

## ASSESSING ADULT LITERACY: THE AIM, USE AND BENEFITS OF STANDARDIZED SCREENING TOOLS

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### *Abstract*

Large-scale surveys, such as the International Adult Literacy Survey (IALS) (OECD & Canada, 2000), provide interesting data on literacy and numeracy skills on a cross-country level. They attempt to answer policy-related questions like: how many adults have low first language literacy or are at risk of becoming low-literate and what are their characteristics? In these studies groups of adults are commonly described as having either high or low literacy skills. But since reading or writing ability itself is a continuum, the question arises: what is the cut-off point? In other words: where does the “problem” of low literacy begin and when is educational or some other kind of intervention in a specific context necessary or desirable?

When answering these questions and promoting adult literacy development, most educational sectors will make use of micro-level analysis to complement the macro-level data. In that case, tools that describe the learning needs and interests of individuals are necessary. The research we report on in this article<sup>1</sup> examines the (practical) possibilities, difficulties and policy measures which underlie the use of such standardized literacy screening devices or basic skills audits among adults having Dutch as their mother tongue<sup>2</sup>. Built upon a qualitative analysis of existing screening instruments in Belgium (Flemish Community) and the Netherlands this study explores how screening procedures are adopted today in different sectors and in which way these procedures are able to identify the particularities of individual adults’ literacy skills. By conducting in-depth interviews with experts (policy makers, academic experts, educational practitioners, low-literates) on the topic of (low) literacy, the advantages and disadvantages of the implementation of a single and uniform standardized screening tool for different educational sectors were explored.

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<sup>2</sup> Although we focused on native speakers, the results of our study and the approach of literacy and screening could also be useful for L2 learners. Moreover nearly all screening devices are only used in that context today.

The results of this study (D'herdefelt et al., 2007) show that not all social domains are equally open to educational assessment using a standardized literacy test in an objective and accurate way. Moreover, the results show that literacy screening may lead to several negative effects. It is argued that in some contexts, those negative effects might overshadow the positive ones. Furthermore, none of the existing tools in Belgium and the Netherlands is able to screen all aspects of literacy in one short and practical way. From this we conclude that although there is a powerful internal logic in the use of one single screening instrument for assessment, the practical benefits of such a device can be questioned and so can the ethical ones. The use of several instruments aligned with the needs of specific target groups is therefore strongly recommended. The context of the screening procedure and the literacy context (such as health care and workplace) should be incorporated in the instrument.

Other results will be presented in this paper, such as the importance of oral feedback on the candidate results, the training of the assessors, the integration of the screening in normal educational procedures and the link between the assessment and the methods of training.

## 1 Introduction

There is little discussion about the importance of literacy skills nowadays. Most people agree that these skills are essential for the proper functioning and development of society as a whole and for each individual as a part of that society. There is less consensus over what the term literacy actually implies. The developments and trends in the discourse on literacy show a number of fundamental substantive shifts. For many years thinking on literacy was very dichotomous. It was a question of whether or not an individual could read and write. However, today this approach tends to be considered negative and stigmatising, as in this way illiteracy is associated with an isolated problem or with individual failure (Goffinet & Van Damme, 1990; Venezky et al., 1990).

The introduction of the notion of 'functional literacy' has put this into a somewhat different perspective. Literacy is no longer a matter of being able to read or write in a strict sense. The notion indicates that literacy can be interpreted differently, depending on its functionality. The generic definition of 'functional literacy' means that one must operationalize the concept according to the context and situation in which it is used. This means that literacy is no longer an absolute condition but a relative and normative one. There is, in other words, no single fixed view of literacy, but multiple viewpoints exist (Kruidenier, 2002). For instance, there are various types of text and literacy (prose and document literacy, numeracy or quantitative literacy, digital literacy, etc.), various user perspectives (micro, meso and macro) (Verhasselt, 2002) and various contexts and situations in which a person can function by making use of one or more literacy skills. In the process of assessing adult literacy, one must take into account this multifaceted nature of the concept. Over and above that it seems impossible to talk about literacy and low literacy today without including *all* aspects and forms of literacy.

The concept of 'functional literacy' also acquires an instrumental character: literacy becomes a means of attaining a certain specific element of employability. In other words: it refers to the way one *functions* in society, for instance on the labour market. This is enough for some authors (like Payne, 2006) to state that the common use of

the notion of functional literacy is actually trapped in conventional ideas about employability and economy. Payne illustrates this by indicating that literacy surveys usually transmute the term 'adult' to mean only those aged 16-65, which is the working age population. This is true, but still we must realize there are a range of literacy expectations in society (and across societies) of which just a fraction is to be situated on the labour market.

The instrumental nature of literacy is today also incorporated into a broader debate on basic and key skills (Van der Kamp, 1997). In this debate, the central question is: 'What knowledge, skills and attitudes must an individual have so as to put him in a position to attain the appropriate quality in a given social role?' The competence-based thinking assumes that acquiring this knowledge, these skills and attitudes is an active, accumulative and context-driven process (Dochy & Nickmans, 2005). Consequently it is difficult to see acquiring and using literacy separately from acquiring and using other skills, such as problem-solving thinking, communicating, and cooperating. This also highlights the social aspect that is inextricably linked to (learning) literacy. Becoming literate is always a social process of making and transforming meaning as an individual, as a group and as a society. Because of the strong connection between literacy and identity, literacy is connected to all other learning and affects an individual in a variety of ways.

## 2 Policy on literacy

The developments in the debate on the precise interpretation of literacy mesh with the greater attention being paid to low literacy. Over the past decades interest in (low) literacy has increased in a number of social sectors and among public authorities. The authorities in an increasing number of European countries have expressly engaged in the fight against low adult literacy. In Great Britain and France, a public discussion on adult illiteracy started in the early 70s. Since the late 70s several initiatives were programmed in Belgium and The Netherlands aiming at awareness at a policy level. As a result, increasing literacy in the population has been high on the policy agenda in Flanders for several years now. The Flemish government and the social partners want to see the number of functionally literate people in Flanders increase to at least 72 per cent of the population by 2010 (*Het Pact van Vilvoorde* 'Vilvoorde Pact'; Vlaamse Gemeenschap, 2001). According to the IALS (OECD & Canada, 2000), 41.9 per cent of the Flemish population do not have the minimum of literacy skills for coping with the demands of everyday life and work in a complex, advanced society. This is the so-called *level 3* of the IALS, which more or less equals the skill level required for successful secondary school completion and college entry. Most of the documents of Flemish government on literacy use the IALS definition.

How this goal of 72 per cent should be achieved and whether it is feasible depends directly on the question of when an individual or a group is functionally literate. In other words, where is the boundary between having and not having adequate literacy skills? And how can an individual's position in relation to this boundary be defined?

The way in which the Flemish government aims to answer these questions and the way in which it seeks to achieve the policy objectives were laid down a few years ago in the *Strategisch Plan Geletterdheid Verbogen* (Strategic Plan on Increasing Literacy) of the

Flemish Community (Vlaamse Gemeenschap, 2003) and then implemented in practice in the *Operationeel Plan Geletterdheid Verbogen* (Operational Plan on Increasing Literacy) of the Flemish Community (Vlaamse Gemeenschap, 2006). One of the objectives set out in these policy documents is the phased and systematic screening of literacy among adults (adults living in Flanders or Brussels and which have Dutch as their mother tongue). Such screening involves detecting low-literacy individuals or groups with a view to providing further route counselling or referring them to educational services to increase their literacy skills.

### 3 *Tools and methods*

Whether a standardised screening device or instrument can be used for screening like this is the central question in the feasibility study conducted in 2007 at the request of the Flemish government (D’herdefelt et al., 2007). In addition to the desirability of such a broad instrument, the feasibility, form, practical usability and application of this were also examined.

The study was conducted on the basis of three qualitative research methods and techniques: (1) a literature survey of literacy competencies and the screening of those competences, (2) a document analysis of existing screening devices from Belgium and elsewhere and (3) semi-structured interviews with 33 key figures from Flanders and the Netherlands. For the interviews, a theoretical or purposeful sample of five categories of interviewees was drawn (Patton, 1990): (1) individuals with low literacy levels or their representatives, (2) screening professionals, (3) policymakers (4) academics with expertise in literacy, (5) professionals from secondary education. The aim of this a-priori characterisation of the interviewees was to collect a balanced sample that covers the various perspectives from which the issue of literacy and screening can be examined.

### 4 *Screening*

In the technical sense, literacy screening implies that on the basis of behaviour or performance which may or may not be induced, the literacy skills of an individual or group are assessed and evaluated using a benchmark or a norm. Screening therefore assesses performance on an indicator variable, which in turn is related to a specific construct (in this case, ‘literacy’). The relationship between the two can be considered in various ways. Our research results indicate that in practice, assessing and evaluating literacy competences depends heavily on a number of starting points.

One starting point is the interpretation and conceptualisation (making a conceptual and operational definition, ways of measurement) of the notion of literacy or functional literacy itself. As previously stated, literacy is a normative and also a vague container term. Thorough operationalisation of this concept is only possible when the individual or target group for whom and the setting or context in which the notion is used is taken into account. The “degree of literacy” of an individual cannot be screened solely on a vertical dimension (referring to the level of the literacy performance), but must simultaneously take account of a horizontal dimension that refers to the various

possible types of text and the range of situations in which an individual can function using written language. A solid literacy performance in one particular situation does not automatically mean that an individual will perform at ease in all situations and with a wide range of texts and text functions in every situation. If one is able to read and understand the bus timetables, for example, this does not mean one is able to read and understand written dosage instructions for a recipe for a birthdaycake. And an employee who is able to read simple instructions, can not necessarily understand more complex safety instructions. So scoring well for the vertical dimension does not necessarily mean that this will also be the case for the horizontal dimension. This does not mean, however, that the two dimensions are entirely separate from one another in practice. The different dimensions might be conceptually distinct, they are nonetheless interrelated (Verhasselt, 2002).

A second starting point concerns what is considered an adequate functionality norm for literacy (often referred to as the cut-off point(s) or the criteria of literacy). This is a question of whether the limit between literacy and low literacy can be established explicitly and if so, who is capable and has the right to make such a decision. The research literature states that a cut-off point is a de facto reflection of the answer to the question “what should someone be able to do?” This question can be answered from the point of view of an individual, a group of individuals or a society. This in itself indicates that any limit is arbitrary and can move depending on perspective as well as place and time (Kurvers, 1990). The context in which the question is answered is also decisive: what a person should be able to do is not the same from a socio-cultural perspective (e.g. social tasks like reading official letters, filling in tax forms, making shopping lists) as from an economic or labour-market perspective (e.g. writing a letter of application, read and understand written instructions and orders).

This means that a universal norm cannot be adopted when screening for literacy. When using a standardised screening device, setting one uniform cut-off point is not without risk. From a theoretical point of view, a norm like this does not do justice to the multidimensionality and complexity of language skills. In practice, it can also lead to a form of exclusion. If the cut-off point is too “high”, an overly large proportion of the population will be considered to have low literacy levels. This makes a targeted policy impossible. It can also lead to an overzealous attitude and a situation in which people who do not have a problem or do not feel they have a problem are convinced that they do have a problem. In other words: some of those below the cut-off point risk being incorrectly labeled low-literate (Venezky et al., 1990). The consequence of this is possible over-problematisation on a meso or macro-level and a loss of self-esteem and motivation on an individual level. On the other hand, if the cut-off point is not high enough, this can lead to wrongful acceptance of a lack of minimum basic skills.

The research data do indicate that a threshold level used when screening individual adults also has to be ‘accepted’ and ‘considered useful’ by the individuals being screened themselves. If this is not the case, then the individual may not attach any credence to the screening device and will not have any internal motivation to increase his own literacy skills. This makes the fact whether or not a person considers the assessment credible an essential issue. It demonstrates the important idea of the individual having some kind of ‘stake’ in the process and result.

For the low-literacy individuals and their representatives interviewed, these risks are the main reason for rejecting a generalised and explicit determination of a standard or

considering this of secondary importance. They prefer to talk about screening from the perspective of increasing skills rather than whether or not attaining a critical barrier.

According to the academics and policy makers interviewed, it is possible to define an adequate cut-off point or a series of cut-off points (as symbols of literacy skills in certain contexts or situations), for instance by means of an intense societal or public debate or international comparison. Such a debate or comparison could reflect what acceptable functioning in (a part of) society is. And although a cut-off point will always be just *one* view on social behaviour – and it will inevitably always be a normative one – the interviewed academics and policy actors do consider the use of a cut-off point advisable to measure and assess performance.

Due to this difference in perspective low-literacy individuals and their representatives focus more on the disadvantages at the micro-level, while policymakers tend more to recognise the advantages at the meso and macro-levels.

The research data further show that it is crucial to distinguish between screening and diagnosis: screening only aims to obtain an indication relating to the question of whether the performance of the candidate is adequate or inadequate (problematic), whereas diagnosis aims to achieve a more far-reaching analysis of the factors that have led to certain achievements, or of the profile of the individual skills within the overall skills level.

The literature on language and literacy testing reveals a fairly wide consensus on the fact that standardised tests provide only very limited diagnostic information (Alderson, 2000; Staphorsius & Krom, 1992). Screening literacy competencies provides only a cursory and generalised portrait of performance. It provides neither evidence nor knowledge of the dynamic interplay among literacy skills and experiences. A screening device can only be conducted for a very specific purpose: to identify adults requiring more intensive assessment and intervention strategies (Justice et al, 2002). The data in our research therefore stress the need to embed screening in a process (e.g. intake, assessment) that leads to further diagnosis, follow-up and training. This conclusion is in line with research that analysed screening devices in Anglo-Saxon countries (Sutton & Benseman, 2005; Brooks et al, 2005).

In addition to checking, analysing and monitoring the screening result, another argument for the integration of screening into existing routes or pathways is that in this way screening is not seen as isolated, unexpected or “strange” by those being screened. This increases their willingness to take part in the screening. From this point of view, a good match between the way screening is carried out and the body that carries it out is also advisable. In other words, the screening should not be conducted by ‘outside’ people, but by people who are familiar with assessment within the context in which the screening takes place.

## 5 Screening devices

We note that generally speaking there are five ‘types’ of screening devices:

- *test*: measuring an elicited literary performance using a device developed beforehand (which may or may not be standardised);

- *proxy measuring*: mapping out factors that show a high correlation with low literacy, as well socio-biographic data (unemployment, level of education, etc.) as literacy practices (for example membership of a library, having an email account).
- *self-assessment*: making an estimate of one's own literacy performance level on the basis of structured questions;
- *interview/discussion*: oral questioning of the extent of literacy on the basis of a questionnaire;
- *observation*: consciously observing behaviour with a view to describing and estimating literacy skills.

Our research shows that there is no absolute preference for any of these types of screening devices. Each of the screening methods has advantages and disadvantages that are specific to the device (reliability, validity, etc.). The “weight” attached to these advantages and disadvantages also depends on the way in which the devices are used. The disadvantages of each method individually can be reduced among other things by combining various devices. However, this is not always feasible or affordable in practice. Choosing a screening device therefore also means seeking a balance between the length of time involved and the cost of the screening on the one hand and the quantity of information required as well as the reliability of this information (or quality of the information in general) on the other.

The substantive analysis of 31 existing screening devices – mainly tests - in Flanders and the Netherlands indicates that no single existing device can be considered a screening device for literacy as a whole. The devices do not take ‘literacy’ as the construct to be tested, but separate individual skills such as reading, listening, speaking and writing. This indicates that in many cases the screening devices lack a broad focus. For instance, they often screen for one or a few types of text (often prose and document literacy) but leave aside adjacent key skills. So they only screen a fraction of the current concept of literacy and therefore have poor construct validity in terms of general literacy screening. Including literacy in its various types, perspectives and contexts and adjacent key skills in one instrument doesn't seem possible.

The existing devices have also mainly been developed for use with well-defined target groups. With a view to functional screening, this is logical, something which is also confirmed by the interviewees. Adequate screening focuses primarily on groups that display a literacy risk, who moreover can be reached for screening (for instance in schools, providers of vocational training courses, civil-society organisations, etc.) and who are motivated to increase their literacy skills.

However, the target groups on which existing screening devices focus are not always clearly demarcated or they are confined to broad categories such as jobseekers. Further defining subgroups with a uniform needs profile (e.g. long-term jobseekers in need of vocational training) would enable more thorough individual-related and context-specific screening. The screening device can then be adapted better to the group in question and go beyond a purely element-oriented, technical approach. This also means that screening takes on a stronger real-life approach, whereby the individuals screened are confronted with functional, authentic or true-to-life literacy tasks. In this way, the content of the screening also matches the context in which the screened individuals participate or wish to participate. This strengthens the validity of the device.

Although the research data offer good motives for adaptive screening of literacy, which means that the test adapts to the person's ability level, the existing range of instruments contains virtually no adaptive devices. The interview data indicate that the development and appropriate use of an adaptive test is often not feasible in practice (owing to the high cost price, the long development phase, technical implications, etc.).

The existing range of devices is also limited in terms of the various media used. The devices mainly use pen and paper and (to a lesser extent) computers. Screening professionals stress that the medium chosen and the possible familiarity of the screened individuals with this medium must not be allowed to impact on the screening result. This is the main reason why pen and paper screening tends to be the preferred choice.

A large number of points can be made about how difficult it is for a single standardised device to meet the requirements mentioned above (validity, familiarity with the medium, etc.). A certain degree of standardisation is possible, according to the research, but only within a certain context and given a certain target group. How big should or could such a target group be? From the point of view of policy makers in particular (describing the scope, impact, etc. of the problem), and from the point of view of research (objectivity and reliability of the results, basis for comparison, only one device to be developed, etc.), there are strong arguments for standardisation on a large scale. The intention to generate data on literacy at the meso or macro-levels plays a role here.

Finally, as regards the question of who should undertake the screening, the research data do not express any preference for either an external body or the individuals themselves (self-screening). They do emphasise possible application problems (for instance the interpretation of the screening result) in the event of self-screening. The experts interviewed for this study (D'hertefelt et al., 2007) state that not all adults are able to assess their own literacy skills or limitations.

## 6 *Conclusion: putting it all together*

Considering the findings of our research project (D'hertefelt et al., 2007), we must conclude that it is very hard to design a standardized screening protocol for adult literacy. There are several reasons for this.

First of all, it is hard to articulate an operational definition of literacy that does justice to the variety of perspectives on the meaning of the term. However, any screening protocol has to take into account a 'multiplicity of literacy' (often referred to as 'multi-literacies' or multiple literacies) simply because there is more than one single literacy or one set of literacy capacities needed to capture what literacy skills people have and how they cope in different societal contexts. Literacy is, and will always be, a 'complex amalgam of psychological, linguistic and social processes layered one on top of another' (Levine, 1986:22). Because of that, literacy is not an ability that can be located on a single continuum, and a screening instrument should not act as if it is. All this, of course, leads to some hard to answer conceptual questions, such as: How can we make literacy skills easily and readily identifiable? How can we make literacy in all of its aspects empirically manageable? How can a screening device sample the right skills, map them onto a set of levels against which people can be measured in a way it

provides vital information on multi-literacies? Is it possible to use a screening instrument of a very general nature within the timeframe of a quick screening protocol? Secondly, it is hard to trace the relation between personal knowledge and skills and social expectations. There will always be between-group and within-group variation in literacy expectations (De Gloppe, 1992). This makes the determination of 'critical levels of competence' (the one or more built-in cut-off points in a screening instrument) a delicate matter. Given the multiplicity of literacy, using one single standard seems far from useful. It is simply theoretically out of date. The use of one critical level of competence for all contexts and situations imaginable can also have negative implications for practice. It can easily lead to a new deficit view which defines people in terms of failure and in terms of what they are unable to do. When a screening device simply leads to a label 'at risk', it will put blame upon the person and will not encourage the person to start a learning process, while, according to the interviewees in our study (individuals with low literacy levels or their representatives, screening professionals, policy makers, academics with expertise in literacy, professionals from secondary education) a screening process should actually incite adults to embark on an educational process.

Does all of this make literacy screening impossible and therefore not advisable? Not necessarily. Yet some realism is in order. The interview data in our project explicitly warn against unrealistic expectations. Screening should be seen as a way to focus attention on things that otherwise remain intuitive, but one has to bear in mind that the result will always be just a snapshot in time (Justice et al, 2002; Crossland, 1994).

A screening tool should exhibit several essential features. Every screening device should demonstrate adequate levels of validity and reliability. It should be robust in its ability to identify adults who are at risk, and furthermore, it should be neutral, fair, and efficient. This is why making new screening instruments will require a lot of pre-testing and research.

As important as the screening device itself is the way screening is conducted. It should be part of a formative process and lead to moments of tangible change. It should, in other words, be educative and support the learning process. The implementation of a new instrument should therefore be guided by the particularities of the target group. In other words, it should be sensitive to the unique characteristics of that group. This also means that literacy is measured in a context-sensitive way. Because of this, one standardized screening instrument for a broad category of adults can never lead to reliable information. That is also the main reason why very few organizations that deal with low-literate adults explicitly demand a single standardized screening instrument. Given the complex definition of 'functional literacy' and the link with other basic competences, a screening device attuned to specific target groups and situations appears to offer advantages although it may cost more (money as well as time) than, for instance, a single standardized test.

Conducting literacy assessment should start with the needs of the person involved. The issue is what low literate adults need and demand; the aim is to strengthen adult literacy. This is what the screening information should be used for. This perspective will be more helpful than simply counting the heads of those people that are 'at risk'.

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