discussed both internationally and nationally. The main issue has been the inclusion debate; *should* and *can* we create an educational environment in which every child can attend the regular classroom (inclusion) and what (if any) is the role of separate special classroom or special school during the times of inclusion? These questions have not been completely solved anywhere, although in most Western countries, the trend has been towards more and more inclusive practices – at least in legislative and rhetorical levels (e.g. Jahnukainen 2015; Richardson and Powell 2011).

At the same time, another noteworthy topic has been the rapid expansion of the number of students served in special education. The international educational statistics have shown that the number of students receiving special education services has been growing steadily in almost every Western society (e.g. Richardson and Powell 2011). However, even though there is a substantial array of educational statistics available, the limitation of these data is that they describe only the *delivery* of the services, not the actual *prevalence* of impairment or disability. It means that based on the information available to date, researchers and policy

makers do not know exactly (a) why these expansions have occurred, (b) whether the statistics indicate actual growth in the incidence of disabilities or (c) whether and to what extent other contributing factors have affected the situation. More practically, this discussion is linked to the question of who is, and who is not, eligible to receive special educational services (e.g. Florian and McLaughlin 2008).

During the previous research approaches, the change of special education has been analysed using the available statistics and education policy papers (Graham and Jahnukainen 2011; Itkonen and Jahnukainen 2007, 2010). Based on the results from these both, national as well as international and comparative studies, it would be too naïve to think that the above-mentioned trend towards more inclusive environments would be explained simply by the general acceptance of the ideology of inclusion (see Thomas 2013). At the same time, it would be too simplistic to think that the expansion of the special education would be the result of changes in the student population only. It is evident that reforms in administrative policies affect directly the definitions and practices of special education. Quite surprising but highly powerful factors explaining the trend changes have been the relation of placement options and the funding allocations (e.g. Florian and McLaughlin 2008; Mahitivanichcha and Parrish 2005; Pijl and Veneman 2005). In general, it is evident that sometimes the funding creates monetary incentives to schools with more students with special education needs. For example, the data from the province of Alberta in Canada showed, that after implementing the severe disabilities reallocation, the number of students with severe disabilities (3-fold funding) started to increase and the number of students with mild/moderate disabilities (no extra funding) to decrease (Jahnukainen 2013; Wishart and Jahnukainen 2010).

In Finnish context, there was a steady annual increase of full-time special education students placed in the regular classroom since 2001 until 2010: the share of full-time integrated special education students doubled in ten years (from 15 to 30% of all full-time special education students, respectively) (Kirjavainen, Pulkkinen, and Jahnukainen 2014). This could be easily misinterpreted as the product of the popularity of the inclusion movement, but however, could at least partly explained by the new possibilities after the launch of the *Basic Education Act* (1998) to label a student already in regular class to a 'fulltime special education student' and still get the extra funding (Jahnukainen 2011). Starting from 1 January 2010, however, the funding allocation was reformed in Finland; the special needs students do no longer get any earmarked extra funding, instead the base funding is calculated using an estimate for organising special needs education (Kirjavainen 2010). This funding allocation restructuring was implemented as parallel to the enactment of the *Act for Amendment of Basic Education Act* (2010, enacted on 1 August 2011), which introduced a new, tiered frame for special needs education called as *Learning and Schooling Support*.

Those above-mentioned global issues of organising inclusive education, growing special education population and the notion of rising costs of special education funding offer an interesting context for a comparative investigation. In the global world of 'educational borrowing and lending' (see Steiner-Khamsi 2013), it is possible to see similar kinds of tensions as well as solutions in different school systems. A multi-tiered system of organising the additional support is one of those models which aim to identify difficulties early on, and securing the additional help for every student even with or without diagnosed disability, promoting the inclusive education and – at the same time – trying to diminish the number of special education students and also decrease the rising costs of special education funding.

## Rationale

The purpose of this article was to compare the background, implementation and the current structure of the tiered intervention system in Finland and in the United States. In this presentation, we are focusing on the structure and educational policy analysis of the recent reforms and on some observed outcomes and the discussions concerning these changes. We are not going into the details comparing the actual implementation or the assessment procedures for example.

One may question about rationale behind the comparison of these two relatively different countries in terms of the size and heterogeneity of population and the existing political culture. Although it is true that Finland with 5.4 million inhabitants is the size of some of the mid-sized states in US, the US federal level education policy makes the structural comparison to national model of Finland meaningful. For example, in the case of Canada, the comparison in the area of education is mostly meaningful at the provincial level only, because no Pan-Canadian school policy does exist (e.g. Jahnukainen 2011). The significance of this comparison is based on the fact that in the area of developing new ideas in special and inclusive education, the Americans seem to be highly influential also in international context (Richardson and Powell 2011). On the other hand, the case of Finland as an international high-flyer has gained lots of continuing international attention since the launch of the first results from the international school attainment test like Programme for International Student Assessment PISA 2000 (e.g. Douglas et al. 2012; Mitchell 2014; Sahlberg 2011). However, the significance of the unique Finnish model of organising the additional support for a large number of students without diagnosing them as having a disability has not been fully discussed in the context of what makes the difference in Finnish schooling. Our aim here is to give a detailed exploration of this in the context of contrasting the Finnish tiered system to the well-known response-to-intervention model in the United States.

## History and background of tiered intervention

It is not just a simple coincidence that the tiered or levelled systems have arisen almost simultaneously in several educational systems. In addition to Finnish and US models, at least in England, there is a model defined as *Graduated Response model* (Mitchell 2014), and similar systems have been under development in some Canadian provinces (McIntosh et al. 2011). It seems that rather than copying each other, these models have been influenced by developments in related disciplines like social and health sectors, where levelled prevention programmes are widely used.

Although preventative actions have been part of special educational thinking, Kauffman suggested probably one of the first direct applications of prevention in terms of restructuring the organising of the special education in US context. In his thought-provoking article (Kauffman 1999) about the prevention of emotional and behaviour problems, Kauffman presented the three levels of prevention (primary, secondary and tertiary prevention) in the context of special education provision. We would assume that this discussion did reflect the influences behind the creation of the response-to-intervention model (RTI) in the United States.

The prevention vocabulary is still very evident in post-IDEIA (*Individuals with Disabilities Education Improvement Act of 2004*) discussions, in particular in the contributions by the

group of researchers associated with Fuchs and Fuchs (e.g. Fuchs, Fuchs, and Compton 2012). In other words, it seems that in the US context the roots of the tiered systems are not actively denied. On the contrary, in the Finnish context, it seems that the connection with prevention thinking has been tried to embed, most probably to make a distinction into the medical and social services thinking and to support the pedagogical power (e.g. Graham and Jahnukainen 2011; Thuneberg et al. 2014). However, because the first author wrote a text himself for a publication by the Finnish National Board of Education (Jahnukainen 2005b; published slightly modified in English; Jahnukainen 2005a) based in the prevention levels and transition planning, just some years before the planning of the reform started, it is evident that there must have been some influences of the tiered prevention among the committee members working with the *Special education strategy* document published in 2007 (Ministry of Education 2007). This committee work did actually directly affect the formation of the *Amendments of Basic Education Act* (Thuneberg et al. 2014) as well as the State Funding reform (Pesonen et al. 2015).

In addition to the adoption of the prevention framework, there are other parallel global trends affecting special education arrangements. As it was already stated in the introduction, it seems clear that (1) the ideology of inclusive education, (2) the growth of special education student population and (3) the special education funding issues are all trends that altogether have led both the practitioners as well as the administrators and researchers to consider new solutions (Graham and Jahnukainen 2011; Richardson and Powell 2011).

As a conclusion, it seems strongly that neither the Finnish *Learning and Schooling support* nor the American counterpart *RTI* did rise up from out of the blue (see also Björn et al. 2015). Quite the contrary, we can see that the roots of current tiered models in the field of special education services are strongly based on the logic of prevention used a long time in the field of social and health administration (e.g. Shonkoff and Meisels 2000).

### Learning and schooling support vs. RTI

In the United States, the legal history of RTI is based on the *Individuals with Disabilities Education Improvement Act of 2004* (IDEIA 2004, PL 101-476), which gave for local education agencies an option to use an assessment of a student's RTI as an alternative to the evaluation of a student's ability – achievement discrepancy in the decision-making and classification in terms of potential learning disability (Kovaleski 2007). In other words, it gave an option to deliver early intervention for any student in need without 'wait to fail' (Vaughn and Fuchs 2003). To support this model, the 2004 reauthorised IDEIA permits a local education agency to use up to 15% of federal funds to develop and implement early intervening services to students 'who are not currently identified as needing special education or related services, but who need additional academic and behavioural support to succeed in a general education environment' (IDEIA 2004, 20 U.S.C. §1413[f][p1]).

The early intervention services (referred to as 'evidence-based practices' in IDEIA) are closely tied to the accountability movement. The 1997 reauthorisation of IDEA (*Individuals with Disability Education Act Amendments of 1997*, 1997) required that students in special education partake in state-wide exams. *No Child Left Behind* (2001) further required that teachers be highly qualified and that students with disabilities have access to core curriculum. Students in certain grades were tested using high-stakes exams and schools ranked based on their performance. Where the performance did not improve, the authority was

moved from the local agency to the state. Thus, the tiered model in the US is an evolution of special education moving from a civil rights frame to that of education and accountability (Itkonen 2009).

Since the passage of IDEIA, there has been a disagreement of how the RTI is linked to the special education eligibility and what part the traditional special education and special educators play in this system (e.g. Boynton Hauerwas, Brown, and Scott 2013; Fuchs, Fuchs, and Compton 2012). It is also implemented differently in different states and school boards (Boynton Hauerwas, Brown, and Scott 2013). Because it is not a mandatory model, also the number of tiers may vary, e.g. in Idaho, there are Title 1 special education services (small group instruction in general education) under level II, and under level III, they have targeted individual interventions in general education. Level IV replaces the traditional special education (Tier 3). (Callender 2007) However, it is evident that the three-tiered structure is the most commonly implemented. One of the most developed substance area in RTI is the reading instruction (e.g. O'Connor et al. 2013) but also support for mathematics as well as behavioural interventions has been under agenda. The latter area is closely linked to the popularity of positive behaviour support and interventions at the Tier 1 level (e.g. Epstein et al. 2008).

In Finland, the latest reform restructured the special education support system, currently called as *Learning and Schooling Support* to three levels: *general support*, *intensified support* and *special support*. These tiers are functionally equivalent to US Tiers 1, 2 and 3, but there is only one well-defined national model mandatory for all school boards. The reform started from the committee work of *Strategy of Special Education* (Ministry of Education 2007) and finalised during 2011, when the amendment of basic education law was enacted. In between, following the *Strategy of Special Education*, there has been an intensive period of in-service teacher training in every region of Finland. This massive in-service training was organised jointly by the special teacher education units of different universities and by the *Finnish National Board of Education* (see(see Thuneberg et al. 2014).

However, in Finland, there has been a long history of providing special support services also for other than students with actual disabilities (Itkonen and Jahnuainen 2010; Kivinen and Kivirauma 1989).<sup>1</sup> Already since 1970s, there has been available additional support without any administrative decisions in the form of 'part time special education' for anybody noticed to have any kinds of learning or behavioural difficulties. During 2001–2010, the coverage of this service has been annually around 20% of all compulsory education students and 70% of all additional support offered under the special education services (Kirjavainen, Pulkkinen, and Jahnuainen 2014). In that sense, the latest reform did not bring anything new to the Tier 2 level, but instead, the Tier 1 defined as general support is a more significant change, because it made the general classroom teacher more involved also in meeting the diversities in the regular classroom.

By exploring Tables 1–4, it is easy to conclude that the both models, RTI as well as learning and schooling support, share many ideas from the prevention framework. They also share many common ideas in terms of defining the target groups as well as in terms of the key professional duties, although the names of the tiers or levels are not fully compatible literally.

The first tier (or primary prevention, Table 2) focuses to offer the quality instruction for everybody and meeting the so-called 'normal diversities'. The Rtl model is given more pressure on evidence-based practices and scientifically validate curriculum. This difference might be explained by the different basic educational standards in these countries; in Finland, the variation between schools in terms of quality of instruction and the curriculum expectations

**Table 1.** Tiered intervention models in the United States and in Finland: an overview.

	US model	FIN model
Programme	<i>Response to Intervention</i>	<i>Learning and schooling support</i>
Implementation status	Several models	One national model
Legal status	Recommended since 2004	Mandatory since 2011
Tier 1	Universal interventions	General support
Tier 2	Targeted interventions	Intensified support
Tier 3	Intensive interventions	Special support

**Table 2.** Features of the Tier 1 intervention in the United States and in Finland.

Tier 1	US	FIN
Target group	All students	All students
Interventions	Evidence-based practices to all students Scientifically validated core curricula	Quality instruction Differentiation, additional support
Key professional	General education teachers	General education teachers
Additional professional	Literacy coach, etc.	Special educator as consultant

Sources: Finnish National Board of Education 2011; Haager 2008.

is very narrow (Sahlberg 2011). Also the teacher education is similar in all universities, and there are strict selection criteria to get in the training in Finland (Malinen, Väisänen, and Savolainen 2012).

Tier 2 (or secondary prevention, Table 3) is focusing on the at-risk students, for whom the Tier 1 primary instruction is not sufficient (meaning there is *no* RTI). These students need 'occasional and perhaps relatively short-term additional instruction or curriculum adaptations to meet their needs' (Vaughn and Denton 2008, 52). On both models, this group is estimated to be more than 20% of all students. This seems to be quite correct estimation based on the past Finnish experiences (e.g. Jahnukainen 2011; Official Statistics of Finland 2012). At Tier 2 level, the specialist also plays an important role in the implementation of the more targeted interventions in more traditional small groups (resource rooms) or as co-teaching. The special educator in this level needs to be a kind of jack of all trades, who is able to work with different kinds of students with a variety of special needs. This is also suggested by Kovaleski (2007, 84):

The proliferation of specialists who see themselves as performing only very narrow functions needs to end and must be replaced by a cadre of generic service providers (e.g. literacy coaches), who can flexibly be deployed to various groups of students across grade levels using an array of evidence-based supplemental materials.

In Finland, special educators with this kind of profile have been trained since 1977 (Hautamäki, Kuusela, and Mänty 1996), instead of traditional special teachers focusing on more specific disability groups. They are mostly responsible for organising the Tier 2 level but participate also in organising and consulting the actions in other levels.

Tier 3 or tertiary intervention is often seen as 'special education where students with extraordinary needs are provided research-based instruction designed to respond to those needs' (McLoughlin and Lewis 2008, 243). This model is basically a version of the old 'cascade' model of services; however, special education is no longer defined as a place (i.e. resource room, self-contained classroom), but rather a 'service brought to students in whatever general education tier they happen to be' (Vaughn and Denton 2008, 75). There are competing views in terms of if the last tier is already the same as more traditional special education



**Table 3.** Features of the Tier 2 intervention in the United States and in Finland.

Tier 2	US	FIN
Target group	At-risk student, not successful in Tier 1	At-risk students with mild learning and behavioural special needs
(Estimated) size:	25–40% of the age group	20–30% of the age group
Interventions	Individualised and/or small group support, in general classroom or pull-out service	Targeted short-term individualised and/or small group instruction, co-teaching or pull-out service
Key professional	Specialists (e.g. reading specialist) together with	Special teacher in co-operation with classroom teacher
Additional professional	Problem-solving teams	Student welfare group

Sources: Finnish National Board of Education 2011; Haager 2008; O'Connor et al. 2013; Official Statistics of Finland 2012.

**Table 4.** Features of the Tier 3 intervention in the United States and in Finland.

Tier 3	US	FIN
Target group	Students who display RTI profiles indicating extensive amount of time and intensity to approach desired levels of proficiency	Students with significant continuing need(s) for special support
(Estimated) size:	4–6% of the age group	6–7% of the age group
Interventions	Special education, as well as other long-term services for students who are not eligible for special education	Inclusive or special education based on IEP General curricula can be individualised
Key professional	Qualified teacher	Special teacher
Additional professional	EA, classroom teacher Problem-solving teams	EA, classroom teacher Student welfare groups

Sources: Finnish National Board of Education 2011; Haager 2008; Kovaleski 2007; Official Statistics of Finland 2012.

(e.g. Fuchs, Fuchs, and Compton 2012). Some scholars like rather to place special education fully beyond the tiered levels in the US system (see Fuchs, Fuchs, and Stecker 2010). In the Finnish model, the Tier 3 (special support) is clearly defined as a replacement of the earlier 'fulltime' special education, although it is not tied to separate class placement but can be organised based on the individualised education plan anywhere between fully inclusive setting to fulltime in special schools (Jahnukainen 2011).

## Discussion

We are living in times of travelling reforms and globalisation of education (Steiner-Khamsi 2013). It is extremely interesting and understandable that also in the field of special education, there are similar trends observed in different countries. In our study, we have contrasted the organisational structure in two countries and described the history, background and implication of these changes. We can see many similarities in the roots of these systems as well as in the current functioning.

From a policy perspective, the origins of the tiered model differ substantially in the United States and Finland. *The Act on Amendments to Basic Education Act 2010* in Finland was a bottom-up initiative from the 10 largest municipalities and designed together with the Ministry of Education in a steering committee (Thuneberg et al. 2014). The statute required both general and special education to be involved in implementing the policy, while still giving municipalities and schools the authority to design a model that fits the local context.

In the United States, on the other hand, the special education legislation uses the language of 'evidence based practices' and allows districts to use IDEIA funds for the prevention of academic or behavioural difficulties for children who are not yet identified as eligible for special education. The field has interpreted these provisions as a basis for a tiered model. There is no language in the *No Child Left Behind Act 2001* about the tiered model, although Tier 1 is completely a general education function. This has left the states and districts to figure out how to provide in-service training to general educators.

From an organisational theory perspective then, Wilson (1989) suggested that policy is actually shaped and interpreted by the very people who are left to implement it.<sup>2</sup> The thesis is that the front-line workers – such as teachers and principals – make decisions based on the context in which they encounter a situation requiring a response while taking into account their professional norms and values. One could argue that since the tiered model is only in a special education statute in the US, and not in general education legislation, the front-line workers 'make sense' of it based on their prior knowledge, experiences, capacity, values and the institutional context (Honig 2006). Longitudinal research is needed to analyse how the tiered support evolves in both countries over time and its effect on institutional structures. By this, we do not limit structures to special education delivery or eligibility, but more broadly on effects on the education system in general. For example, will the roles and responsibilities of content area teachers and their special education colleagues change? What is the role of the school administrator in this approach? Will there be new players who enter the policy implementation process? From a comparative perspective, is there a difference in the 'buy-in' depending on where the policy originates? What is the role of university teacher education, in educating both general and special education prospective teachers in an inclusive, tiered model where classroom and content area teachers are to work with their special educator colleagues?

It seems clear that although the historical development and the roots of the school systems in the United States and in Finland are different, the current reforms of a tiered system in organising special education are basically based on the same, however, partly contradictory basic principles: securing additional help for every student even with or without diagnosed disability, promoting inclusive education and – at the same time – trying to diminish the number of special education students and to decrease the rising costs of special education. At least the number of special education students has already started to decrease in both systems: in the United States, after 2004 the share of special education students (all disabilities) in the age group 6–17 has slowly decreased from 11.6 to 10.9 in 2011 (<http://www.ideadata.org>). Similarly, in Finland, the full-time special education (Tier 3) is having a clear downward trend after the highest peak in 2010 (8.5%) to 7.6 in 2012 (Official Statistics of Finland 2012). Another similarity is that according to the teacher and school principal surveys, the amount of paper work has increased exponentially (Pesonen et al. 2015; Swanson et al. 2012). The preliminary analysis based on the national Finnish data shows that the school boards have been satisfied with the current accessibility to the special education services (Pulkkinen and Jahnuainen 2015).

The limitation of our study, as well as many other comparative studies (e.g. Norwich 2009; see also Jahnuainen 2015), is that a fair comparison using exactly same criteria between different school systems in different contexts is almost impossible to perform. The secondary document analysis employed here should be continued using actual empirical research work including comparative ethnographic data gathering. Although any direct policy borrowing or

lending cannot be recommended, it is clear that proper comparative research may increase our knowledge of the outcomes of implementation of different strategies in a given context and we might get valuable ideas for improving our school system.

## Notes

1. In the United States, the Section 504 of the Rehabilitation Act (e.g. Norwich 2009) has offered same kind of option, however, it is not a common solution.
2. Weatherley and Lipsky (1977) introduced a similar thesis using the term street-level bureaucrats whose authority on the day-to-day implementation actually shaped the policy.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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