



EUROPEAN AGENCY
for Special Needs and Inclusive Education



RAISING THE ACHIEVEMENT
OF ALL LEARNERS IN INCLUSIVE EDUCATION

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Country Report: Netherlands



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NETHERLANDS COUNTRY REPORT

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Introduction: main features of the Dutch school system

Education in the Netherlands is compulsory from age five to sixteen, but learners can voluntarily enter primary education at age four. The Dutch school system is organised into two phases:

- Primary education (typical ages 4–12) lasts for eight years. Schools are free to determine the content and methods of teaching, but their work must be based on national attainment targets and reference levels for literacy and numeracy. At the end of primary education, learners receive a school report describing their achievement levels and potential. They transfer into different types of secondary education, based on their achievement and the advice of their primary school teacher.
- Secondary education (typically from age 12) lasts between four and six years. The secondary school system is highly stratified, even though most secondary schools offer a number of different programmes in the same building. The first years of secondary education are intended to provide learners with a shared curriculum of basic general education. However, most secondary schools stream their learners at this stage, foreshadowing the later tracking into different programmes. There are two main learning pathways: pre-vocational education (VMBO) and education preparing for tertiary education (HAVO and VWO).

There are also several types of special primary and secondary education for learners with special educational needs.

The Netherlands has one of the OECD's most devolved education systems, with schools enjoying a high degree of autonomy ([OECD, 2014](#), p. 17). School autonomy is grounded in the principle of 'freedom of education', which gives the right to any natural or legal person to set up a school and to organise teaching. This implies that schools are free to determine the content and methods of teaching, although the central government does set learning objectives and quality standards that apply to both public and private schools. The Inspectorate of Education monitors school quality and compliance with central rules and regulations.

The State of Education in the Netherlands: The Inspectorate of Education

The Inspectorate of Education aims to contribute to the continuous improvement of the quality of education for all learners. The [Inspectorate report for the 2013/2014 academic year](#) (Inspectorate of Education, 2015) contains the following three highlights:

1. Transitions and school careers

Pupils' perspectives are changing. Individual pupils make their own choices, plotting their own course within the possibilities the education system offers. They increasingly have to



deal with selection procedures, more targeted study programme placements and requirements to complete their study programmes more quickly. After that, they are less likely to start a higher-level programme. There seems to be a trend towards the middle levels in the education system. While an increasing range of excellence programmes is available, the effects are not yet apparent.

2. Focusing on quality

A second noticeable development is the increased focus, on the part of teachers, principals and governors, on quality and quality control, the results of which are also emerging in the classroom. In 2013/2014, special secondary education showed particularly marked quality improvements. Schools are also focusing more strongly on quality assurance with a view to maintaining education quality for all learners. Efforts in this regard have increased, particularly in senior secondary vocational education. Quality assurance leads to better education for all learners. This happens when the focus on quality is prioritised, supported by quality assurance measures. The result is often good or even excellent education.

3. Large differences and professionalisation

There are substantial differences between the various schools. These differences are apparent in all areas: in learners' results, motivation and satisfaction, the quality of lessons and teaching approaches, learner placement, success rates in further education and/or in the labour market and job satisfaction among teachers. How can schools and study programmes be encouraged to learn from each other, rather than re-invent the wheel again and again? When do these differences become unacceptable?

In day-to-day practice, there are many good schools and study programmes where both pupils and teachers are quite motivated. These schools and study programmes often combine a close-knit team and a good principal and/or governor. Many also have an open culture geared towards improvement, a shared vision, and a staffing policy to match. The inspectorate wishes for everyone to attend or work at such a school. When public interest and educational quality merge, there are excellent education and motivated learners and teachers.

The Dutch education system ([OECD, 2016](#))

The Dutch school system is one of the best in the OECD, as measured by the Programme of International Student Assessment (PISA) and the Survey of Adult Skills (PIAAC). It is also equitable, with a very low proportion of poor performers. Basic skills are very good on average, while the system minimises weak basic skills among teenagers as effectively as the East Asian champions of Japan and Korea. This is supplemented by a strong vocational education and training system with good labour market outcomes. The system is underpinned by:

- a high level of decentralisation, balanced by a national examination system and a strong Inspectorate of Education;
- school financing which supports disadvantaged learners;
- experimentation and innovation;



- good data and research.

Strong stakeholder intermediate institutions inform a lively research and policy debate. However, several challenges remain as the Netherlands aspires to greater excellence (see question 8).

1. What reference is made to raising achievement in national policies? How is raising achievement defined?

Current national policy priorities include promoting excellence among learners and schools, raising teacher professionalism and enhancing results-orientated work for all learners.

How is raising achievement defined?

National policies focus on quality and equity in Dutch education. Raising achievement for all learners is defined in terms such as:

1. attainment and participation in education for every learner;
2. decreasing the number of learners with diagnosed disorders and special needs;
3. Education that Fits for every learner;
4. stimulating excellence for all learner.

1. Attainment and participation in education

Attainment rates of the Dutch population are similar to the OECD average and show positive trends (OECD, 2014). In 2011, 72% of the population aged 25–64 had completed at least upper-secondary education, compared to an OECD average of 75%. Among the generation of 25 to 34-year-olds, 82% had attained at least upper-secondary education (the same as the average across the OECD) and 40% had completed tertiary education (compared to an OECD average of 39%). Current estimates indicate that 92% of today's young people in the Netherlands will complete upper-secondary education over their lifetime, compared to 83% across the OECD.

2. Decreasing diagnoses of disorders and special educational needs (OECD, 2016)

In 2011, 17% of learners were identified as having special needs. This was nearly double the figure for 1990 (9.3%). This increase in labelling learners is concentrated in the secondary sector, which has seen enrolments in secondary special education rise between 2007 and 2011, despite a decrease in the number of learners in primary special education (Ministry of Education, Culture and Science, 2012).

3. Education that Fits

In response to the above, the Education Act 'Education that Fits' (*Passend Onderwijs*, 2014) makes school boards responsible for providing 'tailored' or 'fitting' education for every learner, with a strong focus on inclusive education. According to this Act, every child should attend school, preferably one close to their home. Other aims of this policy are to focus on the positive aspects and the learning needs of learners, instead of on their



shortcomings and disorders. As a result, it is expected that more learners will be placed in mainstream education and that separate facilities will increasingly be of a temporary nature (Inspectorate of Education, 2015).

4. *Stimulating excellence for all learners*

Dutch educational policy has given more attention to excellence in recent years through a number of initiatives (OECD, 2016). For example, learners can currently follow subjects formally at higher track level or obtain their secondary education diploma with a *cum laude* distinction. Also, some schools focus on improving excellence by offering special educational programmes, such as bilingual education or programmes for gifted and talented learners. While these are all positive developments, there is room to further encourage the performance of each learner (see question 8).

2. What national policies specifically target raising achievement?

There are several policies that target raising achievement for all, such as result-orientated work and suitable or inclusive education.

Results-orientated work

The policy on results-orientated work (*opbrengstgericht werken*) implies goal-directed work with ambitious learning goals for all learners. It therefore sets the same high standards for the whole class (all learners) and goals may be adjusted – but remain ambitious – for some learners. It means systematically working on these goals every day, constantly monitoring and evaluating the development towards these goals and analysing the outcomes:

- Which goals have already been achieved?
- Which ones have not yet?
- How come?
- Was the quality of teaching sufficiently attuned to the needs of all learners, for example?
- Was the teacher's approach effective for all learners in the class?

The aim of this policy is to raise the achievement of all learners: not only of learners with special needs (e.g. those with below-average capacities, weak or at-risk learners that need extra instruction), but also of the average and talented learners (e.g. those with above-average capacities, cognitively strong learners that need more intellectual challenges). Results-orientated work focuses mainly on reading and arithmetic standards, but it may also target other aims, thus having a broader focus. For example, it may also value all learners' well-being, work attitude, motivation and social competences and parental involvement or engagement with learning success at school.



Education that Fits: the introduction of inclusive education in the Netherlands

In August 2014, inclusive (primary and secondary) education was introduced as 'Education that Fits' (*Passend Onderwijs*). This means that all learners should go to a school that fits their needs, preferably in mainstream education (mainstreaming). School boards are now responsible for providing education to every learner that is registered in their schools. Boards that collaborate within an alliance of schools (*samenwerkingsverbanden*) are free to apply funds reserved for additional support for this purpose and to determine which learners receive which care. It is expected that more learners will be placed in mainstream education and that separate facilities will increasingly be of a temporary nature.

The system is underpinned by:

- a high level of decentralisation, balanced by a national examination system and a strong Inspectorate of Education;
- school financing which supports disadvantaged learners;
- experimentation and innovation;
- good data and research.

Besides these strengths, there are some concerns.

Organisation-focused introduction of Education that Fits

Around 250 alliances were formed, both administratively and organisationally, in a relatively short period of time. All the alliances have determined their mission and vision on raising achievement for all and cautious targets have been set. The organisational form has now been established for practically all alliances and meets statutory requirements. Some differences remain, however. The extent to which the alliances have organised themselves still varies considerably.

Multi-year budgets

Multi-year budgets are seldom rich in policy. Furthermore, alliances generally tend to formulate the targeted results loosely, offering little direction. For example, in the Education that Fits policy, avoiding learners staying at home is high on the agenda for practically all of the alliances, but it has not been sufficiently developed yet. They also recognise the importance of quality control, but have not yet linked this to any clear quantitative and qualitative objectives. Moreover, most alliances have not defined the criteria based on child characteristics that are relevant to education. While all alliances have arranged the allocation of extra support (and money), in practice they do not always monitor the goals which are to be achieved with this support and they do not re-assess all current learners in special education in order to decide which learners can be placed in mainstream schools.

Collaboration and communication with parents

Communication with parents remains a focus area for Education that Fits. Practically all alliances have a website, but there are large differences in terms of quality. Some alliances leave (much of) the communication to the school boards, because parents and teachers are often easier to contact through the schools. If this is the case, the alliance concerned



must check that the provision of information through their schools is up to standard and that other parties besides parents and teachers can also be reached.

3. What information/data are collected at national level on attainment and achievement?

The evaluation and assessment framework

Internationally, the Netherlands stands out for its well-developed evaluation and assessment approaches (OECD, 2014). Central mechanisms for learner assessment, school evaluation and education system evaluation have been in place for several decades, along with requirements for schools to assure their own quality. The Dutch evaluation and assessment system combines a high degree of school autonomy with a set of checks and balances that allow for intervention if schools are found to be at risk of underperformance. The Netherlands is characterised by a complex system of governance with multiple actors shaping evaluation and assessment practices. This multi-actor environment has resulted in a comprehensive and balanced approach to evaluation and assessment, which combines school-based and central elements, quantitative and qualitative approaches, formative and summative assessment improvement and accountability functions, and vertical and horizontal responsibilities of schools. To further consolidate the evaluation and assessment framework, there is:

- room to embed evaluation and assessment approaches with broader education goals (besides focusing on reading and arithmetic skills, also focusing on social skills, learning to learn, motivation and well-being)
- room to continue building on teacher professionalism, and stimulating networks
- capacity for effective and forward-looking evaluation and assessment, in particular in the areas of classroom-based learner assessment, teacher appraisal and school-self-evaluation.

Centraal Instituut Toets Ontwikkeling (CITO): National Institute for Educational Measurement

CITO is an important central/national test developer in the area of exams, tests and assessment methods. Their products are scientifically sound, have a proven track record and focus on all levels of education, ranging from pre-primary to vocational education.

Equal opportunities in education do not start when a child enters primary education, but before. To offer each child with a (language) deficiency the best opportunities during their years at school, it is important to stimulate and support their development as early as possible. CITO offers a range of products to stimulate, observe and measure the development of young children. The products are aimed at children at both day-care centres and kindergartens and include:

- Certified programmes for early childhood education (Piramide Approach)
- Professional development programmes for teachers
- Mentor-coach programmes



- Blended learning for teachers and parents
- Printed resources: a collection of project books, manuals and assessment tools
- Monitoring systems for toddlers
- Language and arithmetic tests for toddlers.

They have also developed tests for learners with special needs in primary and secondary education.

When children enter Basic Education, usually at the age of six, a great transformation takes place in their learning. From learning by playing in kindergarten, most children start to experience a more or less programmed learning. With the CITO assessment instruments, teachers can observe and follow the learning outcomes of their learners and know how to support each individual's progress on the road to maturity. CITO offers a wide range of instruments and expertise to build observation and measurement instruments that can assess and guide the first steps in learning and growing. These include:

- A School Readiness test
- Pupil monitoring systems for reading, arithmetic and basic skills
- External assessment of primary education
- Tests for different purposes: selection, prediction, diagnosis
- Assessments at different levels: individual, group, school.

When children move from primary to secondary education, a next step in learning takes place. In their personal lives, they are experiencing the transformation from child to adult. Education needs to support learners in that transformation process. At some points, important decisions concerning future choices and determination of career opportunities must be taken. Such decisions should be supported by good observations and assessments. At the same time, these learners need support in their learning process. Their learning outcomes need to be observed and followed to understand how to support the progress of each individual on the road to maturity. CITO offers a wide range of instruments and expertise to build observation and measurement instruments that can assess and guide the progress and results of learners that are developing from child to adult. These include:

- Tests for different purposes: selection, prediction, diagnosis
- Assessments at different levels: individual, group, system
- Training and certification for teachers
- Learner monitoring systems for secondary education
- Diagnostic intermediate evaluations
- Assessments for basic skills in vocational or higher education
- External examinations.



Vocational education is the basis for developing skills for a wide range of professions. Most young people's entry into their first job is through a vocational education qualification. Society needs skilled and dependable labourers. Companies need programmes for Lifelong Learning in order to develop potential human resources that can improve the quality of products and processes. Exams and certification can assure that the right person for the right job is found. CITO offers consultancy for developing examination and assessment procedures in a vocational education setting, as well as in various professional contexts, for example:

- Designing an assessment programme
- Developing and applying exams and practical tests
- Training and assessing examiners
- Preparing assessment specialists for certification
- Quality care
- Evaluation methods.

4. What information/data on attainment and achievement (including the wider areas outlined above) are collected at school level?

Evaluation and assessment can play an important role in supporting the attainment of whatever educational goals are decided upon (OECD, 2014). In many ways, the evaluation and assessment policies developed in the Dutch school system are in line with the principles identified by the OECD to develop a comprehensive and balanced evaluation and assessment framework. The Dutch evaluation and assessment approach stands out internationally as striking a good balance between school-based and central elements of reading and arithmetic, quantitative and qualitative approaches, formative and summative assessment, improvement and accountability functions and vertical and horizontal responsibilities of schools.

Learner assessment

Learner assessment in the Netherlands is largely the responsibility of schools and classroom teachers (with formative tools), supported by well-developed standardised assessment (with summative tools), mostly by CITO. The Dutch education system has rich resources and expertise in assessment design, development and administration. Strong attention has been paid to reaching high quality standards and investing in continuing improvements to central national tests. The assessment framework relies on a balance between teacher-based (formative) and central (summative) assessments. There has been a recent focus on clarifying reference levels for learning and strengthening the results-orientated work in schools. There is an extensive system of formative and summative assessments, as well as pockets of promising innovations. To exploit and scale up these innovations, it seems essential to engage a broad-based consultative process to build consensus on the education goals for future generations. It is likely that such a consensus will involve a rethinking of traditional learning goals, as well as the adoption of some



21st century skills as important curricular goals. As consensus on learning goals begins to emerge, the work on a corresponding assessment strategy can begin. This would include further development of the assessment infrastructure, efforts to strengthen teacher professionalism in assessment and support for innovative assessment practice at the local level. In the short term, there are opportunities to leverage assessment data that is currently being generated and to critically examine current practices that may impede innovation and improvement, with a view to ensuring a balanced use of assessment as, for and of the learning of all learners.

Teacher professionalism for effective development and use of assessment

In addition to further developing the assessment infrastructure, it is equally important to continue to build assessment expertise, including the capacity to use results for improvement, among both teachers and school leaders. The OECD Reviews of Evaluation and Assessment in Education (2014) found that teacher professionalism in assessment is key to developing balanced and effective assessment frameworks. Combining teacher-based and external assessments can help ensure maximum validity and reliability in assessment. While learning outcomes that can be readily assessed in external examinations should be covered this way, continuous teacher-based assessment can cover a broader range of complex learning outcomes. Due to its continuous nature, teacher-based assessment allows for important achievements to be measured that are more difficult to capture in an external examination, such as extended projects, practical assignments or oral work. However, in order to reach the full potential of teacher-based assessment, it is important for policy-makers and stakeholders to adopt a strategic approach to teacher learning in assessment and invest in professional development opportunities. To be able to assess learners' progress in developing complex competencies, it is important that teachers learn to select and/or develop a variety of assessment approaches and understand different aspects of validity. This includes what different assessments can and cannot reveal about learning and planning. To this end, assessment capacity, including the capacity to use results to improve teaching, should be reflected in teacher standards and be addressed in a coherent way across teacher preparation programmes and publicly funded professional development programmes.

5. What information/data are used for school evaluation and quality assurance at national/local level?

School evaluation

A school-based approach has been successful in reducing the number of schools providing weak or unsatisfactory quality of education (Inspectorate of Education, 2015). To go further in helping all schools improve, the Inspectorate has launched an internal reflection on new approaches to measure the value added by schools and to develop differentiated inspections for schools already performing at an acceptable level of quality. In developing these approaches, it will be important to continuously review the impact of school development interventions. It will also be important to further invest in building the professionalism of teachers, school leadership teams and school board members to collect, analyse and use evaluative information for improvement.



Evaluation and assessment are key elements within the policy of results-orientated work (question 2). Recent laws on learner assessment make it mandatory for primary and secondary schools to implement regular learner monitoring systems (formative and summative assessment), as well as a standardised end-of-primary tests (summative assessment), such as those developed by CITO. Schools must focus explicitly on reading and arithmetic, however they may also focus on other results that they value in teaching all learners and preparing them for the next step in their learning development. The instruments developed by CITO can be used to track the development of individual learners, classes and schools. This is done twice: in the middle of the school year (January) and at the end of the school year (June/July). They can also be used to quantify data when comparing the results between different learners, classes and schools (learners with the same type of background, SES and learning or behavioural problems). However, there is discussion in the Netherlands about the strong attention to and the 'power' of the CITO instruments. This discussion is summarised well by Biesta (2012), an educational philosopher, who wonders: 'do we value what we measure or do we measure what we value?' Many teachers also find that the CITO instruments focus mainly on literacy and numeracy, neglecting other relevant constructs such as motivation, well-being, social competencies, learning to learn and parental engagement in achieving school success. There is also critique on the monopoly position of CITO, as the largest institute. The Ministry therefore decided that all schools must use an assessment instrument to support transitions from primary to secondary school, but schools may decide whether to use assessment instruments developed by CITO or by another institute.

Dutch education is in a constant state of flux (Inspectorate of Education, 2015). There are various innovations that schools are embracing and different types and methods of education they are willing to experiment with. Schools are increasingly distinguishing themselves in this regard and variety in education is growing. This is a welcome development, which will offer greater freedom of choice and avoid mediocrity. Innovation also helps schools develop into learning organisations. However, as a collective stakeholder, the Inspectorate must continue to assess what quality is considered acceptable and what should be improved. This is important as it avoids inadequate responses in the face of new challenges, such as Education that Fits. Things that really work in classrooms should be shared, ensuring that the interests of all learners remain paramount.

Schools are focusing more strongly on quality assurance with a view to maintaining education quality for all learners. Quality assurance leads to better education for all learners. Ensuring that the focus on quality actually leads to improvements in the classroom, so that all learners can benefit, remains a challenge for many schools and study programmes (Inspectorate of Education, 2015). There are substantial differences between schools (*ibid.*). There are many good schools and strong study programmes where both learners and teachers are motivated. These schools and study programmes often combine a close-knit team and a good principal and governor. Many also have an open culture geared towards continuous improvement, a shared mission and vision, and a staffing policy to match and support their ambitions.



6. Are there any specific initiatives in place to support/enable teachers and/or school leaders to raise the attainment and achievement of all learners?

Teacher appraisal

What competences (attitude, knowledge, skills) do teachers need to raise the attainment and achievements of all learners? Teacher appraisal in the Netherlands is under the responsibility of the competent authority of each school. Central regulations specify that schools should have regular performance interviews with all staff, but employing authorities are free to develop their own frameworks for teacher appraisal. Many school boards delegate the responsibility for human resource management, including teacher appraisal, to the school leaders, and practices vary from school to school. On a system-wide basis, a register system and a peer review project for teachers have been launched by the Education Co-operative, a teacher professional organisation created in 2011.

Improving teaching quality has been a policy priority in the Netherlands in recent years, as evidenced by the introduction of teacher competency requirements, the obligation for school boards to monitor teacher competencies and the Inspectorate of Education's increased focus on monitoring teaching quality in schools. Going further, the teaching profession in the Netherlands could benefit from:

- a revised and refined set of teaching standards;
- strengthened school-based appraisal processes linked to professional learning opportunities, especially for new teachers;
- an enhanced registration system that could be linked to teacher career development.

Capacity for interpreting and using assessment results for improvement

If learner assessment is to improve future learning and teaching, then assessment evidence must be acted upon in subsequent classroom practice, to provide the right levels of support and challenge to each learner. In order to successfully implement differentiated instruction, teachers require relevant professional development, both to make the best use of the evidence collected and to better manage a classroom in which multiple learning activities are taking place. The investment appears to be worthwhile, as research literature documents important learning gains of learners exposed to high quality differentiated instruction, informed by relevant formative assessment.

Competence in designing or selecting an assessment, interpreting the results and using the results effectively should become a key goal of teacher preparation. This can be accomplished, for example, by employing the inquiry Plan-Do-Check-Act (PDCA) cycle as a fundamental didactic method. Undoubtedly, this will require changes in the curriculum of teacher training programmes. According to representatives of teacher education institutions interviewed by the OECD review team, teacher preparation does not currently allow sufficient time for assessment-related competencies. However, there is an effort in some programmes to improve in this area, despite the severe time constraints under which they operate. Practicing teachers should be encouraged to use some of their



professional development time to develop a range of assessment skills, appropriate to the subject and grade. Resources can be provided locally, regionally, or online and supported by various networks.

The practice-based assessment model 'Assessment for Improvement', which is presented as a practical example (Annex 1), focuses on the PDCA cycle as a fundamental didactic method for teachers and school leaders. This cycle is adapted to daily challenges in teaching. It supports teachers in the processes of:

- describing and analysing the situation of an individual learner, a group of learners or a class;
- formulating and testing hypotheses about the learners, the group, the learning environment, the teacher's pedagogical-didactic strategies and parental support of learning;
- describing SMART aims and effective interventions to achieve these aims;
- monitoring and evaluating the effects of the interventions and whether the aims are achieved;
- analysing the outcomes of the evaluation: what were the impacts of the learner(s), the group, the learning environment, teacher's pedagogical-didactic strategies and parental support of learning?;
- planning a new cycle of teaching and learning.

Instead of applying the successful elements of assessment to an individual learner (as school psychologists and school counsellors do, see Annex 1), teachers are trained to apply these principles to a group of learners within their class or to the whole class (all learners). School leaders are trained to apply the same principles to all the teachers and counsellors in their school. In the PDCA cycle, the behaviour of learners, teachers, school leaders and parents is seen as valuable feedback on the quality of teaching and the quality of the school (Hattie, 2009). And the school team is constantly learning how to improve teachers' teaching and learners' learning from each other, from learners and from parents.

7. What other policies may influence levels of attainment and achievement for all learners?

The Education that Fits Act (see question 2) made school boards responsible for providing 'tailored or fitting' education for every learner, with a focus on inclusive education. Every child attend a school, preferably close to their home or in the same region. Other aims of this policy are to focus more on positive aspects and the learning needs of learners, instead of on their shortcomings or disorders. As a result, it is expected that more learners will be placed in mainstream education and that separate, special, facilities will increasingly be of a temporary nature (Inspectorate of Education, 2015).

De-centralisation is also an aim of Education that Fits. School boards, as local stakeholders, might influence levels of attainment by providing quality inclusive education in mainstream settings. Therefore, they are organised into regional alliances that arrange



additional support services (*samenwerkingsverband*). Through Education that Fits, school boards that collaborate within an alliance of schools are free to apply funds reserved for additional support for this purpose and to determine which learners should receive which care. The assessment model described in Annex 1 supports alliances, boards, schools and teachers in needs-based assessment. After analysing the situation around a learner with disabilities, learning, motivation of behaviour problems, ambitious goals and needs are formulated and the best ‘fitting’ mainstream school in the region is sought. A special setting might only be advised (preferably temporarily) if the learner’s additional needs are such that even a strong mainstream school is unable to offer suitable education. This entire process takes place in close collaboration, with the professionals from the support service (and youth healthcare), the school counsellor, school leader and teacher(s) involved, the parents and the learner working closely together.

Education that Fits also focuses on parental engagement in primary and secondary education:

- How can schools involve parents in the learning of their child?
- What can they do to increase the learning of their children?
- How can parents support teachers and how can schools support parents in achieving a shared ambition: school success for learners?

The Education that Fits school financing system supports disadvantaged learners, their teachers and parents. Dutch educational policy has also recently paid attention to gifted and talented learners. The focus on excellence is supported by a number of initiatives. For example, teachers in primary schools learn how to differentiate and offer an enriched environment for talented learners, by asking what extra challenges they need to achieve even more and stay motivated for learning. In several secondary schools, learners can formally follow subjects at higher track level or obtain their secondary education diploma with a *cum laude* distinction. Also, some schools focus on improving excellence by offering special educational programmes, such as bilingual education or programmes for gifted and talented learners. These programmes can be organised and financed by the alliance of schools to which the school belongs and/or by the school board.

8. Please provide a short commentary/critical reflection on the main policy challenges

OECD recommendations

The Netherlands has one of the OECD’s most devolved education systems, with schools enjoying a high degree of autonomy. The school system is equitable, with a very low proportion of poor performers (OECD, 2016). However, the OECD describes several challenges and recommendations:

Strengthen quality in early childhood education and care

Early childhood education and care (ECEC) can have extensive benefits, particularly for disadvantaged children. The quality of ECEC should be strengthened through the development of a curriculum framework, and by improving and standardising the



qualifications and training of ECEC staff. The Netherlands should also move towards a more integrated approach to ECEC provision that is more focused on preparing children for school. The communication between ECEC professionals and teachers in the first year of primary education could become stronger, creating a 'smoother transition'. Teachers would then benefit from the knowledge of ECEC professionals on what does/does not work with a particular child, instead of re-inventing the wheel.

Reform initial selection and subsequent permeability

Learner outcomes in the Netherlands are good on average and in respect of equity, but, despite early tracking, large performance differences within tracks are a problem. The Netherlands should consider options for reducing the extent of early tracking. At the same time, a learner's right to enter a track could be established based on a national objective test. Schools may then be required to respect national test standards when placing learners in tracks and subsequently sustaining them in those tracks. This would facilitate upward transition between tracks throughout the school career. An alternative consideration could be the integration of information from the national tests with teachers' opinions and advice and learner (and their parents') preference. When these are consistent the track is evident, but when the test outcomes and teacher advice are inconsistent (one leading to a lower or higher track than the other), then the higher track should be considered.

Promote and reward learner motivation and excellence

The Netherlands has more 15-year-old top performers in basic skills than most of Europe, but is still behind some Asian countries. Some of the most promising learners are not reaching their full potential. Teacher capacity to respond to individual learning needs should therefore be improved, while rewards for excellence at every level of education are also reinforced through the opportunity for track promotion. High expectations should be set through a relevant curriculum, and parental engagement in education that supports excellence and motivation should be fostered.

Strengthen teacher professionalism and further develop the career structure

Teacher professionalism should be sustained and developed through a life cycle approach. This starts with effective initial selection arrangements and mandatory induction, while promoting collaborative working and learning within and across schools. The career structure for teachers also requires further development, with greater salary and career diversity supported by clear competence standards and effective appraisal linked to professional and school development goals. Sustained attention to differentiated teaching skills is also necessary: how can teachers raise the achievements of all their learners, including the vulnerable and talented ones?

Develop a leadership strategy that promotes professional collaboration and a culture of continuous improvement and learning

The quality of school leadership is especially critical in the de-centralised Dutch school system. In response, the Netherlands needs to develop a leadership strategy that promotes collaboration among school leaders, teachers and school boards and a culture of continuous improvement. The principal should be a model in continuous learning from



and with other principals, teachers, learners and parents. Leaders should consider their responses and behaviour as valuable feedback on their functioning as a school leader (Hattie, 2013). There should be a mandatory national induction programme for school leaders that guarantees the quality of induction and mentoring support, annual appraisals for all school leaders and personal development plans that are aligned to school goals. School leaders and leadership teams should also continue to develop their capacity to conduct school self-evaluations, fostering the aim of schools as goal-directed learning organisations.

Enhance the accountability and capacity of school boards and re-balance their authority

School boards have a key governance role in the Netherlands, but accountability mechanisms are weak and there are sometimes capacity issues within the boards. The OECD argues that the work of school boards should be made more transparent (to the school leaders and teachers) and that they should open their operations up to meaningful challenge. The strategic leadership capacity of school boards and their professionalism should be enhanced systematically, while the authority of school boards should be re-balanced to give more authority (and ownership) to school leaders.

Dutch educational policy has paid more attention to excellence in recent years (see questions 2 and 7). While there are positive developments, there is room to further encourage the performance of each learner. The main goal for most Dutch pupils in each track is still to finish secondary school at that level. As entrance into higher tracks or higher (secondary) education in the Netherlands is mostly guaranteed simply by graduating, there is no real incentive for all learners to exceed the minimum requirement. A reform is needed to increase the possibility of up-streaming to a higher track in order to follow subjects at a higher level. This could help increase the incentive to excel. This reform would remove the threat of repetition (which is high in the Netherlands) or down-tracking, and increase the potential rewards in terms of track promotion for all learners. Rewards are more effective motivators than threats.

Parental engagement and professional communication with parents also remain a focus area in Education that Fits (Inspectorate of Education, 2015).

OECD recommendations on evaluation and assessment

Compared internationally, the Dutch education system achieves very good results. It has made progress on many fronts and has a high standing in international assessments. Yet, there is a general appreciation that the system must continue to improve and strive for the next level. The nature of that next level, however, has not yet been specified. Various groups interviewed by the OECD review team (OECD, 2014) believe it could mean:

- further improving the country's standing in international assessments, with particular focus on increasing the proportion of learners in the highest categories;
- enhancing general academic achievement and responding better to the learning needs of different learner groups;
- turning attention to '21st century skills', such as creativity, collaboration and ICT literacy.



The OECD suggests a range of policy options to further develop and integrate the overall evaluation and assessment framework, while maintaining its balanced approach, including the following:

- Embed the evaluation and assessment framework with broader learning goals, focusing not only on reading and arithmetic skills, but also on learning to learn, motivation, social competencies, well-being, etc.
- Integrate teacher appraisal into the evaluation and assessment framework. As the most important school-level factor in learner achievement, teachers are key to improving education outcomes.
- Continue to adapt school evaluation to emerging needs. Given the multi-actor nature of school evaluation in the Netherlands, the Inspectorate should continuously map the environment in which it operates at both the national and local level. It should also take into account the potential impact of the other partners when designing its school evaluation approaches.
- Strengthen evaluation and assessment competencies across the education system. In the context of freedom of education, the successful implementation of evaluation and assessment in the Netherlands crucially depends on the competencies of school professionals. Teachers are responsible for assessment of all learners and need to build strong competencies in this domain.

The OECD (2014) points out several priority areas for further capacity development in evaluation and assessment, such as:

1. classroom-based formative assessment;
2. interpretation and use of assessment results for the improvement of teaching and learning.

Capacity for classroom-based formative assessment

The current focus in the Netherlands on using regular learner monitoring systems for results-orientated work is commendable (see question 3). Such medium- and long-term formative uses of results are important in:

- identifying areas for further improvement;
- developing broad teaching strategies to address needs identified within the learner cohort;
- planning;
- allocation of resources, etc.

It can also feed into the school-wide co-ordination of pedagogical support and remediation for learners facing learning difficulties.

While medium- and long-term formative assessment strategies are important to ensure consistency of support throughout a learner's learning trajectory, research indicates that short-cycle formative assessment – the daily interactions between and among learners and teachers – has the most direct and measurable impact on learner achievement. In short-cycle interactions, formative assessment is part of the classroom culture, and is an



integrated part of the teaching and learning process. Teachers systematically incorporate such formative assessment methods in their course planning – for example, in how they intend to develop classroom discussions and design activities to reveal learner knowledge and understanding. These interactions encompass effective questioning to uncover learner misconceptions and identify patterns in learner responses, feedback on learner performance and guidance on how to close learning gaps, and learner engagement in self- and peer-assessment (OECD, 2013).

The active participation of learners in such formative assessment processes has given rise to the term ‘assessment of learning’. This focuses on learners reflecting on and monitoring their own progress to inform future learning and making their own choices. While feedback from teachers and others provides information that can help learners improve, it is the learners themselves who must make sense of that information, relate it to prior knowledge and take action to close gaps in their own learning process. However, developing skills for self-assessment and self-regulation takes time and requires structured support from teachers in the classroom.

Teachers can use classroom assessment to provide opportunities for learners to engage in reflection and critical analysis of their own learning. This could be, for example, by:

- guiding learners in setting learning goals and monitoring their progress towards them;
- working with learners to develop criteria to judge progress;
- using exemplars and models of good practice and questioning of their own thinking and learning processes.

Policy-makers can support such practices by developing requirements, guidelines and support around learner-centred teaching and assessment (OECD, 2013).

Considering the large differences between schools when it comes to raising achievement for all learners, there should be more focus on teachers and school leaders actively learning from and with each other. How can schools and study programmes be encouraged to learn from good practice and other effective schools and study programmes, without re-inventing the wheel again and again?



ANNEX 1. EXAMPLE OF PRACTICE TO RAISE LEARNER ACHIEVEMENT

Contact person: Noëlle Pameijer

Introduction

'Education that Fits' aims to 'tailor' or 'fit' education to every learner, with a strong focus on inclusive education ('mainstreaming' in mainstream schools). One of the aims of this policy is to decrease the number of learner disorders (labels) and to focus on learners' positive aspects, talents and learning needs instead of on their shortcomings and problems. Parental engagement is also an important aim of this policy.

In the Netherlands, the 'assessment for improvement' model is popular, because it supports professionals in finding out which type of education is best tailored for a particular learner. It is estimated that about 75% of the primary schools, alliances and support services apply elements of this model. In secondary schools, there is also more and more interest in this way of working. In Dutch, the model is called *handelingsgerichte diagnostiek* for psychologists working in schools and youth mental health services and *handelingsgericht werken* for teachers, school counsellors, school leaders and school boards.

The model supports schools in achieving several recommendations that have been made in this report (question 8), for example:

- Focus on professional and positive communication between ECEC professionals, teachers in primary and secondary schools, school leaders, learners and parents. They can all benefit from each other's knowledge of what does or does not work with a particular learner or group of learners, instead of repeatedly re-inventing the wheel.
- The teacher's capacity to respond to individual learning needs should be improved. Sustained attention to differentiated teaching skills is necessary: how can teachers raise the achievements of all their learners, including the vulnerable and talented ones?
- Parental engagement and professional communication with parents remains a focus area in 'Education that Fits'. Parental involvement in education can support raising the achievement of all learners.
- Learners should reflect on and monitor their own progress to inform future learning and make their own choices. The learners themselves must make sense of the assessment information, relate it to prior knowledge and take action to close gaps in their own learning process. As such, they should participate in the assessment process from the beginning.
- Schools should function as goal-directed learning organisations, in which professionals, learners and parents continuously learn with and from each other. This requires a shared frame of reference.



1. Location of school/learning community and short description of context

'Alliance for Education that Fits' is a Dutch regional centre for tailored education that supports 102 mainstream primary schools (mainstreaming learners with special needs) through a service centre. The service centre is located in Hilversum, in the centre of the Netherlands, between Amsterdam and Utrecht.

2. Summary information on school/learning community

The example in Annex 2 presents an assessment model for addressing children's special educational needs: Assessment for Intervention or Improvement (AFI) or Needs-Based Assessment (NBA) (*Handelingsgerichte Diagnostiek, HGD*) for teachers (Pameijer & Van Beukering, 2015). This model (outlined in section 1 of Annex 2) incorporates recent developments in assessment. It aims to provide scientifically sound recommendations for intervention and improvement in teaching and learning that are also useful to a particular learner or group of learners, teachers and parents. Annex 2 describes the seven principles (section 2) and five stages of the model (section 3). Data on the impact of the model is reported in section 4. Finally, the Conclusion in section 5 discusses the successes, problems and questions relating to the model.

Systematic reviews on the quality of assessment have led to standards for 'good assessment'. These standards are translated into seven coherent principles of AFI:

1. It is goal-directed, aiming at recommendations that are both meaningful and useful for clients and beneficial to the learner.
2. It applies a transactional perspective on development and therefore not only focuses on the learner, but also on teachers' strategies and parental support.
3. It focuses on educational needs: what does this learner need to achieve a specific goal?
4. As teachers and parents are essential in achieving educational goals, AFI also focuses on their needs: what do they need to support this learner's learning?
5. Assessment not only focuses on risk factors, but also on protective factors of the learner, the school and the parents.
6. The assessor works in a collaborative partnership with the teacher, learner and parents.
7. AFI follows a systematic and transparent process with five cohesive stages.

These principles can all be applied by school psychologists, professionals in education and youth health care, teachers, school leaders, learners and parents. They therefore provide 'shared aims and the same language' for all involved in raising the achievement of all learners.



3. Summary of key feature/strengths of current practice

AFI contains guidelines for assessors such as school and educational psychologists. The method also supports teachers, parents and learners when analysing and improving a problematic situation in a class, with a group of learners or an individual learner.

For the successes and challenges of AFI in practice, see section 5 of Annex 2.

4. Data/information available

The service centre selected a sample of twenty schools, representative with regard to type and location of the school, quality of education, learner population and parental socio-economic status. These schools participated in a three-year pilot study, implementing AFI to assess the needs of learners with learning and/or behaviour problems (about 5% of the learners). The study focused on the assessment process of these learners in the third school year of the pilot (from September 2012 to July 2013). In 198 of the AFI cases, the teachers, school counsellors and parents reported on the effects of AFI. For the results, see section 4 of Annex 2.

5. Focus of example/work to raise achievement

Essential for the learner with special needs, beneficial to all learners in their group.

The assessment process focuses not only on the learner, but also on the learning environment, peer learners, group, teacher strategies, school and parents. In a way, all learners' learning is analysed. The recommendations do not only concern a particular learner, but also other learners and the teaching strategy; for example:

- Which other learners need this teaching approach as well?
- Which other learners can benefit from these recommendations?
- What does this teacher need to apply the recommendations in their class?

Interventions and teacher strategies that have been proven effective (Hattie, 2009; Mitchell, 2015) are translated to the daily practice of 'this teacher, in this group, in this school, focusing on the achievement of all learners in the class'.

6. Summary information about developments/current work in this area

The example in Annex 2 gives an indication of the elements of AFI that teachers, school counsellors, parents, learners and assessors appreciate (successes) and of the challenges assessors deal with in their daily practice (points for improvement).

For the strengths and weaknesses of AFI, see section 5 of Annex 2.



7. Key learning points from this example

When assessing individual learners, the teacher and other learners should be included in the analysis of the situation and in formulating feasible recommendations. The aim is that the teacher and other learners benefit from the assessment, as well as the individual learner. By assessing the situation in close collaboration with teachers, teachers learn how to implement the PDCA cycle in such a way that it improves their teaching and the learning of all of their learners.

8. Supporting materials (web links, papers, presentations, etc.)

- Descriptions of the method for teachers, school coaches, school psychologists, parents and learners
- Several books, articles and papers, presentations, web links with films

Illustrations of the AFI model in practice can be found on the [International School Psychology Association \(ISPA\) website](#).



ANNEX 2. ASSESSMENT AND INTERVENTION: BRIDGING THE GAP WITH A PRACTICE-BASED MODEL

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Aim: This article describes a practice-based assessment model (Assessment for Intervention, AFI) that aims to bridge the gap between assessment and intervention. Within this model, school psychologists are scientist-practitioners: they formulate and test hypotheses in close co-operation with teachers, parents and the learner involved.

Method: The seven principles (why?) and five stages (how?) of the AFI model are presented (sections 2 and 3).

Findings: The first findings of an evaluation study are reported (section 4). Despite several limitations (e.g. low response rate), this study gives an indication of the elements of AFI that teachers, counsellors, parents and assessors find important and of the challenges assessors have to deal with in their daily practice. It also provides points of improvement for the AFI model. Finally, it shows that most assessors work according to the seven principles and five stages.

Conclusion: In practice, the model bridges the gap between assessment and intervention and makes the assessment process more meaningful to teachers, parents and learners. It is concluded (section 5) that it is necessary to investigate whether the AFI model actually leads to more ecologically valid case formulations and more effective interventions than 'assessment as usual'.

Key words: principles and stages of assessment for intervention, school psychologist, scientist-practitioner, evaluation study, strengths and challenges, AFI model.

1. Introduction

Assessment is essential for decisions on diagnosis and intervention (Deno, 2005). European guidelines define assessment as a process of hypothesis-testing designed to answer clients' questions and to solve their problems (Lebeer & Partanen, 2011). This process includes important decisions that may have a large impact on the learning and well-being of children (Brown-Chidsey, 2005). Therefore, this process should take place in a systematic, objective and consistent way and should be transparent for colleagues and clients (Carr, 2014). This paper presents an assessment model for addressing learners' special educational needs: Assessment for Intervention (AFI). The aim of this model is to provide recommendations that are both scientifically sound and useful for a particular learner, teacher, or parent. The principles and stages of the model will be described, followed by the first outcomes of an evaluation study. Successes and challenges relating to the model are also discussed.

In practice, there is often a gap between diagnostic information and recommendations. The aim of the AFI model is to bridge this gap. The AFI model, originally developed in the Netherlands (Pameijer & Van Beukering, 1997, 2004, 2015; Pameijer & Pijl, 2006),



describes a decision-making process in which a school psychologist systematically proceeds through a series of stages. These stages start with the analysis of questions from the teacher, school counsellor (an internal educational supervisor or learner educational needs co-ordinator), parents and learner: what do they want to know and why? These questions, combined with those of the school psychologist, determine the purpose of assessment, the decisions to be made and the answers to be sought. AFI is functional when it leads to an understanding of the problematic situation (diagnosis) and provides recommendations on how to alleviate or solve this situation (intervention).

Generally, assessment refers to two main topics (Hunsley & Mash, 2008): the assessment process (i.e. generating and testing hypotheses, integration of information and decision-making) and assessment methods (i.e. tests, questionnaires, interviews and observations). The practice-based AFI model focuses mainly on the process and elaborates on the Plan-Do-Review (PDR) cycle, integrating recent developments in assessment into this cycle. AFI differs from other assessment models as it is scientifically sound and practice-based. It offers guidelines on how to combine the knowledge of the assessor with the knowledge of the teachers, parents and learner involved, in such a way that the outcomes are in the best interest of the learner. The model covers all topics that are considered relevant in a recent international review-study on the assessment of learners with special needs, such as the scientist-practitioner attitude of the school psychologist and the need to collaborate with teachers, learners and parents during the entire assessment process (Struyf, Verschueren, Vervoort & Nijs, 2015).

Recent developments incorporated in the AFI model

The concept of assessment has changed considerably over the last 10 years, focusing more on its contribution to teacher instruction and learner learning (Lebeer & Partanen, 2011). Functional assessment, or AFI (Hargreaves & Fullan, 2012), results in an improvement of the instructional environment and is in the best interest of the learner.

Nowadays, the learners' needs seem more relevant for intervention than their disorders (Frances, 2013). Instead of looking for labels, such as ADHD or dyscalculia, school psychologists focus on the abilities of learners and what they need to take the next step in their development. Assessment also focuses more on solutions and on the empowerment of teachers, parents and learners (Cauffman & Van Dijk, 2014). Furthermore, a problematic situation appears to improve sooner when those involved are part of the assessment process, right from the beginning. During this process, clients' awareness and understanding of the situation and their motivation for change increase. This 'therapeutic value' of assessment makes it more functional (Haydel, Mercer & Rosenblatt, 2011). According to the International Convention on the Rights of the Child (2013, article 12) all children have the right to express their opinion. Regardless of their age, children should therefore participate in their assessment. Last but not least, the assessment process must be as evidence-based as possible, supporting an accurate case formulation of the learner and their instructional and home environment. This formulation is the basis upon which goals are set and an appropriate intervention is chosen (Hunsley & Mash, 2008).

School psychologists use scientific knowledge of what works (e.g. Marzano, 2007; Hattie, 2009; Mitchell, 2014). Moreover, they apply successful practical experiences, professional standards and (ethical) values. As scientist-practitioners, they combine evidence from



various sources, including working research-based, as well as practice-, client- and value-based (Van Yperen, 2010).

The AFI model implies more than the PDCA cycle as it also focuses on the content of the steps within the cycle, the communication skills of the school psychologist and the different roles of the teacher, parent and learner within this cycle. The assessment process is tailored to their specific context, thereby decreasing the gap between assessment and intervention. As a prescriptive model, AFI outlines an optimal and scientifically sound process. School psychologists can therefore use the model as a frame of reference for reflection and quality improvement by asking themselves the following three questions:

- What are my targets for assessment for intervention (goals)?
- Which elements of AFI am I already successfully implementing?
- Where is there room for improvement?

2. The seven principles of AFI

In their AFI model, Pameijer and Van Beukering have translated research on the quality of assessment and professional standards for 'good assessment' into seven coherent principles:

1. AFI is goal-directed, aiming at recommendations that are both meaningful and useful for clients and beneficial to the learner.
2. AFI applies a transactional perspective on development and therefore not only focuses on learner factors, but also on teachers' strategies and parental support.
3. AFI focuses on educational needs: what does this learner need to achieve a specific goal?
4. As teachers and parents are essential in achieving educational goals, the model also focuses on their needs: what do they need to support this learner's learning?
5. AFI not only focuses on risk factors, but also on the protective factors of the learner, school and parents.
6. The school psychologist works in a collaborative partnership with the teacher, learner and parents.
7. The AFI model follows a systematic and transparent stage-like process.

These seven principles describe the theoretical context and rationale (what and why?) that underlie the five stages of the AFI model (how and when?). They can also be applied by teachers, school counsellors, school leaders, parents and learners, creating a shared perspective.

Principle 1: Goal-directed and functional assessment

The information gathered should be confined to what is strictly necessary for addressing the problem (Salvia & Ysseldyke, 2004). The school psychologist aims at feasible interventions from an early stage. Knowing *what* needs to be changed does not yet



indicate *how* this can best be done for this learner, this teacher, this classroom and these parents. A successful and workable recommendation requires both knowledge of effective interventions and strategies and consultation with clients: how does a certain strategy fit into their daily work? What do they already do according to this strategy and what can be done better? From this perspective, assessment can be seen as a change-orientated cycle of investigation, case formulation, intervention and evaluation. The situation becomes increasingly clear, while assessment and intervention enrich each other. As AFI aims to improve a problematic situation, it focuses on variables that can be translated into intervention-goals, such as a learner's feeling of competence and executive functions, the quality of the instructional environment and teachers' strategies and the parental support of learning.

Principle 2: Transactional perspective

Children develop through a continuous interaction with their instructional and home environments (contextual approach). These interactions are transactional: learners evoke reactions from their teachers, fellow learners, parents, siblings and friends and thereby also indirectly influence themselves. Learner and context thus reciprocally influence each other, resulting in changes both in the learner and the environment (Braet, Prins & Bijttebier, 2014). A problematic situation is related to risk factors. The more risk factors are at play, the higher the chance of a problematic development (Vanderbilt-Adriance & Shaw, 2008). The risk factor 'aggressive behaviour at an early age', for example, is not directly related to behavioural problems at a later age. However, when there are more risk factors, such as a teacher who clashes with the learner and parents who physically punish them, there is a greater risk of behavioural problems (Orobio de Castro, 2014). Protective factors weaken the impact of risk factors and are relevant as well. AFI therefore questions which favourable interactions can be extended and which counter-productive interactions should be modified. For teachers and parents this means: what is the impact of my approach on the learning of this learner? For the learner this means: what is the effect of my behaviour on teachers, peers and parents? By discussing these questions during the assessment process, clients become more aware of their impact on the situation. This realisation may increase their motivation to change certain behaviour.

Principle 3: Special needs of the learner

The AFI model focuses on the learner's needs related to education and parenting. It shifts the attention from 'what the learner has or is' (such as 'she has dyslexia' or 'he is oppositional') to 'what the learner needs'. The first question is: which SMARTI (specific, measurable, achievable, relevant, time-bound and inspiring) goals are we pursuing? The subsequent question is: which approach (from teacher, parent) does this learner need to reach these goals? These questions change the mind-set from problem-orientated thinking to solution-focused acting. In co-operation with the learner, teacher, counsellor and parents, the school psychologist discusses educational needs: what does this learner need to achieve a certain goal? For example: a specific type of instruction, assignment, learning environment, feedback, teaching strategy or fellow learners. In this way, the expertise of all involved is used to discover what the ideal approach for this learner might be. The school psychologist then discusses with the teacher and parents what they already offer the learner ('goodness of fit'), what is missing ('poorness of fit') and to what extent it



would be possible to offer these extras. The additional needs are then made attainable by asking the teacher and parents what they themselves need to support the learner.

Principle 4: Teachers matter: what do they need to support the learner?

Teachers matter, especially for vulnerable learners (Marzano, 2007). By proactively supporting learners, competent teachers are able to prevent learning and behaviour problems. Such teachers have strong pedagogical-didactic competencies. Moreover, a positive teacher-learner relationship is a key to success (Verschueren & Koomen, 2016). A warm and close relationship offers a learner emotional support and security, which has a positive impact on relationships with peers and learning behaviour in the classroom. On the other hand, a hostile or dependent teacher-learner relationship is a risk factor for learners with antisocial or withdrawn behaviour as it encourages this problem behaviour. By investing in a positive teacher-learner relationship, academic achievement and well-being at school can increase (Hattie, 2009). This is why the AFI model focuses not only on teachers' skills, but also on their relationships with particular learners. Once a teacher is aware of their impact, they can become a key instrument in improving the situation. In cooperation with the teacher, the school psychologist therefore might formulate hypotheses concerning the impact of certain teaching strategies on the learning of the learner. Once confirmed, they discuss what the teacher needs to adjust more to the needs of the learner.

Principle 5: Protective factors and strengths

Every learner, no matter how severe their problems may be, displays positive behaviours and qualities, such as talents and interests, which can compensate for shortcomings in other areas (Carr, 2014). Studies have identified child protective factors, such as an easy temperament, good intellectual capabilities, strong emotion regulation, an internal locus of control and strong coping skills (Vanderbilt & Shaw, 2008). Beneficial aspects in the social environment, such as a supportive school team and a family network can support teachers and parents. For learners with attachment problems, for example, a positive relationship with their teacher has a positive impact on their behaviour, working attitude and achievements (Verschueren & Koomen, 2016). A warm and supportive relationship with responsive parents, in which the learner experiences security, emotional involvement and encouragement, has also been found a protective factor (Masten & Tellegen, 2012). While taking the problems and concerns of the clients seriously, the AFI model also focuses on the chances and strengths. The school psychologist includes these positive aspects in the assessment report and uses them to make recommendations. The school psychologist is, for example, interested in the positive exceptions (when is the learner able to display the desired behaviour?) and the successful teaching approach (what does the teacher do in this situation?). A balanced overview of risk factors, protective factors and the interaction between these factors produces an ecologically valid case formulation. Moreover, it is often easier to boost positive factors than to reduce risk factors (Carr, 2014).

Principle 6: Collaborative partnerships

School psychologists co-operate with learners, teachers, counsellors and parents when searching for explanations and formulating goals and needs. This is a key condition for ecologically valid assessment and effective recommendations (Carr, 2014). Clients are



more than just sources of information, subjects of research and executors of recommendations. As hands-on experts through experience, they have good insight into the possibilities for change. As 'co-assessors', clients participate in the assessment process, playing a key role in translating diagnostic data into attainable interventions that suit their context.

The insights and solutions suggested by the learner, teacher and parents are just as valuable as those of the school psychologist. The principle, therefore, is to talk *with* the learner, teacher and parents as much as possible, rather than *about* or *to* them. AFI is customised to this learner, this teacher and these parents: what do they need to reach a particular goal? The school psychologist translates their scientific knowledge into the clients' personal framework, in order to make the information meaningful and useful to them. Only then will they understand the case formulation and recommendations. That is why, from the outset, the AFI model aims for openness in communication with clients (transparency).

Principle 7: A systematic and transparent assessment process

As said before, assessment should take place in a systematic, objective and consistent way and be transparent for other school psychologists and clients (Carr, 2014). Following an assessment model increases the likelihood of consistent and objective decision-making (Kazdin, 2005). The AFI model is an example of an assessment model which is based on the empirical cycle of scientific thinking (De Bruyn, Ruijsenaars, Pameijer & Van Aarle, 2003). AFI includes five stages and each stage has its own guidelines, supporting clinical decision-making. These guidelines are formulated to remind a school psychologist of the principles of AFI and protect them against common pitfalls in decision-making, such as tunnel vision, confirmation bias and over-confidence (Witteman, Van der Heijden & Claes, 2014).

3. The five stages of the AFI model

The model consists of five stages closely linked to each other in a cyclical process with systematic feedback loops. The stages can be applied by a single school psychologist or a multi-disciplinary team. Each stage consists of coherent steps that support the decision-making process and guard the seven principles of AFI. In practice the stages may overlap, but here they are discussed separately in order to realise an explicit and clear assessment process.

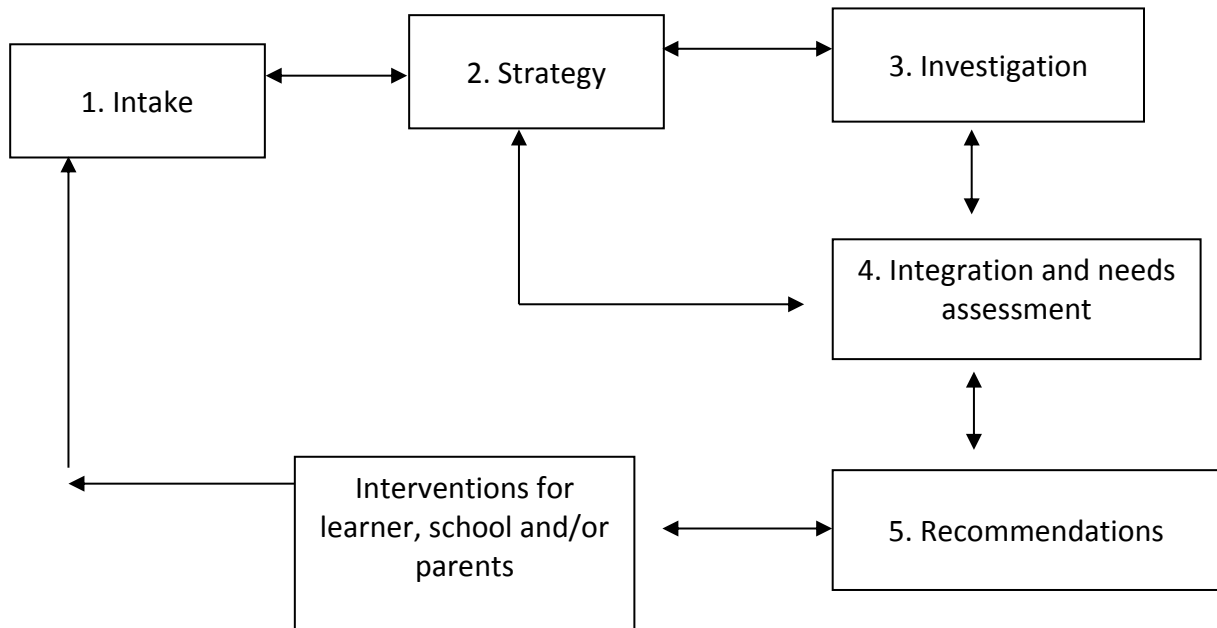


Figure 1. Five stages in the assessment cycle

Stage 1: Intake – how can we collaborate?

The first goal is to collect information so that the school psychologist can determine a strategy for a particular case. Another key objective is to achieve compatibility with the school, learner and parents, in order to create a constructive partnership. In the first meeting the questions, aims, expectations and requests of those involved are discussed: what do they intend to accomplish (or avoid), why and how? How do they explain the situation? Which case formulation and recommendation are most likely to help them? These questions shed light on their frame of reference and support the school psychologist in tailoring the process to their personal theory and needs. Appointments for co-operation are made, e.g. who collects which information? When will we meet again to discuss the findings?

Stage 2: Strategy – how to proceed in this particular case?

The input of this stage is the information collected in the intake and the output is the strategy that best fits a specific situation. First, the relevant information is organised in four sections: learner, instructional environment, parental support of learning (parental involvement or engagement) and relevant history. Then the school psychologist decides what more needs to be known to answer the clients' and their own questions:

- Is the investigation stage (Stage 3) necessary? This is the case when more information is needed to formulate recommendations.
- Can they already move on to stage 4 (Integration stage)?

The bottom line is: no investigation will be conducted unless its outcomes will influence the choice of the intervention. Each question is justified with the 'if-then rationale': 'if we know *x*, then we can recommend *y*. However, if we don't know *x*, then we cannot recommend *y*'. This way, data collection is goal-directed and directly linked to intervention. If stage 3 is required, alternate hypotheses from a transactional frame of



reference are formulated. Relevant hypotheses are selected, based on their impact on the choice of an intervention, and these hypotheses are translated into questions for investigation.

AFI focuses on factors that can be changed, therefore stages 1 and 2 may focus on these factors. For example:

Factors of the child that can be improved include:

- prior knowledge relating to the task;
- feelings of competence;
- learning style;
- meta-cognitive skills;
- executive functions (such as working-memory, self-regulation, inhibition, planning and organising tasks);
- motivation;
- performance anxiety;
- the ability to concentrate;
- well-being at school;
- asking for help appropriately;
- relationships with fellow learners and teachers.

Factors in the instructional environment that can be influenced are aspects of the teacher's pedagogical-didactical support such as:

- quality of instruction and feedback;
- differentiation;
- co-operative learning;
- activities that are meaningful to learners;
- attuning to learners' level of cognition;
- making learners 'owners' of their development;
- classroom management;
- analysing the learning-process together with learners;
- presentation skills;
- being a model for what the teacher aims to teach ('practice what you teach').

In addition, classroom variables can also be influenced, such as a pleasant and inspiring atmosphere and acceptance of a learner who is different. Also, the manner in which the school coaches, teachers, management and the director support each other in teaching can be improved.



Parental factors that influence school achievement are income, educational level and career of the parents (Marzano, 2007). These variables are hard to change. However, the way in which parents support the learning of their child at school not only has a large impact on school achievement, it can also be extended or improved. This parental support of learning comprises three aspects (Pameijer, 2012):

1. Parental involvement in the education of their child:

- showing interest in school work;
- discussing school progress with their child;
- stimulating their child to work hard at school;
- helping with homework;
- emphasising the importance of education;
- relating knowledge that their child gained in the classroom to daily situations so that the new knowledge becomes more meaningful;
- cultural outings and visits to the library and museums.

Parents who enjoy reading act as a model and motivate their children to read as well. Moreover, it is important that parents support school policy, for example, by telling their child to follow the school rules. A parent can inadvertently undermine a teacher's authority by criticising the teacher in the child's presence. Among young, vulnerable children this can result in a conflict of loyalty ('If my teacher is happy, mummy is angry, but if mummy is happy, my teacher is angry') and feelings of insecurity. For older learners, this can offer the opportunity to evade school rules ('Why should I follow that rule? My father thinks it's ridiculous!'). Learners who experience a difference of opinion between parents and school are at greater risk of poor academic achievement and behavioural problems at school (Colpin, 2010). It is also important that parents regularly compliment teachers on their commitment to their child. These expressions of appreciation keep teachers motivated, particularly for those learners who require extra time and energy.

2. Parental supervision, such as:

- monitoring and guiding their child's behaviour (while playing outside, watching television, using the computer, playing video games, etc.);
- ensuring that their child eats healthily;
- ensuring their child does not use drugs or alcohol;
- ensuring their child gets enough sleep, so that they arrive at school on time and are well-rested enough to participate in the lessons.

3. Parental expectations. High realistic expectations correlate with success at school. Expectations that are too low can demotivate learners and lead to low achievements. Expectations that are too high can cause stress and anxiety in a child, which can also have a negative impact on learning and well-being.



Stage 3: Investigation – answering the selected questions

This stage involves a goal-directed, rather than a routine, collection of data. The selected hypotheses determine the information to be gathered. The content of this stage thus varies in each case, ranging from using one instrument to several different tools. Tests and questionnaires are administered and those involved can also be interviewed. The impact of teaching or parenting strategies on the learners' learning may be observed and available formative and summative data can be analysed. The context/class may also be investigated to determine if the teacher or other learners may be contributing to the problem. Data gathered in the context may have a higher ecological validity than data gathered in an office outside the classroom. Moreover, contextual data can be translated into personalised recommendations, tailored to the teaching strategies of the teacher.

Investigating the potential for change

Exploring the learning ability (zone of proximal development) of learners and teachers can contribute to more feasible recommendations (Koomen & Pameijer, 2016). A hypothesis may focus on their changeability. By manipulating a particular variable, it may be possible to find out whether an expected positive change occurs. With an experiment, insight is gained into both the learner's changeability and the teacher's potential for change. The school psychologist, together with the teacher and learner as co-assessors, registers what occurs prior (antecedents) to the learner's behaviour and what occurs after (consequences), thereby identifying provoking and reinforcing factors. Such a functional analysis can be translated into recommendations that fit in the classroom (Vargas, 2013). For example, there may be a suspicion that a learner's disruptive behaviour (making funny noises) is stimulated by classmates' laughter and the teacher's correction (consequences). The hypothesis would state that if the teacher rewards both the learner and their peers as soon as they show task-orientated behaviour, this might lead to a drop in the noise making. The school psychologist can also explore the learning potential of the learner in a one-on-one situation, e.g. through dynamic testing (Bosma, 2011). This would investigate which 'hints' are effective. However, translating the hints that work in the one-on-one situation to the teacher's strategies in the classroom may be difficult. This is why additionally observing the teacher's approach may be necessary: what does the teacher already do that corresponds with the effective hints and how could they further improve their approach?

Stage 4: Integration, goals and needs

As this stage supports the bridge to intervention, it is referred to as 'pre-treatment assessment' (Haynes, Smith & Hunsley, 2011). The information is integrated into a specific case formulation: how can the situation be understood? This summary is translated into goals for the learner, teaching strategies and parental support, educational needs of the learner and support needs of the teacher and/or parents.

In a transactional case formulation, factors relating to the learner, instructional context and home environment are included as risk factors if they contribute to the problem, while factors protecting the learner from the impact of these risks are reported as protective factors. This information is explicitly related to the initial questions of those involved and to their personal theories, making the case formulation meaningful to them.



However, a case formulation seldom leads directly to recommendations that are both desirable and workable. Although it points out *what* should be changed and enhances the consistency between the collected data and the recommendations, it does not indicate *how* this change can best be made for this learner, this teacher and these parents. This requires knowledge of which interventions are desirable to them and which arguments support and oppose these options. As there is no 'one size fits all' (Deno, 2005, p. 24), recommendations need to be personalised in the next stage.

As several interventions focus on the same target, choices must be made. The AFI model prefers interventions that have been proven to be effective. The school psychologist can benefit from several meta-analyses when deciding in this.

Effective recommendations: what works in general?

Hattie (2009) analysed 50,000 studies on successful learning and excellent teachers, generating interventions¹ that are generally effective, ineffective or counterproductive (e.g. repeating a class, -0.16). Examples of effective interventions are:

- self-reported learning in which the learner grades themselves in advance, predicted on past performances with an emphasis on high expectations (1.44);
- direct informative and positive reinforcing feedback during learning, explicitly linked to goals (1.13);
- direct instruction models and strong classroom management (1.00);
- instruction to a small heterogeneous group (0.88);
- predictable teacher behaviour, high expectations and exercises that are tuned to learners' needs (0.75);
- positive learner-teacher relationships (0.72);
- parents that guide learning in school (0.55);
- parental support of learning (0.49).

Whereas Hattie focuses on interventions that are effective for all learners, Mitchell (2014) describes 27 evidence-based teaching strategies that 'really work' for learners with special needs. Interventions with an impact above 0.70 include:

- co-operative learning;
- peer tutoring;
- supporting parents to be involved in the education of their child;
- functional behaviour analysis;
- formative assessment during learning.

¹ Degree of impact on performance: above 1.0 = very large effect; between 0.6 and 1.0 = large effect; between 0.4 and 0.6 = moderate effect; between 0.0 and 0.4 = small effect; less than 0.0 = negative effect.



Stage 5: Recommendations, appointments and feedback

In this stage the clients are informed about the outcomes of the assessment. The aims of this last stage include:

- answering the clients' questions;
- objectifying goals (what will we notice, see and hear once this specific goal is achieved?);
- matching these goals to specific needs;
- supporting clients in choosing the intervention with the highest chance of success.

All parties involved discuss the outcomes, question each other and listen. Hopefully, the clients approve of the case formulation and choose one of the outlined recommendations. The result is a tailored intervention, with sufficient support to be successfully implemented. The information exchange is tailored to answer the questions of this particular learner, this teacher and these parents. By providing them with clear and meaningful information, related to their personal theory, hopes and worries, they can choose for *themselves* which option is both desirable and achievable. An important aim is to arrive at a feasible intervention, supported by all parties. The school psychologist therefore asks if those involved are willing and able to 'start tomorrow'. If the answer is affirmative, the learner, teacher and parent are encouraged to change their behaviour. If this is not yet the case, the assessment process continues with further consultation.

Appointments to monitor and evaluate the intervention are made: who is doing what, why, when and how? This information is important feedback for both the case formulation and the recommendations. In the end, the assessment process is evaluated by both the school psychologist and the clients. Are the clients' questions answered? Was the assessment functional? Has their insight into the problematic situation increased? Do the learner, teacher, counsellor and parents have more perspective? In the end, the school psychologist asks all clients, including the learner, for feedback. What did the school psychologist do professionally well (compliments)? What could they do better in a similar case in the future (suggestions)?

4. The AFI model in practice: an evaluation study

The AFI model has been applied for 20 years in regular and special educational settings, in primary and secondary schools, mostly in the Netherlands and Flanders. Developed in 1997, it was evaluated and improved in 2004 and 2015 (Pameijer & Van Beukering, 1997; 2004; 2015). Many adaptations have been made, eliminating aspects that were unsuccessful and expanding upon those that have shown to be effective. By now, professional organisations in the Netherlands and Flanders promote the model as a standard for assessment practice (NIP/NVO, 2013; Verschueren & Koomen, 2016). The model has also been selected as a Dutch example of 'best practice' by the European Agency for Special Needs and Inclusive Education (Pameijer & Pijl, 2006).

However, AFI had not yet been evaluated systematically. Therefore, an evaluation study was conducted in a Dutch centre for inclusive education (www.swvunita.nl). This centre supports 102 mainstream primary schools (learners' ages ranging from four to twelve).



The centre selected a sample of twenty schools, representative with regard to the type and location of the school, quality of education, learner population and parental socio-economic status. These schools participated in a three-year pilot, implementing AFI to assess the needs of learners with learning and/or behaviour problems (about 5% of the learners). The study focused on the assessment process of these learners in the third school year of the pilot (from September 2012 to July 2013). The study was conducted and reported by an independent researcher (Algera, 2013) and focused on the following questions:

- Are the principles of AFI implemented as intended?
- Are the aims of AFI achieved; for example:
 - Does assessment offer a better understanding of the learner and the support they need?
 - Does assessment generate recommendations for teachers and parents?
 - Are teachers able to apply the recommendations in their classroom?

Method

The assessors were school psychologists and external school coaches, working for the centre. In the first two years of the pilot they were trained in AFI. Depending on the reason for referral (problems with reading, arithmetic, task behaviour, social-emotional and/or behaviour problems), the assessors were assigned to a particular learner and the internal school counsellor, teacher(s) and parents were involved. Three weeks after the assessment was completed, a digital questionnaire was sent to the teachers, counsellors, parents and assessors involved in 198 cases. The questionnaire contained 105 questions, mostly multiple choice and a few open-ended. The percentage of responders varied (see Table 1). Questionnaires could only be sent to valid email addresses; this explains why fewer than 198 questionnaires were sent.

Table 1. Number of questionnaires returned by four types of respondents

Respondents involved in 198 cases	Teachers (n=104)	Counsellors (n=87)	Parents (n=96)	Assessors (n=99)
Questionnaires returned with all questions answered	44	47	32*	75
Response rate	42%	54%	33%	76%

* The parents' questionnaire included four questions to be answered by the child; 17 of the 32 parents (18%) discussed these questions with their child.

After collecting the data and in order to better understand some of the outcomes, assessment reports were analysed and a meeting with parents was held.



Results

Are the principles of AFI implemented as intended?

According to most teachers, counsellors, parents and assessors, the principles of AFI were implemented as prescribed (see Table 2).

Table 2. Number of respondents (%) who affirmed that the principle was applied

The seven principles	Teacher	Counsellor	Parent	Assessor
1. Goal-directed assessment:				
• assessment goals were formulated	98	87	93	96
• assessment goals were evaluated	93	87	100	83
2. Transactional perspective ²	–	–	–	–
3. Learners' needs were discussed:				
• educational needs (in school)	98	98	84	99
• parenting needs (at home)	–	–	87	85
4. Support needs were discussed				
• teachers' support needs	93	92	–	95
• parents' support needs	–	–	85	86
5. Positive aspects were part of assessment				
• learners' positive aspects	100	100	87	96
• teachers' positive aspects	73	83	48	72
• parents' positive aspects	73	83	50	55
6. Assessor worked in partnership				
• with teachers	86	85	–	89
• with counsellors	–	92	–	88
• with parents	93	94	94	88
• with learners	30	23	29	37
There was a collaborative partnership with assessor	97	87	93	–
7. Assessment process evolved systematically and transparently	98	85	94	61

Goals concerning the assessment process were formulated and evaluated in most of the assessment processes. According to the majority of participants, the **needs** of learners, teachers and parents were also discussed during the process.

Learners' **positive aspects** were covered, as were the positive aspects of their teachers. However, the positive aspects of the parents were discussed in only about half of the cases, according to both parents (50%) and assessors (55%). In the meeting with parents afterwards, examples of positive aspects, such as 'parental support of learning', were given and it was explained that these statements were intended to be compliments.

² This principle was not included as it appeared difficult to operationalise this concept in a questionnaire.



Parents, however, considered most of these examples as ‘self-evident and not so special that they required a compliment’.

Most teachers, counsellors and parents reported a positive **collaborative partnership** with the assessor. Together they analysed the problematic situation and in co-operation they formulated specific goals and needs. This finding was confirmed by most of the assessors. Also, the majority (81%) of the parents valued participating in the intake and recommendation stages. The assessors appreciated the collaborative partnerships with high averages (on a scale from 1 to 10) of 8.4 (counsellors), 8.3 (teachers) and 8.1 (parents). However, the assessors co-operated much less with the learners involved, according to teachers, counsellors, parents and themselves. For example, learners seldom participated as co-assessors. Less than half of the learners actually participated in the intake and recommendation stage. Of course, they participated in the investigation stage, providing the assessor with information. However, even in this stage most assessors did not benefit from the experience, knowledge, opinions and solutions of the learners themselves when analysing the situation and formulating goals, educational needs and suggestions for intervention.

The questionnaire for parents included four questions to be answered by their child. The learners could show their feelings on the investigation stage by choosing a smiley: 77% of them enjoyed it, 23% were neutral and none of them were angry or sad at this stage. After the assessment, a few of the learners noticed a difference, for example:

- ‘My teacher now understands me better.’
- ‘She helps me more than before.’
- ‘Now I get more attention from the teacher.’

According to all parties involved, assessors should co-operate more actively with learners, regardless of their age. After all, AFI is focused on learner well-being and should benefit them. Learners also have the right to ask questions for assessment and to participate in the process of answering these questions.

Finally, teachers, counsellors and parents reported that the assessment process evolved **systematically and transparently, stage by stage**. The assessors themselves, however, were more critical about this principle, as they probably compare the process more explicitly with the prescribed five stages of AFI.

Are the aims of AFI achieved?

Does assessment offer a better understanding of the learner and the support they need? Does it offer teachers and parents recommendations on how to deal better with the learner? Are teachers able to apply the recommendations in their classroom?

Table 3. Number of respondents (%) who feel the aims of AFI were achieved

Assessment aims	Teachers	Counsellors	Parents	Assessor
Assessment offered better understanding of learner	90	85	65	95
Assessment offered recommendations for teachers	70	60	–	80



Assessment aims	Teachers	Counsellors	Parents	Assessor
Assessment offered recommendations for parents	–	–	52	43
Teachers could apply the recommendations in their classroom	65	66	–	40

Assessment provided most teachers and counsellors with more **insight** into the learner's situation than they had before the assessment. This was less so among parents. The assessor's insight was particularly boosted. This was expected, as the assessors barely knew the learners prior to the assessment. According to the majority of teachers, assessment provided recommendations; only half of the parents – and even fewer assessors – indicated that assessment offered recommendations for parents. As not all learners with problems in the school have problems at home as well, this was to be expected.

Teachers indicate that they feel more **capable in teaching the child**: the average score (on a scale from 1 to 10) rose significantly from 6.2 prior to the assessment to 7.4 after. For 80% of the teachers, the **cost-benefit analysis** is balanced: the time and energy they invested in the assessment process delivered just as much or even more, such as time saving, more knowledge of the learner and skills to deal with them. A small minority of teachers (8%) are dissatisfied because the assessment offered no solution. They continued to experience problems with the learner.

AFI is supposed to strengthen teachers' strategies in the classroom. In the pilot study, two out of three teachers reported that they could implement the recommendations in their classroom. They succeeded in adapting their approach to the learners' specific educational needs. For them there is hardly a gap between assessment and intervention. However, for one third of the teachers the recommendations were not sufficiently workable. Sixty percent of the assessors agree with this. It is an important consideration for all professionals involved: the assessors ('What can I do to make the recommendations more achievable?'), the counsellors ('How do we translate the recommendations into practice?') and teachers ('How can I incorporate the desired approach in my way of teaching?').

The assessors indicate that they formulated goals for learners (in 67% of the cases), teachers (in 71% of the cases) and parents (in 61% of the cases). As all learners were referred because of learning and/or behaviour problems, it is surprising that the assessors did not formulate goals for all learners. Analysis of the assessment reports afterwards showed that all reports included recommendations, but one third of these recommendations were not consistently related to specific learner goals. In these cases, it is difficult to evaluate the impact of the recommendations later on. Most of the assessors evaluated the assessment process itself (Table 2), although only a third of them evaluated the effectiveness of the recommendations afterwards. This is a key limitation, given the importance of feedback in the assessment-intervention cycle.

Discussion evaluation study

There are several limitations to this study. In the first place, questionnaires could only be sent to valid email addresses, decreasing the representativeness of the sample. The low



response rates, especially for parents, also decrease the representativeness. The amount of cases in which all five respondents completed their questionnaires was so small that it was impossible to compare the opinions of the teacher, counsellor, parents and assessor involved in the same case. Therefore, only the averages per group of respondents were reported. Despite these shortcomings, this study gives an indication of the elements of AFI that clients and assessors appreciate (successes) and of the challenges assessors deal with in their daily practice (points of improvement).

Successes include:

- The stages of AFI structured the assessment process from the beginning (relevant questions for assessment) to the end (answers and recommendations) and offered all professionals involved a shared aim and language.
- Everyone who was important in teaching the learner 'sat at the table'; they worked in co-operation towards a shared goal of the optimal development for the learner.
- The assessment provided school and parents with a perspective on how they can further collaborate and come to an agreement in the best interest of the learner.
- The counsellors, teachers and parents valued the partnership and communication with the assessors. As their questions led the assessment, the outcomes were meaningful to most of them.
- Many teachers and parents re-emphasised their appreciation of the AFI model in the open questions. Although participation demands much of their time and commitment, most teachers found the benefits definitely worth the effort. Not only did they better understand the learner, they also knew how to adjust their teaching more to the learner's specific educational needs. A few parents wrote that they were moved by the assessors' professional passion and drive to achieve what was best for their children.

Points of improvement for the assessors include:

- Formulate SMARTI goals for all learners and, if necessary, also for the instructional environment and parental support of learning.
- Focus more on translating the case formulation into the teacher's approach in the classroom. Involve the counsellor in this translation: how can counsellors support teachers in attuning their teaching strategies to fit the learners' needs better?
- Explain the case formulation to parents in such a way that they understand it. Translate the information in such a way that it becomes meaningful to them. Also tell parents they can support their child's learning at school and address how well they are already doing this. Explicitly formulate positive elements of parenting as a compliment, so parents are motivated to continue do so. Also discuss what more they could do to enhance school success and ask them what they need to support their child's learning even more.
- Invite all participants to take part in the 'collective brainstorm' on the learners' educational needs. Ask parents and learners to give suggestions to the teacher, but ensure the teacher stays in charge of their teaching.



- Actively include learners in the assessment process as much as possible, regardless of their age. Ask them questions such as: What is going well at school and what could be better? Why do you think this is? How come? What aims and solutions do you have yourselves?

5. Conclusions

Assessment models support the school psychologist in the process of answering questions and making decisions. However, an assessment model may neither dictate nor determine the outcomes of assessment, as those involved will bring their own values and subjective judgements into the assessment process (Deno, 2005). The participation of teachers, counsellors, parents and learners makes the process meaningful and creates a bridge between assessment and intervention. In the AFI model the school psychologist is therefore a scientist-practitioner, fulfilling the roles of both scientist (formulating and testing hypothesis) and coach (supporting their clients). During the intake stage and recommendation stage, they co-operate and consult with those involved, applying effective coaching skills. If necessary, they investigate the learner, their educational environment or parental support, using reliable and valid instruments on the one hand and coaching skills on the other. During the stages of strategy and integration/needs assessment, they reflect on their decision-making, applying recent scientific knowledge. As the stages are closely linked to each other, the relationship between the initial clients' questions on the one hand and the case formulation and recommendations on the other hand is consistent. In this sense the AFI model is more extended and related to the practice of school psychologists than the PDR cycle.

Since 1996, when the model was formulated, there have been many training sessions and implementations, which have shown the model's strengths and challenges.

Strengths

The five stages support school psychologists in their day-to-day assessment. Checklists guide them through the stages and provide continuous feedback. School psychologists find the checklists helpful and apply them before, during or after each stage. Thanks to a clear outline of the steps within the stages, the model offers a common frame of reference for all professionals involved. It promotes their communication as they all speak the same language and strive for the same goals. Professionals, teachers and parents understand and appreciate the AFI model, even more since there are several publications on the model, written especially for school counsellors (Pameijer & Van Beukering, 2006), mental health professionals (Pameijer & Draaisma, 2011), teachers in primary and secondary schools (Pameijer, Van Beukering & De Lange, 2009; Pameijer, Van Beukering, Van der Wulp & Zandbergen, 2012) and parents (Pameijer, 2012). The systematic feedback that clients give during each assessment process also appears to be valuable in improving assessment.

Challenges

During two decades of implementing the AFI model, several problems and challenges have arisen. For example, it appears difficult to apply the guideline of 'assessing only what is



strictly necessary'. The shift from 'knowing in order to diagnose or label' to 'knowing in order to recommend' is not always easy. Although applying the 'if-then-rationale' provides support, some school psychologists still feel that they are labelling more learners than strictly necessary. They often do so under pressure from the school, parents or learner. Setting boundaries in consultations with clients can be challenging and may endanger a constructive partnership. Consultation with clients occurs twice during the assessment process: when identifying the questions in the first stage (intake) and when deciding on interventions in the last stage (recommendations). Things usually run smoothly, as long as there is sufficient consensus and all involved support the choices made. Sometimes, however, if a client wants something that the school psychologist is not willing or able to offer, collaboration becomes problematic, such as when the parties involved have conflicting requests or needs. For example, the school may not want the instructional environment to be investigated, while the school psychologist finds this necessary for tailoring the recommendations to the teaching strategies of a specific teacher in a particular classroom. Alternatively, parents may wish to receive a confirmation that their child is dyslexic because of the extra facilities in school, although the school psychologist finds insufficient evidence to support this request.

An AFI report focuses on the questions of the teacher, counsellor, parents and school psychologist. Learners may receive an 'assessment letter' in which their concerns and questions are addressed. Although such a report or letter is written according to a present format, its content is not standard. Instead, it targets the specific situation and is client-focused, using terms they understand and that are close to their personal theory and are thus meaningful to them. It appears to be quite an undertaking to write a tailored report that focuses mainly on questions. Translating jargon into common language can be difficult. In addition, school psychologists may find it difficult to describe tactfully the quality of the teacher's strategies and the parental support and the extent to which their approaches are tuned to the learner's specific needs.

Even though meta-analyses, such as Hattie's (2009), offer information on what works, there still is a lack of applicable evidence-based knowledge and matching reliable and ecologically valid instruments. In identifying and addressing specific educational needs, there may be a poor match between science, theory, assessment tools and intervention. Even though various sources of information are available, these may lack clinical utility and school psychologists may have difficulty translating the information into their everyday practice.

Working according to this model is time-consuming as every case is unique and requires a tailored approach. Compared to administering a standard battery of tests to the learner, AFI takes more time to:

- consult with the clients (stages of intake and recommendations);
- reflect on the assessment process (strategy stage);
- assess not only the learner but also the educational context (investigation stage);
- formulate a case formulation, goals and needs (stage of integration/needs assessment);
- discuss the outcomes with clients (stage of recommendations);



- write a personalised report.

This extra time is rarely compensated by the time saved by conducting fewer tests.

Questions for the future

High quality assessment for intervention aims at designing and implementing evidence-based teaching strategies and at monitoring and evaluating the impact of these strategies on learning (Tymms & Elliott, 2006). Teaching learners with special educational needs requires on-going assessment, according to a cycle of implementing the intervention and assessing the effects in order to adjust (if needed) the case formulation, goals and recommendations. The presented AFI model needs further development in this aspect, urging that not only the learners' needs but also those of their teachers and parents (if necessary) be continuously assessed in a cycle with systematic feedback loops, in which all involved co-operate for the learner's benefit.

Even though the model contains effective mechanisms, it is necessary to investigate whether it actually leads to more ecologically valid case formulations and more effective interventions than 'assessment as usual'. Ultimately, this will be the test. In the meantime, practical evidence is likely to show that this model not only bridges the gap between assessment and intervention, but also makes this process more meaningful to teachers, parents and learners. As the model invests in co-operation, avoiding conflicts with clients, it reduces the chance that schools and parents seek a second opinion or implement an ineffective intervention. AFI is therefore in the best interest of the learner, and teachers and parents may benefit from the outcomes as well.

Compared to other assessment models, AFI focuses more on the entire decision-making process from the referral to the evaluation of the assessment, supporting the school psychologist in their role as a scientist-practitioner: what decisions need to be made, why and how? AFI offers practical guidelines on how to collect and integrate relevant information in close co-operation with teachers, parents and learners and how to enhance their motivation to participate in the assessment process and implement the recommendations.

Illustrations of the AFI model in practice can be found on the [International School Psychology Association \(ISPA\) website](#).



References

- Algera, M., 2013. *Handelingsgericht arrangeren: tweede evaluatie van een pilot in samenwerkingsverband Unita (Assessment for intervention: second evaluation of a pilot in Unita, a centre for inclusive education)*. Rotterdam: CED-groep (www.swvunita.nl)
- Bosma, T., 2011. *Dynamic testing in practice: shall I give you a hint?* Doctoral thesis, Leiden University
- Braet, C., Prins, P. J. M. and Bijttebier, P., 2014. 'Ontwikkeling en psychopathologie' (Development and psychopathology). In P. J. M. Prins and C. Braet (eds.), *Handboek klinische ontwikkelingspsychologie (Handbook clinical developmental psychology)*, pp. 3–57. Houten: Bohn, Stafleu, Van Loghum
- Brown-Chidsey, R. (ed.), 2005. *Assessment for intervention: a problem solving approach*. New York: The Guilford Press
- Bruyn, E. E. J. de, Ruijsenaars, A. J. J. M., Pameijer, N. K. and Aarle, E. J. M., 2003. *De diagnostische cyclus: een praktijkleer (The diagnostic cycle: practice learning)*. Leuven: Acco
- Carr, A., 2014. *Handbook of child and adolescent clinical psychology: a contextual approach*. London: Routledge
- Cauffman, L. and Dijk, D. J. van, 2014. *Handboek oplossingsgericht werken in het onderwijs (Handbook solution focused working in education)*. Amsterdam: Uitgeverij Boom onderwijs
- Deno, S. L., 2005. 'Problem solving assessment'. In R. Brown-Chidsey (ed.) *Assessment for intervention: a problem solving approach*, pp. 10–42. New York: The Guilford Press
- Frances, A., 2013. *Essentials of psychiatric diagnosis*. New York: The Guilford Press
- Hargreaves, A. and Fullan, M., 2012. *Professional capital: transforming teaching in every school*. New York: Teachers College Press
- Hattie, J., 2009. *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. London/New York: Routledge, Taylor & Francis group
- Haydel, M. E., Mercer, B. L. and Rosenblatt, E., 2010. 'Training assessors in therapeutic assessment' *Journal of Personality Assessment*, 93, 16–22
- Haynes, S. N., Smith, G. T. and Hunsley, J. D., 2011. *Scientific foundations of clinical assessment*. New York: Routledge
- Hunsley, J. and Mash, E. J., 2008. 'Developing criteria for evidence-based assessment: an introduction to assessments that work'. In J. Hunsley and E. J. Mash (eds.) *A guide to assessments that work*, pp. 3–15. New York/Oxford: Oxford University Press
- Kazdin, A. E., 2005. 'Evidence-based assessment for children and adolescents: issues in measurement, development and clinical application' *Journal of Clinical Child and Adolescent Psychology*, 34, 548–558
- Koomen, H. and Pameijer, N., 2016. 'Diagnostisch proces in het onderwijs' (The assessment process in education). In K. Verschueren and H. Koomen (eds.), *Handboek*



Diagnostiek in de leerlingenbegeleiding (Handbook assessment in coaching learners).
Antwerpen: Garant

Lebeer, K. and Partanen, P., 2011. 'Guidelines for a dynamic and functional assessment orientated at development and inclusive learning'. In J. Lebeer, A. Candeias and L. Grácio (eds.) *With a different glance: dynamic assessment of functioning of children orientated at development & inclusive learning*, pp. 249–259. Antwerpen/Apeldoorn: Garant

Marzano, R. J., 2007. *What works in schools: translating research into action*. Alexandria: ASCD

Masten, A. S. and Tellegen, A., 2012. 'Resilience in developmental psychopathology: contributions of the competence longitudinal study' *Development and Psychopathology*, 24, 345–361

Mitchell, D., 2014. *What really works in special and inclusive education: using evidence-based teaching strategies*. London/New York: Routledge, Taylor & Francis group

NIP/NVO, 2013. *Praktijkrichtlijnen voor orthopedagogen en psychologen werkzaam in het onderwijs (Guidelines for schoolpsychologists working in schools)*. Utrecht: NIP/NVO

Orobio de Castro, B., 2014. 'Agressieve en regelovertredende gedragsproblemen' (Externalising problem behaviour). In P. J. M. Prins and C. Braet (eds.) *Klinische Ontwikkelingspsychologie (Handbook clinical developmental psychology)*, pp. 253–277. Houten: Bohn, Stafleu, Van Loghum

Pameijer, N., 2012. *Samen Sterk: Ouders & School! (Together strong: parents and schools!)*. Leuven: Acco

Pameijer, N. K. and Beukering, J. T. E. van, 1997. *Handelingsgerichte diagnostiek in het onderwijs (Assessment for intervention in schools)*. Leuven: Acco

Pameijer, N. K. and Beukering, J. T. E. van, 2004. *Handelingsgerichte diagnostiek in het onderwijs (Assessment for intervention in schools)*. Leuven: Acco

Pameijer, N. K. and Beukering, J. T. E. van, 2006. *Handelingsgericht werken: voor de intern begeleider (Needs-based working for school counsellors)*. Leuven: Acco

Pameijer, N. K. and Beukering, J. T. E. van, 2015. *Handelingsgerichte diagnostiek in het onderwijs (Assessment for intervention in schools)*. Leuven: Acco

Pameijer, N. K. and Pijl, S. J., 2006. *Assessment practice in the Netherlands*. Odense: [European Agency for Development in Special Needs Education](#)

Pameijer, N., Beukering, T. van and Lange, S. de, 2009. *Handelingsgericht werken: een handreiking voor het schoolteam (Needs-based working in primary schools)*. Leuven: Acco

Pameijer, N. K. and Draaisma, N., 2011. *Handelingsgerichte diagnostiek in de jeugdzorg (Assessment for intervention in mental health)*. Leuven: Acco

Pameijer, N., Beukering, T. van, Wulp, M. van der and Zandbergen, A., 2012. *Handelingsgericht werken in het voortgezet onderwijs (Needs-based working in secondary schools)*. Leuven: Acco

Salvia, J. and Ysseldyke, J. E., 2004. *Assessment*. Boston: Houghton Mifflin Company



Struyf, E., Verschueren, K., Vervoort, E. and Nijs, S., 2015. *Leerlingenbegeleiding in een internationaal perspectief (Coaching students: an international perspective)*. Antwerpen: Universiteit Antwerpen

Tymms, P. and Elliott, J. G., 2006. 'Difficulties and dilemmas in the assessment of special educational needs', *Educational & Child Psychology*, 3, 25–35

Vanderbilt-Adriance, E. and Shaw, D., 2008. 'Conceptualizing and re-evaluating resilience across levels of risk, time, and domains of competence' *Clinical Child Family Psychology review*, 11, 30–58

Vargas, J. S., 2013. *Behavioral analysis for effective teaching*. New York: Routledge

Verschueren, K. and Koomen, H. (ed.), 2016. *Handboek Diagnostiek in de leerlingenbegeleiding (Handbook assessment in coaching learners)*. Antwerpen: Garant

Witteman, C. Heijden, P. van der and Claes, L., 2014. *Psychodiagnostiek: het onderzoeksproces in de praktijk (Assessment: the investigation process in practice)*. Utrecht: de Tijdstroom

Yperen, T. A. van, 2010. *55 vragen over effectiviteit (55 questions on effectiveness)*. Utrecht: [NJI](#)