

Postprint

Krammer, M., Gebhardt, M., Rossmann, P., Paleczek, L. & Gasteiger-Klicpera, B. (2014). On the Diagnosis of Learning Disabilities in the Austrian School System. Official Directions and the Diagnostic Process in Practice in Styria/Austria. *ALTER. European Journal of Disability Research*, 8(1), 30-39.
<http://dx.doi.org/10.1016/j.alter.2013.11.001>

On the diagnosis of learning disabilities in the Austrian school system: Official directions and the diagnostic process in practice in Styria/Austria

Sur le diagnostic de trouble d'apprentissage dans le système scolaire Autrichien : les orientations officielles et la procédure diagnostique dans la pratique, en Styrie/Autriche

Krammer, Mathias*, Gebhardt, Markus**, Rossmann, Peter*, Paleczek, Lisa*, Gasteiger-Klicpera, Barbara*

* University of Graz, Department of Educational Science, Inclusive Education Unit,
Merangasse 70/2, 8010 Graz, AUSTRIA,
Tel.: +43 316 380-804

** TU München, School of Education Susanne Klatten Endowed Chair for Empirical
Educational Research, Schellingstraße 33
D-80799 München (Germany)

Corresponding author : mathias.krammer@uni-graz.at,

Abstract:

There is no international consensus concerning the diagnostic criteria used to diagnose a Learning Disability (LD). In fact, various diagnostic criteria are used and interpreted differently in different countries. A common denominator can only be found in the fact that Intelligence Quotient (IQ) is often seen as important in order to identify LD, either in the framework of discrepancy models between cognitive ability and achievement or in the context of models relating LD to below-average IQ (Grünke, 2004).

The present paper examines the criteria that are used for the diagnosis of LD in Styria, a federal state of Austria. For this purpose 25 Special Educational Needs (SEN) reports of children identified as having Learning Disabilities were examined. In addition, three expert interviews with school administration authorities were conducted. The results provide a first indication that IQ scores are not important for the diagnosis of LD in Styria. In fact, the diagnostic procedure seems to be quite unregulated and standardized tests are hardly ever used in this context. Moreover, the results show that a diagnosis of LD in Styria is usually based on poor reading skills, poor basic arithmetic skills, deficits in German language and/or behavioral problems.

Key words:

Learning Disability, diagnostic identification, IQ-tests, Special Educational Needs

Résumé :

Actuellement, au niveau international, il n'existe pas de consensus sur les critères diagnostiques des troubles d'apprentissage (TA). En effet, différents critères diagnostiques sont utilisés dans différents pays et ces critères sont interprétés de manières différentes. Un dénominateur commun peut être trouvé dans le fait que le QI est souvent considéré important pour l'identification des troubles d'apprentissage, que ce soit dans le cadre de modèles de discrédance entre les capacités cognitives et les performances ou dans le cadre de modèles reliant un trouble d'apprentissage à un QI en-dessous de la moyenne.

Le présent article examine quels critères sont utilisés pour le diagnostic des troubles d'apprentissage en Styrie, une province de l'Autriche. A cet effet, 25 rapports éducatifs d'enfants ayant un TA ont été examinés. De plus, trois entretiens d'experts ont été menés avec des responsables de l'administration scolaire. Les résultats montrent que les scores aux tests QI ne semblent pas être importants pour le diagnostic d'un TA en Autriche. En effet, la procédure diagnostique ne semble pas être très réglementée. Les tests standardisés ne sont

pratiquement jamais utilisés dans ce contexte. En outre, les résultats montrent que le diagnostic de TA en Styrie/Autriche est généralement basé sur de très faibles compétences en lecture ou en arithmétique, des déficits en langue allemande et/ou des problèmes de comportement.

Mots clés:

Un trouble d'apprentissage, l'identification diagnostique, QI-tests, des besoins éducatifs spéciaux

1. Introduction

The specific concepts of learning disabilities (LD) and the ways of classifying children identified as having learning disabilities, vary widely from country to country (Sideris, 2007). The international classification systems, namely the International Classification of Diseases 10 (ICD henceforward) and the Diagnostic and Statistical Manual IV (DSM henceforward), only employ the term learning disabilities usually to refer to a specific learning disorder like dyslexia or dyscalculia. In Great Britain, for example, LD is often seen as a synonym for a mild mental retardation or an intellectual disability, which usually refers to people with an IQ below 70. In contrast, in Germany the construct of LD traditionally refers to students with an IQ between 55 and 85 (Kultusministerkonferenz, 1994).

However, the most common definition of the LD construct refers to children who have significant academic difficulties in school, caused neither by other disabilities (e.g. sensory impairment) nor by lack of schooling (Lloyd, Keller & Hung, 2007). Moreover, LD is a “soft” disability for which no physical markers are currently known. Thus, the identification process is open to subjective interpretations (Fuchs, Fuchs & Speece, 2002). It is therefore not astonishing that concerns regarding the identification process of LD are frequently expressed and appear to be well founded (Specht, 2009).

One of the most common methods used to identify LD is based on different variations of the discrepancy model (Tung-Kuang, Shian-Chang, & Ying-Ru, 2008). In this approach a standardized language-free IQ test is used to assess the general cognitive abilities of a child. Subsequently, these abilities are compared with his or her academic achievement. In practice, a noticeable discrepancy between intellectual ability and achievement needs to exist for the diagnosis of LD (Peterson & Shinn, 2002). However, many researchers have pointed out problems with the standard discrepancy approach. In fact, some of the shortcomings of this model are its lack of reliability and validity as well as its inability to identify children who are

in need of remediation in contrast to those who are not (Brueggemann, Kamphaus & Dombrowski, 2008, p. 425; see also: Vellutino, 1996). Therefore, it is not surprising that discrepancy models for the identification of LD are unlikely to be used in future (Stanovich, 2005). An alternative approach for the identification and handling of LD is the Response to Intervention framework (RTI). RTI methods use a model in which low-achieving students move from general to individualized assistance based on their response (or rather, their non-response) to evidence based interventions (Benson & Newman, 2010). In this model, students who are unresponsive to different stages of intervention may be identified as children with LD (Fuchs, Mock, Morgan & Young, 2003, p. 159). Although the RTI framework provides considerable advantages compared to the discrepancy model, there are some critical objections as well (e.g. Büttner & Hasselhorn, 2011). Firstly, considerable concerns exist about the lack of data for guiding decisions about the selection of appropriate interventions. Secondly, it seems difficult to specify a reference group which can be used for defining unresponsiveness to intervention (Benson & Newman, 2010, p. 540).

2. The situation in Austria and Styria, respectively

One of the most important characteristics of the Austrian school system is the move towards an inclusive system during the last three decades. Although the development towards an inclusive school system can be traced back to the 1980s, the initial nationwide starting point was the recognition of article 23 of the UN-Convention on the Rights of the Child in 1993 (Landesschulrat für Steiermark, 1998, p. 7). Nowadays, in Austria about 52% of all students with Special Educational Needs (SEN) are educated in inclusive settings within regular schools (Statistik Austria, 2012).

However, in this regard it is important to note that the inclusion rates (the percentage of children identified as having SEN educated within regular schools) vary considerably between the nine federal states of Austria. In Styria, for example, the inclusion rate is about 80%, whereas in lower Austria it is only around 30% (Statistik Austria, 2012). Due to the fact that the present study was performed in Styria, it is reasonable to say that the examined diagnostic criteria for LD identification refer to a widely inclusive school system.

One of the reasons for this quite different development of the inclusion rate between the different Austrian federal states is because parents in Austria have the choice between getting their children educated in inclusive or special schools (Klicpera, 2007). Moreover, different framework conditions on the administrative level are also responsible for the varies and uneven development of inclusive schooling in the nine federal states of Austria, too

(Gebhardt, Krammer, Rossmann, 2013). Therefore, the focus of the present article is on the legal and administrative framework in Styria, which may be slightly different to the situation pertaining in other federal states of Austria

Within the Austrian Education system the term inclusion refers to a school system in which children identified as having SEN and children without SEN are educated together. The children are simply regarded as individuals with different initial starting positions in which differences are regarded as benefits (Schwab, Holzinger, Krammer & Gebhardt, 2013, submitted). This concept of inclusion in the Styrian School system rests on the idea that schools should meet the requirements of all students, regardless of difference. It is important to note, that the aim of inclusion is not only to place all children within the same class, but to facilitate the social participation and a positive development of all students in daily school life (Avramidis, 2010; Bossaerta, Colpin, Pijl, & Petry, 2011; Huber, 2006; see also: Schwab, Holzinger, Krammer & Gebhardt, 2013, submitted).

Primarily, the Austrian educational system differentiates between pupils with and without Special Educational Needs. The distinction between different types of SEN is only made on the basis of different curricula, which the children identified as having Special Educational Needs are assigned to. Children who are identified as having Learning Disabilities within the SEN reports are usually assigned to a "General Special Education Curriculum" (Lehrplan der Allgemeinen Sonderschule) in one or more particular subjects (e.g. German or Math). It is important to note that it is not within the remit of the SEN report itself to assign students to a particular curriculum nor to identify students as having SEN. Rather, it is the suggestions and the diagnostic reasoning concerning special educational needs within the SEN reports which form the most important basis for decision-making and for the identification of SEN as well as the assignment to a particular curriculum by the district school board (Landesschulrat für Steiermark, 1998, p. 14).

Statistical data concerning the prevalence of LD in Austrian schools is hardly available and the prevalence rate can only be estimated at 1.5–2% (Buchner & Gebhardt, 2011). Recommendations of the Styrian state authority define LD as impairment for which neither other medical or psychological evidence exists nor lack of schooling be found as a cause (Landesschulrat für Steiermark, 1998, p. 11). As a result of this, SEN and the associated LD are diagnosed by duly accredited Special Education teachers in the SEN reports, usually by the end of second grade of primary school. This is mainly caused by the fact that the diagnosis of SEN is tied to a prolonged period of observation of the child during the first years of primary school, in which children should have the opportunity to overcome their learning

difficulties, with repetition of the school-year if necessary (Landesschulrat für Steiermark, 1998, p. 13). Subsequently, according to the recommendations of the Ministry of Education (2010), the diagnostic process should be repeated on a regular basis and a reclassification to the regular curriculum should be possible for the student if he/she no longer meets the criteria indicating special educational needs support. Over the following years in secondary school, the classification of the child usually remains stable until the end of schooling. As a consequence of the SEN diagnosis, resources for additional support may be allocated to the school. These resources determine the child's class placement, additional teaching staff, curriculum mapping as well as instructional methods. Therefore, it is understandable that the number of students with Special Educational Needs has a significant impact on the availability of resources for certain classes, particularly in regard to support opportunities for students identified as having LD.

According to evaluation studies, secondary school students who are identified as having SEN and who are assigned to the General Special Education Curriculum spend an average of $M=22.55$ hours per week in inclusive settings and $M=4.41$ hours per week in segregative settings (Gebhardt, Schwab, Krammer & Gasteiger-Klicpera, 2012).

Finally, as already mentioned, SEN are usually diagnosed by Special Education teachers and not by School Psychologists. The latter are only involved in the diagnostic process on request and/or with explicit consent of the parents (Landesschulrat für Steiermark, 1998). As a consequence of this, intelligence tests are rarely used in the diagnostic process or rather just in case the parents ask for it.

2.1. From selection to support

With the change towards an inclusive educational system, the objectives of SEN diagnoses in Austria, and consequently in Styria too, have changed considerably. Until the 1990s, the most important function of the diagnostic procedure was to sort out students for allocation to special schools. Today, the main function of an official SEN expertise is to provide a description of the additional support needed, which has to be met within the regular school system (Eggert, 1997; Ansperger & Wetzels, 1999). This implies that the main focus of an SEN report refers no longer only to the student's deficits, but it also provides specific advice concerning the necessary support that a student identified as having SEN should be given. In other words, an SEN report should accurately describe the needs of a given student and highlight the appropriate forms of support in order to facilitate his or her positive

development. This is, indeed, much more in compliance with the ideas of an inclusive school system than simply testing for selection.

3. Research objective

Presently, there is hardly any research available on the identification process of LD in Austria. In order to obtain a first impression of existing ways of identifying LD in Styria, 25 official SEN reports have been examined.

The first research question aims to explore whether or not IQ tests, e.g. employed in the discrepancy model, are used as a part of the LD identification process. If IQ tests do not appear to play a significant role in the identification process, then what *are* the most important diagnostic criteria used for LD identification?

Secondly, as the Styrian school system claims to be an inclusive one, the research also evaluates whether or not the principles of modern inclusive assessment are met. The second research question, therefore, examines the extent to which support opportunities are considered and mentioned in the SEN reports.

4. Methodology

Content analysis of SEN reports and qualitative expert interviews were the two methods used to conduct the present study. Frequency analysis, a particular kind of content analysis, was used to examine which diagnostic criteria were used as a justification for the diagnosis of LD (Rustermeyer, 1992). Similarly, the frequency of diagnostic criteria, instruments and tools which lead to the diagnosis of Learning Disabilities were also examined in the present work. In this context, it is important to note that due to the fact that little is known about the identification process of LD in Styria/Austria, the research methods rely heavily on the Grounded Theory of Anselm Strauss and Barney Glaser (2009). In this approach, research is seen as a continuing process of data collection and reflection about the collected data. Glaser and Strauss (2009, p. 45) refer to this process as “theoretical sampling”, meaning that the data collection is controlled by the emerging theory, substantially as well as formally. This implicates that at first the collection of data is based on very few theoretical assumptions (e.g. the usage of IQ tests in the case of the present work). The progressive formulation and conceptualization of theory then emerges from the analysis of the available data (Glaser & Strauss, 2009, p. 46). It is important to mention that data collection, analysis of the collected material and changes in the coding scheme go along hand in hand (Glaser & Strauss, 2009). Thus, if a new dimension occurs in the available data within the LD diagnostic criteria, it will

be considered in the coding scheme. For example, if behavioral disorders are mentioned in one of the official SEN reports concerning the identification of LD, behavioral disorders will be included as a new category in the coding scheme.

Therefore, a semi-open system of categories was used to outline the reasons underpinning the identification of LD. The only category which had already been assumed in advance was the usage of standardized IQ tests to identify LD. All other categories were added on the basis of the available data during the research process. This was mainly done to avoid leaving out a dimension or reasoning in relation to the identification of LD (Strauss, 1998, p. 50). It was examined whether references to support opportunities occur in the reports or not. Again, due to the fact that this research relies on Grounded Theory, no predetermined coding scheme was used. On the contrary, at first the only focus was on whether support opportunities were mentioned or not. In the next step, newly occurring support opportunities built a new category in the coding scheme.

All in all, 25 SEN reports of children identified as having SEN because of LD were examined. The children concerned were sixth graders and visited “inclusive middle schools” (NMS-Neue Mittelschule) in Styria. Sixth Graders were chosen because the diagnosis of LD usually remains stable in secondary schooling and therefore, no changes in the students’ SEN status are expected until the end of their school career. The student SEN reports were collected at the Special Educational Needs center Graz and at one of the last “Special Schools” in Graz (and the last remaining Special School which is not specialized on particular disabilities nor embedded in the framework of a Special Educational Needs center).

In addition to the analyses of the written SEN reports, three expert opinions were gathered using interviews with members of the school administration, holding responsible positions in connection with the diagnosis of SEN. This was done in order to round off and verify the results of the content analysis of the SEN reports. The three experts held, or had held, stakeholder positions at Styria’s school authority department. All of them have or had played a significant role in the diagnostic process required to identify students as having SEN. Finally, all of the experts interviewed were former Special Education teachers and had gained significant experience in teaching children identified as having SEN in inclusive settings in Styria. The interviews were done during a doctoral course at the University of Graz. They were carried out by using a semi-structured format which was previously developed. In this format the interviewees received the questions on cards (e.g. Tell me something about the diagnostic process in practice) and subsequently answered in a narrative way to the whole audience. It is important to note that these interviews were no focus group interviews, but

rather a talk between the lecturer and the expert in front of an audience, whereby the audience had the opportunity to ask questions. Nevertheless, the structure and the main questions of the interview were previously developed and carried out by the lecturer. The interviews were audio-recorded and subsequently transcribed in MS Word. Thereafter, they were interpreted by the first author of this paper and the results were compared with the findings of the content analysis of the SEN reports. An intercoder-reliability test was omitted, due to the fact that the interviews were only used to validate the findings of the content analysis.

5. Results

According to the results presented in table 1, IQ testing does not seem to play any role in the identification process of LD in Styria. In none of the 25 SEN reports an IQ test was mentioned. This result was also confirmed by the qualitative interviews with the experts from the school administration.

<<Insert Table 1<<

Five different diagnostic criteria for the identification of LD were found in the 25 SEN reports. I.e.: Deficits in Math and German language, behavioral disorders, lack of proficiency in German language (this criterion concerns only children with migration background), autism and a problematic social background.

However, the main diagnostic criteria for the diagnosis of LD in Styria were, according to the examined SEN reports, deficits in Math and in German language. In 16 out of 25 SEN reports, these curricular deficits were the main criterion for the diagnosis of SEN and the associated LD. Therefore, once the students concerned had already repeated a class, the continuing poor performance in Math and German language were the main indicators for the identification of LD and also for the justification of this diagnosis. In the SEN reports analyzed, mainly non-standardized tests were used to determine the skills in Math and German. Another important condition for LD diagnosis were behavioral disorders. In 5 out of 25 SEN reports this was the main diagnostic criterion. In this category it was suggested that students who were receiving treatment because of behavioral disorders should be assigned to the "General Special Education Curriculum" for learning disabled children. This group also included students with ADHD (Attention Deficit Hyperactivity Disorder) even when they were currently receiving treatment (e.g. medication with Methylphenidate).

Lack of German language proficiency (concerning children from a migration background who do not speak German as a first language), autism and a poor social background only played minor roles in the examined SEN reports, although these categories were used as well in connection with the identification of LD.

As far as support recommendations are concerned only 5 out of 25 reports contained such indications. The support opportunities mentioned were: teaching in small groups, individualized assistance and additional support in the afternoon. However, in the vast majority of the examined SEN reports, support opportunities were not mentioned at all. Rather, it seems that the support function of the SEN reports is not noticeably emphasized in the daily practice in Styrian schools.

6. Discussion

As early as in 1996, the Austrian federal ministry for education clearly legislated that “unsatisfactory academic performance without the feature of disability is no justification for special education needs” (Bundesministerium für Unterricht und kulturelle Angelegenheiten, 1996). However, the results of the present expert opinion analyses show that in most cases the diagnosis of LD and the statement of SEN are simply given on the basis of poor academic performance in Math and/or German language. Usually, there cannot be found a lot of additional information about any observations which could justify the diagnosis of a “disability”. For example, IQ tests or other kinds of standardized psychometric assessments do not play any role in the diagnostic process, according to the examined SEN reports. Even the evaluation of a child’s academic performance itself is usually done without using any norm-referenced diagnostic tools.

These findings were not expected at all by our research group. In contrast, the experts from the school administration who were interviewed were not surprised by these findings. One interviewee commented the situation in the following way: *“Of course, we do have different initial diagnostic tools, but there is nothing standardized from the federal ministry for education.”* In fact, up to now the Austrian federal ministry for education did not publish any precise guidelines or recommendations concerning the usage of standardized tests, neither in connection with the identification of LD nor concerning the assessment of SEN in general. This fact is also reflected by official information booklets for parents and teachers, where no references to explicit guidelines for the identification of LD can be found (e.g. Landesschulrat für Steiermark, 1998). Another reason for the lack of standardized and norm-referenced testing may be found in the fact that SEN expert opinions are usually prepared by Special

Education teachers, who are not trained in the use of tests, whereas School Psychologists normally do not take part in the diagnostic process. In other words, given the fact that contributions of School Psychologists, who are professionally trained in psychometric testing, are virtually absent in SEN reports, it is not astonishing that standardized tests do not play any role in the identification of LD in Styria. Comparable results are reported for Germany, where psychometric tests are also a rarely used tool in this setting (Kretschmann, 2006) and, likewise, precise guidelines are lacking (Kultusministerkonferenz, 1999).

At the same time, behavioral disorders are important for the diagnosis of LD. In no less than five out of the 25 examined reports, behavioral disorders were the main criterion for the diagnosis of LD. This result was somehow expected since a wide range of scientific literature points out a correlation between LD and behavioral disorders (Klein, 2008, p. 112).

Another striking result of the present examination was the fact that in one SEN report the lack of proficiency in German language was used as diagnostic criterion for the identification of LD. This was astonishing insofar, as in recommendations by the Styrian state department of education, an insufficient command of German was clearly ruled out as a possible reason for LD (Landschulrat Steiermark, 1998). This circumstance leads to the conjecture that latent patterns of prejudices and xenophobia may also influence the identification process of LD. Along these lines, Shifrer, Muller and Callahan (2011) have already pointed out in relation to the United States that sociodemographic characteristics, in particular that of language minorities, are predictive of being identified with LD. A lack of proficiency in the second language is sometimes interpreted as limited intelligence or as disability (Shifrer et. al., 2011). Based on our observations, it is also possible that children from minority ethnic groups in Styria may sometimes be in danger of being identified as having learning disabilities according to characteristics largely unrelated to their cognitive abilities. It is well documented that children with migration backgrounds are overrepresented among students diagnosed with Special Educational Needs (Specht, 2009, p.82), but beyond that, little empirical research exists on this topic.

6.1 Support opportunities

The aim of the second research question was to examine how far support opportunities are mentioned in the SEN reports and, indeed, in five SEN reports support recommendations were found. We could therefore tentatively argue that some of Special Education teachers, being the authors of the SEN expert opinions, try to meet the demands of a diagnostic procedure based

on the principles of an inclusive school system. Thus, the authors of the SEN reports tried to consider the individual strengths and weaknesses of students and made suggestions for a possible improvement of the academic development of a particular student within the regular education system. Nevertheless, there is one very important objection concerning the efforts of these Special Education teachers. Due to the fact that SEN reports are subject to very strict privacy laws, teachers in regular schools (not in Special Schools), who are responsible for the students concerned in daily class life, are not allowed to read their pupils' SEN reports. In other words, even if suggestions regarding support opportunities are mentioned and recommended in the SEN reports, they are completely pointless in practice, because none of the students' teachers in regular schools will ever have the opportunity to read them. Hence, a change in the privacy laws in Austria with regard to SEN reports would be, indeed, highly desirable. Every effort to establish a modern support diagnostic system is pointless as long as the teachers concerned in inclusive regular schools are not permitted to read the results of the diagnostic procedure.

In sum, the results of the present study indicate that poor skills in Math and German language are the most important criteria for the identification of LD in Styria. Nevertheless, it must be noted, that the results of this study cannot be generalized at all. In fact, due to the circumstance that this piece of research is a qualitative one based on Glaser's and Strauss Grounded Theory, further quantitative research is needed to verify the findings of the present pilot study. Therefore, and as always, more research, in particular quantitative research, is urgently needed.

7. Recommendations

Students are primarily identified as having Learning Disabilities on the basis of poor performances in the major subjects Math and German language. This is in contrast to the legal position in Austria that poor academic school performance, without the presence of a disability, is no reason for the assignment of the label SEN (BMUKK, 1996; cited in Landesschulrat für Steiermark, 1998, p.11). Nevertheless, according to the results of this study students are labeled with SEN and the associated LD simply due to their poor performances in Math and German.

This means that students who demonstrate insufficient performances in Math and German language are labeled as "disabled", although neither physical, medical nor psychological

evidence exists for the labeling. Moreover, the lack of norm referenced tests raises questions about the reliability of the judgments in the SEN reports (Florian et. al., 2006).

Due to these circumstances, we suggest the usage of a Response-to-Intervention (RTI) model for the support and diagnosis of students at risk. As already mentioned, within this framework students move from general to individualized assistance according to their response to a particular intervention.

In general, RTI models were firstly introduced in the United States of America. With the “No child left behind” act schools are expected to monitor student performance over time. This is done continuously from the first year to the end of the school career. During this time, students are screened on a regular basis. If students are in danger to fail the annual benchmarks they come under the RTI framework and get more assistance or instructional aid. Moreover, the outcome of the instructional intervention is again monitored within the RTI framework. In this process, students who are unresponsive to specific interventions or who are in danger of failing to achieve the annual benchmark goals move from general to individual assistance (Benson & Newman, 2010). On the other hand, high performing students can be identified and receive more adequate training and instructions especially in regard to their above average school performance. In this regard educators often speak about “data driven” decisions. These decisions should not be made solely on the basis of tests that are administered infrequently or which are not norm-referenced. Instead, frequent, timely estimates of student performance should provide the schools with the necessary information about instructional effectiveness and student performance, in particular for students who are at risk (Lembke & Stecker, 2007). This usage of an RTI framework would provide considerable advantages. Firstly, the usage of norm-referenced test would increase the reliability of the judgments concerning the school performances. Secondly, the usage of an RTI framework would also avoid the labeling of children as “disabled” only based on their poor academic performance. Rather, students move through the different stages of interventions without getting immediately labeled as children identified as having SEN. Thirdly, it would provide students who are at risk with immediate additional aid. Hence, instructional aid could be provided more adequately and in a much shorter period of time. Finally, the provision of almost real time support tailored for each individual student with different abilities and performances, is much more in compliance with the idea of an inclusive school system in which one school provides education for all students.

8. Conclusion

Overall, students in Styria are primarily identified as students with learning disabilities on the basis of poor performances in Math and in German. Norm-referenced tests are hardly ever used in the identification process of LD. Consequently, it seems that the latest achievements and advantages of modern educational testing are largely ignored by the Austrian education system. In the current situation, the release of clear diagnostic guidelines and the implementation of an evidence-based intervention framework would be highly desirable. This is particularly important since the results of the present study indicate that support opportunities and recommendations mentioned in the SEN reports are not communicated to the educational practitioners in inclusive schools. The implementation of an RTI model would help to provide immediate support for children identified with SEN, which currently does not take place in an evidence-based program within the Styrian education system. First trials are already being carried out in neighboring Germany (Huber & Grosche, 2012) and the implementation of an RTI model is probably the next necessary step on the way to a fully inclusive school system in Styria, too. However, teachers must be provided with adequate trainings to translate support recommendations into helpful interventions and to observe and document the effects of these interventions.

References

- Ansperger, R., Wetzel, G. & Saurer, J. (1998). Die Gutachtenerstellung im Rahmen des Feststellungsverfahrens zum Sonderpädagogischen Förderbedarf – Analyse der Praxis in Österreich. *Zeitschrift für Heilpädagogik*, 42 (4), 8-17.
- Avramidis, E., P. Bayliss, and R. Burden. 2000. A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary classroom in one local education authority. *Educational Psychology* 20, 193-213.
- Beson, N. & Newmann, I. (2010). Potential utility of actuarial methods for identifying specific Learning Disabilities. *Psychology in the Schools*, 47 (6), 538-550.
- Bossaert, G., Colpin, H. Pijl, S.P., & Petry, K. (2011). Loneliness among students with special educational needs in mainstream seventh grade, *Research in Developmental Disabilities*, 33, 1888-1897.
- Brueggemann, A., Kamphaus, R. & Dombrowski, S. (2008). An impairment model of learning disability diagnosis. *Professional Psychology: Research and Practice*, 39 (4), 424-430.
- Buchner, T. & Gebhardt, M. (2011). Zur schulischen Integration in Österreich: Historische Entwicklung, Forschung und Status Quo. *Zeitschrift für Heilpädagogik*, 62 (8), 298-304.
- Bundesministerium für Unterricht und kulturelle Angelegenheiten (1996). Rundschreiben Nr. 15/1996 vom 11. Juni 1996, GZ.:36.153/27-I/8/96. Wien: Author. Retrieved from http://www.borg-gs.at/SoPaed/images/stories/dokumente/Richtlinien_zum_Sonderpaedagogischem_Foerderbedarf.pdf [18.11.2012].
- Bundesministerium für Unterricht, Kunst und Kultur (2010) Der sonderpädagogische Förderbedarf . Qualitätsstandards und Informationsmaterialien. Wien: bmukk.
- Bundschuh, K. (2010). *Einführung in die sonderpädagogische Diagnostik* (7th. ed.). München: Reinhardt.
- Büttner, G. & Hasselhorn, M. (2011). Learning Disabilities: Debates on definitions, causes, subtypes and responses. *International Journal of Disability, Development and Education*, 58 (1), 75-87.
- Eggert, D. (1997). *Von den Stärken ausgehen: Individuelle Entwicklungspläne in der Lernförderungsdiagnostik; ein Plädoyer für andere Denkgewohnheiten und eine veränderte Praxis*. Dortmund: Borgmann.
- Florian, L., Hollenweger, J., Simeonsson, R., Wedell, K., Riddell, S., Terzi, L. & Holland, A. (2006): Cross Cultural Perspectives on the classification of Children with Disabilities: Part 1. Issues in the classification of children with Disabilities. *The Journal of Special Education*, 40, 1, 36-45
- Fuchs, D., Mock, D., Morgan, P. & Young, C. (2003). Responsiveness to intervention: Definitions, evidence, and implications for the Learning Disabilities construct. *Learning Disabilities Research & Practice*, 18 (3), 157-171.
- Fuchs, L., Fuchs, D. & Speece, D. (2002). Treatment validity as a unifying construct for identifying Learning Disabilities. *Learning Disabilities Quarterly*, 25, 33-55.
- Gebhardt, M., Krammer, M., & Rossmann, P. (2013). Zur historischen Entwicklung der schulischen Integration in der Steiermark. *Zeitschrift für Heilpädagogik*, 6, 249-256.
- Gebhardt, M., Schwab, S., Krammer, M., Gasteiger-Klicpera, B. (2012). Achievement and Integration of students with and without Special Educational Needs (SEN) in the fifth grade. *Journal of Special Education and Rehabilitation*, 13, 3-4, 7-19.
- Glaser, B. & Strauss, A. (2009). *The discovery of Grounded Theory: Strategies for qualitative research*. London: Aldine Transaction Publishers.

- Gresham, F. M., & Vellutino, F. R. (2010). What is the role of intelligence in the identification of Specific Learning Disabilities? Issues and Clarifications. *Learning Disabilities Research & Practice*, 25(4), 194-206.
- Grünke, M. (2004). Lernbehinderung. In G. W. Lauth & M. Grünke (Eds.), *Interventionen bei Lernstörungen. Förderung, Training und Therapie in der Praxis* (pp. 65–77). Göttingen: Hogrefe.
- Hallahan, D. P., Lloyd, J. W., Kauffman, J. M., Weiss, M. P. & Martinez. (2005). *Learning Disabilities: Foundations, characteristics, and effective teaching*. Needham Heights: Allyn & Bacon.
- Huber, C. (2006). *Soziale Integration in der Schule?!: Eine empirische Untersuchung zur sozialen Integration von Schülern mit sonderpädagogischem Förderbedarf im gemeinsamen Unterricht*. Marburg: Tectum.
- Huber, C. & Grosche, M. (2012). Das Response-to-Intervention-Modell als Grundlage für einen inklusiven Paradigmenwechsel in der Sonderpädagogik. *Zeitschrift für Heilpädagogik*, 63 (8), 312-322.
- Klein, G. (2008). Frühförderung für Kinder in prekären Lebenslagen. In J. Borchert, B. Hartke & P. Jogschies (Eds.), *Frühe Förderung entwicklungsauffälliger Kinder und Jugendlicher* (pp. 108-121). Stuttgart: Kohlhammer.
- Klicpera, C. (2007). *Erfahrungen von Eltern und Schulaufsicht mit dem Elternwahlrecht in der Entscheidung über den Unterrichtsort*. Wien: Lit.-Verlag
- Kottmann, B. (2006). *Selektion in die Sonderschule: Das Verfahren zur Feststellung von sonderpädagogischem Förderbedarf als Gegenstand empirischer Forschung*. Bad Heilbrunn: Klinkhardt.
- Kretschmann, R. (2006). Diagnostik bei Lernbehinderungen. In U. Petermann & F. Petermann (Eds.), *Diagnostik sonderpädagogischen Förderbedarfs* (pp. 139-162). Göttingen: Hogrefe.
- Kultusministerkonferenz (1994). *Empfehlungen zur sonderpädagogischen Förderung in den Schulen der Bundesrepublik Deutschland*. Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. Retrieved from http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/1994/1994_05_06-Empfehlung-sonderpaed-Foerderung.pdf [18.11.2012].
- Kultusministerkonferenz (1999). *Empfehlungen zum Förderschwerpunkt Lernen vom 1.10.1999*. Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. Retrieved from <http://www.kmk.org/fileadmin/pdf/PresseUndAktuelles/2000/sopale.pdf> [18.11.2012].
- Kultusministerkonferenz (2010). *Sonderpädagogische Förderung in Schulen 1999 bis 2008: Dokumentation Nr. 189 – März 2010*. Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. Retrieved from http://www.kmk.org/fileadmin/pdf/Statistik/Dok_189_SoPaeFoe_2008.pdf [18.11.2012].
- Landesschulrat für Steiermark (1998). *Behördenfibel II – Zum gemeinsamen Unterricht behinderter und nichtbehinderter Kinder in Volksschule und Sekundarstufe I*. Graz: Author.
- Lauth, G. W. & Grünke, M. (Eds.). (2004). *Interventionen bei Lernstörungen: Förderung, Training und Therapie in der Praxis*. Göttingen: Hogrefe.
- Lembke, E. & Stecker, P. (2007). Curriculum-based measurements in mathematics: An evidence based formative assessment procedure. Portsmouth, NH: RMC Research Cooperation, Center on Instruction.
- Lloyd, J. W., Keller, C. & Hung, L. (2007). International understanding of Learning Disabilities. *Learning Disabilities Research & Practice*, 22(3), 159-160.
- Peterson, K.M. & Shinn, M. (2002). Severe discrepancy models: Which explains best school identification practices for learning disabilities. *School Psychological Review*, 31, 459-476

- Rustemeyer, R. (1992). *Praktisch-methodische Schritte der Inhaltsanalyse: Eine Einführung am Beispiel von Interviewtexten*. Münster: Aschendorff Verlag.
- Schwab, S., Holzinger, A., Gehhardt, M., Krammer, M., Schwab, S. (submitted). Achievement Goals in Students with Learning Disabilities, behavioral disorders and students without Disabilities predicted by school achievement, self-estimation of achievement and school anxiety. contact: susanne.schwab@uni-graz.at
- Shifrer, D. Muller, C. & Callahan, R. (2011). Disproportionality and Learning Disabilities: Parsing apart race, socioeconomic status, and language. *Journal of Learning Disabilities*, 44(3), 246-257.
- Sideridis, G. D. (2007). International approaches to Learning Disabilities: More alike or more different? *Learning Disabilities Research & Practice*, 22(3), 210-215.
- Specht, E. (2009). *Nationaler Bildungsbericht Österreich 2009: Band 2. Fokussierte Analysen bildungspolitischer Schwerpunktthemen*. Wien: Bundesministerium für Unterricht, Kunst und Kultur. Retrieved from http://www.bmukk.gv.at/medienpool/17992/nbb_band2.pdf [18.11.2012].
- Stanovich, K. E. (2005). The future of a mistake: Will discrepancy measurement continue to make the learning disabilities field a pseudoscience? *Learning Disability Quarterly*, 28, 103-106.
- Statistik Austria (2012). *Bildung in Zahlen 2010/2011 - Tabellenband*. Retrieved from http://www.statistik.at/web_de/services/publikationen/5/index.html [18.11.2012].
- Strauss, A. L. (1998). *Grundlagen qualitativer Sozialforschung* (2nd. ed.). München: Wilhelm Fink.
- Tung-Kuang, W., Shian-Chang, H. & Ying-Ru, M. (2008). Evaluation of ANN and SVM classifiers as predictors tot he diagnosis of students with learning disabilities. *Expert Systems with Applications*, 34, 1846-1856
- Vellutino, R., Scanlon, M., Sipay, R., Small, S., Chen, R., Pratt, A. & Denckla, B. (1996). Cognitive profiles of difficult-to-remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology*, 88, 601-638.

Appendix:

Tables:

Table 1; Criteria for the diagnosis of LD in (N=25) students
SEN identification

	Quantity	
	Abs.	%
IQ-tests	0	
Deficits in Math and German	16	64 %
Behavioral disorders	5	20 %
Lack of proficiency in German language (for migrant children)	1	4 %
Autism	2	8 %
Problematic social background	1	4 %