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Contents

CURRENT LITERATURE REVIEW IN EDUCATION

You are reading a literature review compiled by members of Veille & Analyses, a department of the French Institute of Education within the higher education institution ENS Lyon. We analyse research literature and activities throughout scientific and institutional productions in education in order to map out key research trends on current topics and produce states of the art in the educational research field.

PRIMARY EDUCATION: STUDENTS AT RISK (OF DROPPING OUT)

For most people, dropping out of school simply means leaving school prematurely. The concept of school dropout is often interpreted as meaning "leaving school without qualifications" and is most common at middle school, but can also affect high school students.

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However, "*previous studies have* […] *shown that the academic record of students who leave school without qualifications indicates that there is evidence of major learning difficulties well before the first signs of disengagement*" (Bonnéry, 2003). We need only listen to school dropouts to understand that the "road to disengagement" generally begins during childhood, at home or at school (Lessard et al., 2007). In France, students who have repeated their first year of primary school (CP) and/or who have experienced difficulties in reading and writing tend to be overrepresented among school dropouts (Douat, 2012).

To what extent are the warning signs of dropout risk, such as academic difficulties, lack of interest, passivity and disengagement (drop-in), apparent at primary school? What factors determine engagement in learning? Why is it that 9 to 10% of students at the end of CM2 (final year of primary school in France) have poor basic literacy and numeracy skills?

Are disengagement, "disaffiliation", and withdrawal and marginalizing behaviors at secondary school (Hugon, 2010) not already apparent at primary school, albeit often in more implicit or invisible forms? Focusing on academic difficulties at primary school and at the beginning of middle school, this study provides an overview of recent research on the predictors of dropout, with a particular emphasis on academic learning in class.

LACK OF SUCCESS

THE CURRENT SITUATION

In 1999, a call for proposals was issued in France as part of an inter-ministerial research program "*to better understand the processes leading to disengagement and dropout among school-age children*" (Infocentre). In 2002, three research groups (ESCOL at the University of Paris 8, Printemps at St-Quentin University and SYLED-RES at the University of Paris 3) investigated "*the genesis of dropout constructed in the interaction between students and the educational institution, education policies and situations in class, from*

students' interactions with teachers to the work environment in schools" (Bautier et al., 2002). Academic difficulties are the most obvious type of difficulties. As such, they may be a relatively easy predictor to act upon to prevent disengagement and dropout.

Difficulties in learning basic skills

In **France**, the Inter-Ministerial Information Exchange System (Système Interministériel d'Échanges d'Information or SIEI) is used to identify young people who leave school without qualifications, irrespective of the course or pathway from which they withdraw. The system has been operational since May 2011 and has "*helped to identify 254,000 young dropouts, including 180,000 who have been "lost sight of", i.e. who are not enrolled in any educational or integration structure*" (Eduscol).

At the beginning of the 2010-2011 academic year, 13.7 % of students started middle school having repeated at least one grade. Among them, 24.6 % were from a member school of the *R*éseau *Ambition R*éussite (RAR), while 20.2 % were from a member school of the *R*éseau *R*éussite *Scolaire* (RRS) ●. In March 2011, 12.1% of CM2 students did not have basic literacy skills, while 9.9% did not have basic numeracy skills (L'état de l'école, 2011).

THE CONCEPT OF DROPOUT

Dropout, disengagement and academic failure

According to Bernard, the concept of *décrochage* must be distinguished from the concept of *déscolarisation. D*écrochage implies a failure to meet social norms (complete education), while *déscolarisation* implies a reference to the legal norm (i.e. compulsory education). Researchers in France have been cautious in analyzing these issues, emphasizing the risk of stigmatization involved in identifying an at-risk population, in addition to the risk of simplification related to the complexity of real-life situations and a poor understanding of the causes of school dropout: "*Focusing research on dropout amounts to ignoring the root causes of the problem, which must be sought in individual trajectories and the associated social and educational contexts*" (Bernard, 2011).

In the dominant discourse on academic failure, dropout is seen by some as a symptom, while others see it as a way of addressing the reality of academic failure, along with all the connotations of the term "dropout", and "*the deep interconnectedness of academic and social factors*" (Glasman, 2011).

Should we see dropout as a "*multifactorial (social, family, educational, geographical, psychological) process*" and as a discriminating process from the youngest age, i.e. as something that is too complex to be prevented before adolescence, or as a "*gradual process fostered by doubt and a loss of self-confidence often caused by the emphasis on performance at the heart of our education system*" (Balas, 2012)?

The assumption is that research on dropout needs to start before middle school. Even in the case of students who show no symptoms of potential disengagement at primary school, researchers have hypothesized that dropout is the result of a combination of social, cognitive, subjective and linguistic factors (Bonnéry, 2003).

The manufacture of dropout

"*Whereas previous studies in psychology have primarily emphasized intrapsychic, behavioral and social interactional dimensions, educational researchers have tended to focus on factors related to pedagogy and the academic environment. By contrast, sociologists and historians tend to focus on the social construction of the phenomenon, the role of policies, the factors governing educational institutions and class relations*" (Janosz, 2000).

For many observers, school dropout is merely a symptom of external difficulties (notably the family, socio-economic and cultural situation). In this view, negative attitudes toward school and education or a refusal to learn are assessed in the light of the socio-cultural context governing students' experiences outside school.

● *"The Réseaux Ambition Réussite (RAR) were created during the first stage of the third revival of the priority education policy in March 2006 by Gilles de Robien"* [Minister of Education], as were the Réseaux de Réussite Scolaire (RRS), although the priority, in terms of human and financial resources, was given to the RAR. *"Every RAR is composed of a Collège Ambition Réussite and local schools and is allocated significant resources"*. At the beginning of the 2011/2012 academic year, the majority of the Réseaux Ambition Réussite were incorporated into the ECLAIR program (Écoles, Collèges et Lycées pour l'Ambition, l'Innovation et la Réussite)". (OZP)

Research indicates that school dropout is determined by a range of factors and processes, including:

- learning and the perception of knowledge and skills;
- institutional and teacher practices aimed at addressing strictly academic difficulties;
- the subjective and social processes at work among students as they are manifested in perceptions of the self and relationships with others, notably peers and teachers;
- speech and language and their role in the process of understanding texts and school tasks, but also in the stigmatization processes caused by a significant gap between teachers' expectations and students productions (Bautier, 2003).

The educational experience of school dropouts. *"Although dropouts will often have experienced many difficulties in their early academic life in addition to an often difficult social, family and affective environment, they may have no cognitive difficulties. In some cases, they may even have been good students. For young people who are at risk of dropping out, school and education gradually lose meaning. The quality of the educational experience is therefore one of the most powerful predictors of school dropout"* (Janosz, 2000).

For others, "*dropout is most common among students combining family vulnerability and (significant) academic difficulties*". Bautier et al. conducted a study to "*highlight the dynamics of the interaction between various factors involved in the "manufacture" of dropout from within*" (Bautier et al., 2002).

In the literature, persistent difficulties among "ordinary" students tend to be examined either as part of a pedagogical approach (i.e. academic failure in difficult environments), focusing on "*restoring self-image, social relationships, the perception of work and the future, and the meaning of learning*" (Nonnon, 2007), or as part of a medical approach (specialized education, rehabilitation, research on learning and behavioral problems, etc.).

The primary-secondary school transition as a triggering factor of latent difficulties

We have seen that the structure and organization of education is one of the risk factors of dropout.

The transition from primary to secondary school – i.e. from an environment that fosters close relationships with students, with just one teacher, to a larger school in a fragmented environment involving several teachers – "*can have a negative impact on academic success*" (Janosz, 2000). The transition can serve to bring to light earlier (latent) difficulties.

Retrospective analyses of the school career of dropouts have often shown that their primary education appeared to go smoothly and that they have relatively happy memories of their primary school experience. At primary school, students often have the illusion of faring relatively well. However, when they enter middle school, they may experience learning difficulties without any possibility of compromise or adaptation. The rigor expected of students can lead to disengagement or indiscipline, which merely serve to further impede learning (Blaya, 2003; Bautier, 2003).

Analysis of dropout risk

Over the years, with the accumulation of research and as a result of the nature and vagaries of ideologies, philosophies, decision makers and target audiences, the "risk of dropout" has had different connotations, with the finger being variously pointed at schools, parents and students (see, for example, the study by Blaya on dropout parents, 2010).

A predictive approach can be used to identify "at-risk students" by determining the factors associated with an increased probability of failure or dropout. This has been the preferred approach in Quebec.

The reliability of the tests upon which the longitudinal studies conducted in Quebec have been based (some of the results of which will be presented in due course) are open to question. The *IMDPE* (Instrument de Mesure du D**éveloppement de la** Petite Enfance), is a questionnaire administered to kindergarten students (based on a comparison of two groups of students), while the *Lollipop* test is administered individually. Used to measure academic maturity, both tests have been used by the Institut de la Statistique du Québec and have confirmed that "*the relationships between the socio-economic level, school preparation and academic productivity are not the result of a statistical artifact*" (Lemelin, 2007).

Another approach involves identifying students as soon as problems or difficulties become apparent (absenteeism, low productivity, aggressiveness). The unilateral approach used in recent studies posits that every student is potentially "at risk", while the institutional approach focuses on academic factors as the potential causes of dropout. In this approach, key factors include inflexible schedules, narrow curricula, the emphasis on basic skills, the focus on standardized tests, grade retention, secondary level courses, special classes, and the beliefs and attitudes of teachers and administrators toward students and parents. However, whatever the approach, the literature review by Tessier and Schmidt on the concept of risk showed that the concept "*is transactional, and not a static element that a brief and isolated measure can eliminate*" (Tessier et al., 2007).

STUDENTS AT RISK OF DROPPING OUT

We may hypothesize that "*disengagement and dropout are the result of cognitive disengagement (or a lack of cognitive engagement) that may have occurred at an earlier stage and that can develop in silence, independently of any apparent rejection of school*" (Bautier et al., 2002).

PREDICTORS AND WARNING SIGNS

At a one-day event (*journée départementale*) on dropout prevention (Grenoble, 13 April 2011), a group of state education representatives, experts on academic performance and success experts and social workers identified the "warning signs of dropout" at middle school (*collège*). The evidence suggests that warning signs can be identified at primary school.

It is worth noting that the warning signs identified at the Grenoble event differ from the indicators used in previous typologies, notably by Janosz. Previous studies have tended to explain dropout in terms of cultural differences related to the value placed on education and the development of key social and personal skills. They have also sought to explain dropout in terms of class relations and the impact of poverty, the assumption being that if viewed as a means of social promotion, education will tend to lose its appeal if access to the labor market is difficult or restricted.

Though based on different approaches, recent studies on early dropout appear to be based on a common typology of predictive indicators and warning signs.

Predictors

A number of studies conducted in the United States, Australia, France, Belgium and the United Kingdom have demonstrated the importance of various risk factors for dropout (Blaya, 2003). These include:

- being a boy;
- coming from a split or blended family;
- having parents with little education or with a negative perception of school;

- underperforming academically or falling behind;
- moving house frequently;
- receiving little homework support at home;
- being educated in special classes;
- in the case of France: having repeated a grade.

These findings suggest the need for further research. A typology identifying meso-social risk factors (institutional and family factors) and micro-social risk factors (individual and interpersonal factors; see Janosz, 2000) can be used to provide a more accurate picture of the issue.

Key institutional factors include school structures, organization and climate, with research indicating that "*as an environment, school is one of the determinants of academic perseverance*" (Janosz, 2000). Studies show that a smaller school provides more opportunities for participating in extracurricular activities, in addition to a more flexible environment. Besides the structural factors cited above, family factors were examined (from an educational/academic point of view) in a previous *Dossier d'Actualité* (Feyfant, 2011a). These relate to representations of school at home and the involvement of families in their child's personal development and academic career. Interpersonal relationships are another key factor. The evidence suggests that difficult relationships with teachers and school staff and developing friendships with students in difficulty can have a negative impact on a student's academic career. Among the predictive micro-social factors, gender is a less important factor in cases where educational and family factors are known. In different countries, research indicates that ethnic origin (to be used with caution) and linguistic origin can have an impact. Lastly, personality may also have an impact on academic performance, with warning signs including low self-esteem, a tendency toward somatization, and the "*feeling that external factors govern*" one's fate. According to recent studies, meso-social and micro-social factors must be combined with or filtered by "*educational experience [which] is one of the most powerful predictors of school dropout*" (Born, 2008; Janosz, 2000).

Warning signs

Warning signs of dropout include:

Limited engagement in learning: the student does not write down homework assignments, fails to complete homework assignments, often forgets school materials, and is often late. The results of recent research on engagement in mathematics among Finnish students will be outlined.

A negative view of school: the student feels that school is pointless and a waste of time; school activities are seen as being too abstract; the student or the student's family often speak of school in negative terms.

Difficulties adjusting to the rhythm of school life: the student struggles to get through long days; occupations other than school activities are too taxing.

Learning difficulties and poor academic performance: the student's grades decline, but s/he does not appear to be affected; s/he struggles to understand instructions.

Rejection of the status of student outside school: the student refuses to use or attend social facilities and sports clubs; s/he withdraws from educational support structures; s/he is unable to organize his/her leisure time; s/he becomes known for the wrong reasons in the local area.

A psychological approach to risk factors: specific attention is paid to any change in behavior, frequent visits to the school nurse, lack of motivation, asthenia, academic anxieties and phobias, hyperactivity or selective mutism and withdrawal from school, lack of interest in what happens in class, and repeated deviant and/or violent behavior.

INTERPRETING WARNING SIGNS

Perceived incompetence

At different times throughout the educational process, some students may develop a sense of incompetence, which can have a devastating effect on learning. Among "failing" students, behaviors and attitudes associated with perceived incompetence are a response to academic or behavioral problems. Perceived incompetence appears to be no more common among girls than it is among boys and does not appear to affect high-potential students more than other students. Psychological traits such as perceived competence and incompetence are fostered and consolidated by relationships with teachers and parents, in the sense that students project their opinion of themselves onto their teachers and parents, by (for example) interpreting the slightest remark made by their parents. "*The reflection of their competence that children see in their parents plays a more important role in their perceived competence than their real productivity*" (Bouffard et al., 2006).

Research in psychology has shown that perceived incompetence in a particular area tends to lead to withdrawal and disengagement, a strategy aimed at protecting self-esteem and at reducing the value or importance given to the area in question. The problem is that children often tend to place a high value on school and are aware that adults do so too. As such, it is often difficult for children to solve their learning problems by devaluing school. Low self-esteem leads to lower intrinsic motivation ●, accompanied by lower engagement and productivity. With their feeling of incompetence thus further entrenched, children become trapped in a vicious circle, resulting at best in passivity.

As noted by Toczek, the emphasis on success in Western society involves associating performance with intellectual ability. Because of the "bias toward success", students tend to pay significant attention to other people's reactions to their academic results. Another effect is the tendency to focus on "self-value". The focus on success tends to be associated with a view of intelligence as a stable given, the assumption being that some children have more of it than others. Yet research shows that if families, students and teachers believe that intelligence is not a "stable ability", students will tend to develop very different learning strategies and to define "real learning objectives" for themselves (Toczek, 2006).

Fostered by the quest for perfection ("I must do my work"), the attitude associated with the emphasis on success appears to be most common among high-potential students. However, the evidence shows that high-potential students have a similar profile to students with serious learning problems (Bouffard et al., 2006). Another cause for concern is the growing body of data showing that motivation and perceived incompetence can decrease in the second year of primary school. The relationships between self-concept, motivation and learning are discussed in more detail below, with specific reference to literacy and numeracy.

Social skills and learning

Many studies have demonstrated the impact of students' social goals in specific learning situations. From an "academic" point of view, these may be performance goals (i.e. being the best or seeking approval) or learning and knowledge acquisitions goals (i.e. developing knowledge and skills). Another approach involves focusing on interrelationships by examining prosocial behaviors (support, cooperation, sharing) and social responsibility goals (compliance with rules and commitments; see Wentzel, 2003). Arriving on time, trying to participate, making efforts to complete a task and not being disruptive in class appear to be characteristic of good students (Filisetti et al., 2006).

Peer recognition is a key factor of engagement in learning. Recognition by teachers of progress, good grades or good answers are also important factors, and the combination of both forms of recognition serves to further promote student motivation

● According to Deci and Ryan, *"the term 'intrinsic motivation' is used when the source of energy is the pleasure and satisfaction experienced by the student in performing an activity, while the term 'extrinsic motivation' is used when the learning activity enables the student to obtain something or to avoid consequences"* (Deci & Ryan, 2004).

(Wentzel, 2010). Reviews of the literature on social skills and student engagement have provided evidence of the relationships between family objectives, peer relationships and class situations (Wentzel, 2003). However, it is important to qualify the nature of peer influence since students in difficulty may also focus on their recognized status as poor, "lazy" or disruptive students.

Just as dropout has multifactorial causes, "*so learning difficulties are the result of interactions between the characteristics of students, their family, the school and the environment*" (Lopez et al., 2004). Lopez and Sheriff developed a typology of the various factors that impact learning:

- individual factors (state of health, cognitive profile, interest and motivation, learning styles and rhythms, sensory and motor aspects);
- family and social factors (socio-economic level, language and culture, level of education, family educational practices; see Feyfant, 2011a);
- educational factors (pedagogical practices, stakeholders' perceptions and expectations, methods and practices in class and at school, interpersonal relationships).

The use of the terms "predictors" (or "indicators") and "warning signs" (both in France and in Quebec) merits consideration. The term "predictor" (or "indicator") implies a statistical analysis involving a form of cold determinism – based, for example, on a case study of a male student who has moved house several times following his parents' divorce or remarriage or a student with a mother who works in the evenings. However, reality is not as simple as this, and research in this area requires a multidimensional approach: "*Dropouts are not a homogeneous group of individuals, and a distinction can be made between subgroups of individuals based on various personal characteristics, the interaction of these factors with the educational environment, or life events*" (Janosz, 2000).

Just as it is impossible to say that dropout and disengagement are inevitable, so the determinants of dropout appear to be largely influenced by interventions targeting the factors identified above: "*Empirical studies and explanatory theories of effective prevention programs emphasize the central role of the interaction between the educational environment and the individual and cultural characteristics of students*" (Janosz, 2000).

This is why it is important to focus on weak signs and to act within and around the school by focusing on "students at risk" of dropping out.

Socio-cognitive conflicts

In order to understand what a socio-cognitive conflict might be (in other words, difficulties in making the connection between a task, the necessary intellectual effort and the expected knowledge), researchers, including Bonnéry, often use the example of geographical maps. For example, when a teacher asks a group of students to draw a map of the Rhône-Alpes region, it is in order that students learn to use colors to highlight relief and rivers. The students produce the map by following the teacher's instructions and learn the map for the purposes of the assessment test. The students will assume that the expected knowledge relates to their ability to correctly locate the Rhône or the Isère (for example) on a map. However, in the assessment test, their task is to draw a map of the Auvergne. As a result, they will be unable to meet the teacher's expectations and will consider their grade to be unfair.

According to Bonnéry, two interacting strategies can be used to ensure that primary school students remain engaged, and teachers may draw on both strategies. The first strategy is related to performance, the assumption being that students perform school tasks to achieve good results. If they are unable to do so, they will seek to comply with the demands of the class group formed by the teacher and their peers (performance of a "mini-task" proposed by the teacher to re-motivate those students who were given a poor grade). While motivation plays a key role in engagement in learning, the pro-

cess described above can disrupt the acculturation process, since seeking the teacher's approval may detract from difficulties and contribute "*to making the connection made by the student between the effectiveness of their intellectual effort and the verdict more opaque*" (Bonnéry, 2003).

Research indicates that the impact of socio-cognitive conflicts is even greater at the beginning of secondary school, since the relatively protected environment of primary school means that the primary-secondary school transition can be extremely unsettling, and, in some cases, anxiogenic. The didactic contract changes as students move from primary to secondary school, without them being aware of these changes (Douat, 2012)

IDENTIKIT(S) OF A STUDENT AT RISK OF DROPPING OUT

The use of the phrase "at-risk student" has provoked considerable debate in France, and disagreements have arisen over attempts to identify students at risk of developing behavioral problems as early as possible.

In **Quebec**, official texts and documents issued by the Ministry of Education, teacher associations and research groups aim to provide teachers with a guide for determining risk factors "*for vulnerability that may impact on learning or behavior […] notably the risk of academic failure and poor socialization, if remedial measures are not quickly taken*" (Récit).

"*Student work is based on a set of routines alternating between lessons, individual exercises, group exercises, and periods for assessment tests*" (Lopez et al., 2004). The assumption is that at-risk students draw the attention of teachers because they are unable to follow these routines and/or to comply with class rules.

Long-term view

This framework was developed on the basis of a longitudinal study conducted by researchers at the University of **Quebec** among students and teachers in the first year of secondary school. Potvin and colleagues defined two types of students not at risk (model students and average students) and four types of at-risk students: students with learning difficulties, students with externalized behavior problems, students with internalized behavior problems, and unmotivated students (Potvin, 2007).

A student who "*has learning difficulties or exhibits behaviors that may prevent them from achieving the learning or socialization objectives defined by the school*" ● is considered to be an at-risk student and will therefore require appropriate support from the school and, above all, from teachers.

● See Royer, Saint-Laurent, Moisan, Biteaudeau (1995), quoted in Fédération des Syndicats (2009).

The system requires teachers and educators to administer questionnaires to identify at-risk students from kindergarten onward. The questionnaires are used to predict the academic development of students and the type of student needing support and, combined with a description of the student (based on descriptive adjectives), are designed to determine the level of risk. The questionnaire is administered annually over a period of three years (kindergarten, first and second year of primary school).

Based on a sample of 990 students in 2000, Potvin showed that 11 years later (at the end of secondary school), 13 % of the students had dropped out, 25 % had repeated at least one grade and 62 % had qualifications. The dropouts included 6 % of students deemed to be "engaged" or "average" (i.e. not in difficulty) over the three years, 13.7 % of students viewed as "cause for concern", and 36.4 % of "rejected" students (for behavioral reasons). The proportions of students who had "repeated at least one grade" were of the same order – 13 % for trajectories deemed "without difficulties" at the beginning of education and 47 % for others.

Having established the importance of early assessment of at-risk students, Potvin produced a *Prevention Guide for At-Risk Primary School Students* ("Guide de prévention pour les élèves à risque au primaire"), aimed primarily at teachers, educational specialists and headteachers, but also parents. The guide offers solutions for improving class climate and aims to raise awareness of the key role of teacher-student relationships.

Adaptation to risk: between resilience and suffering

The concept of at-risk student is inspired by epidemiological studies in medicine. Research in this area aims to determine risk and predictive factors that influence the development or non-development of a given deficiency and, therefore, to predict whether a given individual may be said to be "at risk". In the human sciences, the concept implies a focus on child development and involves research based on different approaches. The focus may be on biological characteristics, affective disorders, or family and community environments. In the late 1990s, a number of researchers conducted studies to develop models characterizing risks.

Numeracy is a body of knowledge and skills required to effectively manage mathematical difficulties related to different situations.

The concept of risk implies two different "visions": a static (compassionate) vision that sees "*risk as an inevitable disaster caused by the environment and the child as a victim to be saved*"; and a dynamic vision that sees "*risk as one of the inevitable components of an adaptive, dynamic and complex process, and subject to change and recomposition. Here, the child is assumed to play an active role in their development*" (Tessier & Schmidt, 2007).

According to some researchers, the influence of negative factors is likely to lead to psychosocial maladjustment in students (behaviorist approach). Other researchers have focused on students' ability to adapt and the interactions between risk and protection (phenomenon of resilience) ●. Adults' perceptions of students with an unsatisfactory level of "academic productivity" can be diametrically opposed. Teachers' life stories show that teachers may struggle to distinguish between the difficulties experienced by a student who is unable to understand something and the response of a student exhibiting disruptive behavior. As such, in dealing with a student's difficulties, teachers must face their own responsibilities and limitations (de Champlain, 2011).

"Therefore, resilience is the result of an individual experiential process rooted in social experience and fostered by the interaction between the socialization of the child and their environment" (Terrisse, 2001).

READING, WRITING, COUNTING: DIAGNOSIS AND REMEDIATION

"*Students who struggle to develop basic reading, writing and counting skills are particularly at risk of later school dropout*" (Bébi, in Bautier et al., 2002).

Studies on literacy and numeracy ● based on cohorts of young children or students generally aim to identify future students with special needs and to detect potential learning and behavioral problems. However, factors such as cognitive disengagement and a limited ability to engage in learning are not necessarily predictive of later problems. In dealing with students with "more general needs", it will be both simpler and more difficult for a teacher to identify warning signs and to adapt their practice.

DOMAIN-SPECIFIC ANALYSES: WRITING, READING, NUMERACY

Can a poor reader be reliably described?

Consider a cohort of students from disadvantaged backgrounds at the beginning of lower secondary education. Imagine that they are given a narrative text to read (4-5 pages) and are instructed to answer questions about descriptive details (places, dates), characters (name, age, characteristics, role) and plot (events, outcome or denouement) without the aid of the text.
Research shows that the differences between good and poor students are related to the greater ability of good students to use appropriate strategies and to draw on personal experiences (Van Grunderbeeck et al., 2007). The evidence indicates that the lowest-ability students tend to have the following characteristics:

- a lack of basic knowledge and skills (about the world, the theme of the text, the structure of texts in general) or an inability to use these skills;

- difficulties suppressing irrelevant information in the course of reading;
- passive information processing;
- lack of motivation and perseverance;
- difficulties in relating textual clues to previous knowledge;
- difficulties in answering questions in writing;
- difficulties in understanding important textual information (Gersten et al., 1998).

The evidence points to several types of difficulties, which may or may not be combined:
- decoding;
- written comprehension;
- oral comprehension;
- general cognition (Van Grunderbeeck et al., 2007).

High-risk language practices

The analysis of language practices shows that the list of difficulties identified by Van Grunderbeeck must be used with caution. Schools should take care not to stigmatize the gap between students' language practices (particularly the gap between spoken language and standard use) without ensuring that they have given students the necessary tools and resources to develop their academic language skills.

We know that the ability to learn basic vocabulary at the beginning of kindergarten stimulates the development of reading skills. We also know that students who speak another language at home are likely to have more academic difficulties.

Children learn to speak before starting school without knowing that they are learning. The challenge is to make the transition to written language and to become aware of word structure (sound awareness, syllable awareness, phonetic awareness) and sentence construction. At school, the perception of language is not governed by the need to communicate (unlike at home), but is a skill that requires full attention. Every year, students progress from one level or grade to the next, and ever greater demands are placed on them without any possibility of long-term learning, since the very meaning of what is learned will remain unclear (in the case of students in difficulty). As such, academic texts may remain empty of meaning.

Based on assessments at the beginning of middle school (first year of *collège*), Bautier demonstrated the existence of weaknesses in the development and use of grammaticized language. A student may be able to decipher a text without necessarily understanding or interpreting it, since they may fail to identify key linguistic or grammatical clues: "*Analysis in this area also shows that students may struggle to understand the "intellectual" vocabulary used in school settings and the meaning of metalinguistic terms and will therefore struggle to understand school tasks. More generally, research highlights major weaknesses in the vocabulary used in school*" (Bautier, 2003).

The foundations of numeracy

The foundations of numeracy learning, as with reading and writing, need to be sought well before the beginning of formal education. In order to know how to distinguish quantities of objects, to identify numbers and to count by the end of kindergarten, most children need to have developed various "sub-skills" requiring a knowledge of numbers, the memorization of arithmetic facts and procedural or conceptual knowledge (Pakarinen et al., 2011). Other skills (both cognitive and metacognitive) also appear to facilitate numeracy. These include the use of working memory, the ability to count, attention, language skills and the ability to understand instructions: "*Most children develop knowledge of three important "how to count" principles before they enter kindergarten including the one-one principle, the stable-order principle, and the cardinality principle*" (Jordan, 2006). The motivational and affective factors referred to above are once again key, as are the teacher's learning objectives (Aunola, 2006).

COMPARATIVE AND MORE COMPREHENSIVE ANALYSES

Skills, motivation, engagement

The relationship between self-esteem (or perceived incompetence), motivation and academic success was noted above. Based on longitudinal studies of students and teachers at kindergarten, a number of studies on numeracy learning have examined task-avoidant behaviors and how the predictive nature of such behavior shapes parents' and teachers' representations. Good academic results or recognition from the teacher or the school are consistent with students' expectations and motivate them to engage in subsequent tasks. In the long term, there is evidence of a strong correlation between engagement and academic success and between avoidance and academic difficulties.

The various studies reviewed include research by the department of psychology at the University of Jyväskylä in **Finland** (Finnish Center of Excellence in Learning and Motivation Research) and by the department of psychology at the University of **Québec** at Montreal (UQAM).

Based on research by Bandura on self-esteem and the ability to learn, recent studies have extended Bandura's findings by using predictive factors of academic success or failure. For example, Hirvonen et al. demonstrated the relationship between learning strategies and academic failure: "*negative self-concepts of ability and low efficacy beliefs, originating from repeated failures in previous learning situations, increase the likelihood of failure expectations. This then leads to low motivation, low effort, and task-avoidant or task-irrelevant behavior in later learning situations*" (Hirvonen et al., 2012).

Other studies have shown that the decline in motivation and self-concept decreases at the same rate in both areas in year two and subsequent years, but remains stable at middle school and decreases less in girls (Jacobs et al., 2002).

The level of engagement varies according to the task to be performed (for example, a student may be more motivated to perform a counting task than a mathematics test).

Canadian research groups in Montreal and Laval have shown that students in first and secondary year derive more pleasure from reading and writing than from mathematics and that intrinsic motivation and self-concept in mathematics decrease between the first and the second year while they remain stable in reading and decrease slightly in writing (Guay & Talbot, 2010).

This concern is consistent with recent research in cognitive neuroscience. The brain adapts to the demands of the environment throughout life, but *"in babies, the formation of new synapses occurs at a phenomenal rate"* (OECD 2007),particularly in the frontal and prefrontal cortex, related to attention control.

Combined with other family or personal factors, gender appears to have a greater impact on motivation than socio-economic status. In the first year of primary school, research indicates that girls tend to have a greater sense of competence than boys, while motivation in mathematics decreases less in boys than in girls. The findings of recent research in this area point to various remediation strategies. However, in order for such remediation to be effective, we need to understand why motivation is so gender-dependent in order to determine the factors that lead to or strengthen representations and stereotypes of students' skills.

Predicting success to prevent risks?

Measuring skills as early as possible

At an even earlier stage, good reading skills and, above all, good numeracy skills at kindergarten have been found to be a good indicator of academic success in the first years of primary school. While number skills ("pre-mathematical skills") and the level of vocabulary (pre-reading skills) are known predictors of success, most longitudinal studies merely seek to measure these skills.

It is important to define attention span and attention skills and to identify processes of "control inhibiting" the ability to act. The evidence indicates that motor skills also determine academic success and the "student's overall productivity" (Pagani et al., 2011). In France, the Programme de l'École Maternelle focuses on these skills. However, this depends on detecting and assessing the presence of absence of skills and the potential for development.
The Quebec Longitudinal Study of Child Development (QLSCD), begun in 1998, aims to better understand child development in Quebec and to identify the determinants of academic success and social adaptation. The measurements performed combine skills (number skills, receptive vocabulary, hyperactive behavior, general motor skills, fine motor skills, movement, control of objects) and academic productivity (in mathematics, reading, writing and

science) or engagement (in class and academically). The association is not always positive or negative, but depends on skills and the academic object in question. While hyperactivity is a negative factor, no correlation has been found between hyperactive behavior and future success or failure in science, for example (Pagani et al., 2011).

PREVENTION IN CLASS

Teachers' representations and actions

In the course of the 2005-2006 academic year, the *Direction de l'Évaluation, de la Prospective et de la Performance* (DEPP) surveyed nearly 1,500 primary and secondary school teachers to understand their views on the causes of academic difficulties. The student's environment was identified as the main cause (69.5 % of primary school teachers; 63.5 % of lower secondary school (*collège*) teachers), while the structure of the educational system was cited by 16.5 % of primary school teachers and by 26.4 % of secondary school teachers. "*This means […] that teachers are more tempted to blame external factors over which they have no direct control*" (Do, 2007), and in particular parents' lack of involvement in their child's schoolwork. In considering causes involving the educational system, the participants emphasized the lack of support or provision for students with significant difficulties and the discrepancy between school programs and students' abilities. Very few teachers cited pedagogical causes (for example, less than 3% cited disciplinary compartmentalization). There was also a significant emphasis on the lack of teacher training. These findings may suggest that teachers struggle to cope with students' learning difficulties and therefore struggle to perform their job (de Champlain, 2011).

In their research report on the causes of dropout, Bautier, Terrail, Branca-Rosoff, Bonnéry and Bébi focused on how teachers (and students) adapt to academic difficulties. From a pedagogical perspective, their findings indicate that teachers tend to use "practical pedagogy", adapting their practices to their perception of students' difficulties (Bautier speaks of "psychologism"). The case studies conducted by Bébi and Terrail showed "*how school contributes to disengagement and dropout by not enabling students to engage in learning while allowing them to advance to the next stage, causing them to fall even further behind in their learning based on academic expectations at middle school (collège) throughout primary education*" (Bautier, 2003).

Socio-cognitive conflicts and social goals

Teacher adaptation to students and student adaptation to teachers, based on assumed expectations or implicit representations, are based "*in large part on context-specific evidence*" (Bautier, 2003). As noted above, Bonnéry described the logics at work. A cognitive conflict highlights the difficulty of choosing between, on the one hand, obedience and self-enhancement (sense of accomplishment) and, on the other, the desire to acquire knowledge. The evidence shows that conflicts are most common among students from disadvantaged backgrounds, for whom explicit teaching appears to be more effective.

How can conflicts be solved? According to Bautier, "*personalized teaching and consideration for students as "children", their personal lives, and their real or supposed characteristics, the emphasis on enabling every child to "flourish", the informality of pedagogical relationships, and the proliferation of "non-academic" activities in schools […] all appear to play a part*" in making the goals of education unclear. The team led by Gauthier made a distinction between academic models focused on teaching and emphasizing "*the systematic teaching of basic skills such as reading, writing and mathematics*" and cognitive or affective models, which tend to focus on students. "Based on conclusive evidence", the team demonstrated the effectiveness of academic approaches (Bissonnette et al., 2005). More generally, the debate between explicit teaching and the "new" pedagogy remains open (Feyfant, 2011b).

Refocusing on learning

Based on the framework proposed by Potvin (2011), preventive measures must be adapted to the different types of identified risks. In the case of an unmotivated student, a range of measures can be envisaged depending on the degree of "demotivation":

- the creation of a facilitating environment: this will involve encouraging the student, the family and the school to engage in dialogue and ensuring that all parties are aware of the need for support;
- the promotion of student-centered pedagogy: this will involve promoting student self-awareness (talents, skills) and self-esteem; helping students to become aware of their strengths and ambitions; emphasizing their talents and skills and helping them to become aware of them; developing the various types of academic motivation (intrinsic, extrinsic); helping students to define success goals and practical projects; encouraging students to become involved in school projects (for example extracurricular activities); helping students to define a short-term objective for their academic results; and encouraging students to consider their future, their tastes and their interests;
- the development and promotion of engagement and autonomy in school tasks, among both at-risk and other students.

In the case of students with learning difficulties (i.e. students with poor knowledge and skills who struggle to meet academic demands and who need teacher support to make progress but who have a positive attitude toward school), Potvin emphasized the need for patience and encouragement and the importance of highlighting progress. In this view, students need to be encouraged by emphasizing their "good moves". There also needs to be an emphasis on differentiated tasks and expectations (i.e. maintaining an acceptable level of expectation) and providing more individual support. Students should also be encouraged to ask for support in order to overcome their learning difficulties, and there should be training programs designed to promote skills.

This type of program is aimed at students with behavioral problems such as autism. However, Potvin defined the aims of one of the programs as follows: it *"is designed more specifically to foster [...] the development of their social skills, to recognize and use the strengths of their family, to consolidate parents' ability to negotiate with their teenage children, and to create a truly equal partnership between the school and the family"* 2005).

In the case of a student with externalized behavior problems (i.e. who shows hostility toward the teacher, who exhibits poor behavior in class, who is insolent and insulting, who refuses to collaborate, who requires considerable attention, or who exhibits rule-breaking behavior), recent research suggests (at the risk of giving the appearance of wishful thinking) that it is important to provide extra support in the event of learning difficulties, to provide training in social skills and emotion management, to change students' socio-educational environment, to use praise and to promote positive behavior, to use positive reinforcement (individual and group-based), to use time-out, to promote the development of moral judgment (good and evil) in order to promote a sense of personal responsibility, to train students in problem-solving, to help them find peaceful ways of solving problems ("stop, calm down and think"), and to develop self-control skills (anger management).

TAKING ON A PARADIGM SHIFT

Though contested, the solution proposed by researchers in Quebec is pedagogical differentiation. In practice, differentiation requires teachers to have "*a good understanding of the learning process at play in the development of skills, a good understanding of the psychological, symbolic and interpersonal work performed by the student, and a knowledge of the student's general situation (i.e. their difficulties, their skills, their learning pace, family support and collaboration, etc.)*" (Lopez et al., 2004).

In **Finland**, recent evidence indicates that the quality of the learning environment plays a key role from kindergarten onward. It appears that students are more likely to engage in a task if the teacher provides support and encouragement. Research conducted at the University of Jyväskylä has provided evidence based on a relatively large cohort (1,200 students) and provides the basis for a playful and informal approach to teaching (in mathematics) "*connected with the way children act in learning situations*" (Pakarinen et al., 2011).

The point here is not to establish a correlation between the promotion of academic results by the teacher and student engagement in tasks, since evidence for the correlation has already been given. In research on students in kindergarten and the early years of primary school, positive variables that are predictive of subsequent learning in mathematics generally include support and pedagogy (Hirvonen et al., 2012).

This approach is close to the view taken by Bautier (2006), for example, in her analysis of the role of teaching practices in shaping students' academic difficulties: "*The objective that some students assign to a task may not be the same as the objective defined by the teacher, although the difference between students is not always apparent in the work produced. The gap between students thus grows wider without any possibility of support*". Bautier, like Mägi (2012), found evidence of a systematic relationship between "engagement in learning and the development of knowledge and skills" and its association with parents' level of education.

The question of the transition from primary to secondary school was briefly discussed above. The challenge is to determine how to ensure a more gradual transition – a challenge made more difficult by, among other things, the nature of teaching and the concept of bi- or multidisciplinary teaching at the beginning of secondary school. Teaching practitioners are currently seeking to promote increased collaboration between primary and secondary teachers. In particular, teachers at the end of primary school and mathematics teachers working in the early years of secondary school have been working on two areas in which primary and secondary school students were found to be experiencing difficulties: arithmetic skills and problem-solving. By sharing teaching resources and strategies, collaboration has allowed for greater continuity in teaching and learning, and there are hopes for further development in this area (Bednarz et al., 2009). The emphasis on facilitating the transition from primary to secondary school in the area of mathematics learning, but also in writing, reading and science teaching, or on a more global or comprehensive approach has resulted in a number of studies that may merit their own review. However, it is important to note that the studied cohorts are often too small to provide a basis for designing a unique method of preparing students to enter secondary school, although there is some convergence in the suggestions made in Quebec (involving more specific and often subject-specific avenues), France and the French Community of Belgium (see, for example, Carette et al., 2007).

SOME CONCLUDING REMARKS...

Without wanting to "psychologize" the potential for dropout and disengagement, the literature review (of both French and international research) conducted in this study primarily reported findings on student engagement in primary school. Programs and practices in schools are key factors in the reduction of dropout rates and the prevention of learning difficulties. In particular, the focus needs to be on developing literacy skills from the youngest age, on using problem situations, and on a range of other strategies.

The reduction of dropout rates is one of the main priorities of educational authorities in France, Europe and beyond. The emphasis on offering a second chance to middle and high school dropouts is one of the key priorities of policy and decision makers. But can school dropout be prevented? Studies in this area have shown that there are predictors or warning signs of dropout. Fortunately, dropout is not inevitable, since no student is predestined to fail all throughout their school career. However, it would be wrong not to be more vigilant and not to adapt teaching practices on the grounds of the risk of stigmatization or by explaining the difficulties experienced by "at-risk" students by simply pointing the finger at those who educated (family) or instructed them (teachers, school) in previous years. It is also important to identify

areas of vigilance for the benefit of teachers, future teachers, educators and families and to provide them with the tools needed to support children and students in their learning.

The attentive reader will have noticed that no reference was made to acronyms such as RASED (Réseau d'Aides Specialisées aux Élèves en Difficulté) or ECLAIR (Programme des Écoles, Collèges et Lycées pour l'Ambition, l'Innovation et la Réussite), i.e. networks and programs designed to support students with significant difficulties. There is no certainly no lack of remediation measures and pedagogical innovations. The various measures and programs examined in this overview highlight an initial approach to symptoms that are generally only referred to in books and articles on school dropout at secondary level and its remediation.

BIBLIOGRAPHY

Links refer to our collaborative bibliography.

- Aunola Kaisa, Leskinen Esko & Nurmi Jari-Erik (2006). "Developmental dynamics between mathematical performance, task motivation, and teachers' goals during the transition to primary school". *The British Journal of Educational Psychology*, vol. 76, n° 1, March, pp. 21-40.
- Balas Guillaume (2012). *Lutter contre le décrochage scolaire: Vers une nouvelle action publique régionale*. Paris: Fondation Jean Jaurès.
- Bautier Élisabeth (2006). "Le rôle des pratiques des maîtres dans les difficultés scolaires des élèves: Une analyse de pratique intégrant la dimension des difficultés socialement différenciées". *Recherche et formation*, n° 51, April, pp. 105–118.
- Bautier Élisabeth (2003). "Décrochage scolaire: Genèse et logique des parcours". *Ville-école-intégration Enjeux*, n° 132, pp. 30-45.
- Bautier Élisabeth, Bonnéry Stéphane, Terrail Jean-Pierre et al. (2002). *Décrochage scolaire: Génèse et logique des parcours*. Paris: Direction de la programmation et du développement (Ministère de l'Éducation Nationale).
- Bednarz Nadine, Lafontaine Joséphine, Auclair Mélanie *et al.* (2009). "Pour une plus grande harmonisation dans la transition du primaire au secondaire en mathématiques". *Bulletin AMQ*, vol. XLIX, n° 1, March, pp. 7-18.
- Bernard Pierre-Yves (2011). *Le décrochage scolaire*. Paris: Presses universitaires de France.
- Bissonnette Steve, Richard Mario & Gauthier Clermont (2005). "Interventions pédagogiques efficaces et réussite scolaire des élèves provenant de milieux défavorisés". *Revue française de pédagogie*, n° 150, pp. 87–141.
- Blaya Catherine (2010). "Décrochage scolaire: Parents coupables, parents décrocheurs?". *Informations sociales*, n° 161, pp. 46–54.
- Blaya Catherine & Hayden Carol (2003). *Constructions sociales des absentéismes et des décrochages scolaires en France et en Angleterre*. Bordeaux: Laboratoire de Recherches Sociales en Éducation et Formation (LARSEF).
- Bonnéry Stéphane (2003). "Le Décrochage scolaire de l'intérieur: Interaction de processus sociaux, cognitifs, subjectifs et langagiers". *Les Sciences de l'Éducation pour l'Ère Nouvelle*, n° 36, pp. 39-58.
- Bonnéry Stéphane (2008). *Comprendre l'échec scolaire: Élèves en difficultés et dispositifs pédagogiques*. Paris: La Dispute.
- Born Michel & Lafontaine Dominique (eds.) (2008). *Prévenir le décrochage scolaire des jeunes lors de la transition primaire-secondaire*. Bruxelles: Ministère de la Fédération Wallonie-Bruxelles.

- Bouffard Thérèse, Vezeau Carole, Chouinard Roch & Marcotte Geneviève (2006). "L'illusion d'incompétence et les facteurs associés chez l'élève du primaire". *Revue française de pédagogie*, n° 155, April-June, pp. 9–20.
- Bednarz Nadine, Lafontaine Joséphine, Auclair Mélanie et al. (2009). "Pour une plus grande harmonisation dans la transition du primaire au secondaire en mathématiques". *Bulletin AMQ*, vol. XLIX, n° 1, March, pp. 7–18.
- Carette Vincent, Coché Frédéric, Dublet Audrey et al. (2007). *Coordination et mise en oeuvre de deux expériences pilotes dans les établissements scolaires de la Communauté française en vue de renforcer l'articulation entre l'enseignement primaire et l'enseignement secondaire*. Bruxelles: Ministère de la Fédération Wallonie-Bruxelles, pp. 1–140.
- Champlain Y. de (2011). "Le déficit d'intention: Faire face à la souffrance à l'école". *Les collectifs du Cirp*, n° 2, pp. 177–186.
- Deci Edward L. & Ryan Richard M. (2004). *Handbook of self-determination research* [2002]. Rochester, NY: University of Rochester Press.
- DEPP (2012). *L'état de l'école: 31 indicateurs sur le système éducatif français*. Paris: DEPP, Département de la valorisation et de l'édition.
- Do Chi-Lan (2007). "Les représentations de la grande difficulté scolaire par les enseignants: Année scolaire 2005-2006". *Les Dossiers*, n° 182, March, pp. 1–116.
- Douat Étienne (2012). "Croire à nouveau dans l'égalité des intelligences". *Les dossiers de la Ligue*, October-December, pp. 6–10.
- Fédération des syndicats de l'enseignement (CSQ) (ed.) *Les élèves à risque et HDAA*. Centrale des syndicats du Québec (CSQ).
- Feyfant Annie (2011a). "Les effets de l'éducation familiale sur la réussite scolaire". *Dossier d'actualité Veille & Analyses*, n° 63, June, pp. 1–14.
- Feyfant Annie (2011b). "Les effets des pratiques pédagogiques sur les apprentissages". *Dossier d'Actualité Veille & Analyses*, n° 65, September, pp. 1–14.
- Filisetti Laurence, Wentzel Kathryn R. & Dépret Éric (2006). "Les buts sociaux de l'élève: Leurs causes et leurs conséquences à l'école". *Revue française de pédagogie*, n° 155, April-June, pp. 45–56.
- Guay Frédéric & Talbot Denis (2010). *La motivation en première et deuxième année du primaire: Une analyse en fonction du genre et du statut socioéconomique*. Québec: Institut de la statistique du Québec, Québec Longitudinal Study of Child Development-QLSCD series, n° V.5, fasc. 3.
- Gersten Russell, Williams Joanna P., Fuchs Lynn et al. (1998). *Improving Reading Comprehension for Children with Disabilities: A Review of Research. Final Report*. Jessup: ED Pubs.
- Glasman Dominique & Oeuvrard Françoise (eds.) (2011). *La déscolarisation* [2004]. Paris: La Dispute.
- Hirvonen Riikka, Tolvanen Asko, Aunola Kaisa & Nurmi Jari-Erik (2012). "The developmental dynamics of task-avoidant behavior and math performance in kindergarten and elementary school". *Learning and Individual Differences*, n° 22, pp. 715–723.
- Hugon M.-A. (2010). "Lutter contre le décrochage scolaire: Quelques pistes pédagogiques". *Informations sociales*, n° 5, pp. 36–45.
- Jordan Nancy C., Kaplan David, Nabors Oláh Leslie & Locuniak Maria N. (2006). "Number sense growth in kindergarten: A longitudinal investigation of children at risk for mathematics difficulties". *Child development*, vol. 77, n° 1, pp. 153–175.
- Janosz Michel (2000). "L'abandon scolaire chez les adolescents: Perspective nord-américaine". *Ville-école-intégration Enjeux*, n° 122, September, pp. 105–127.
- Ligue de l'enseignement (ed.) (2012). *Comment lutter contre le décrochage scolaire?* Paris: La ligue de l'enseignement.
- Lemelin Jean-Pascal & Boivin Michel (2007). *Mieux réussir dès la première année: L'importance de la préparation à l'école*. Québec: Institut de la statistique du Québec.

- Lessard Anne, Fortin Laurier, Joly Jacques *et al.* (2007). “Cheminement de décrocheurs et de décrocheuses”. *Revue des sciences de l’éducation*, vol. 33, n° 3, pp. 647–662.
- Lopez Arellano José, Sheriff Teresa & Landry Amélie (2004). ““Élèves à risque d’échec scolaire” et les notions de métier d’élève, de parents, d’enseignant”. In CTREQ, *Tous ensemble pour la réussite*. Montréal: CTREQ.
- Mägi Katrin, Torppa Minna, Lerkkanen MK *et al.* (2012). “Developmental profiles of task-avoidant behaviour and reading skills in Grades 1 and 2”. *Learning and Individual Differences*, (forthcoming).
- Nonnon Élisabeth (2007). “L’école et ses “mauvais lecteurs””. *Repères*, n° 35, pp. 5–30.
- Pagani Linda S., Fitzpatrick Caroline, Belleau Luc & Janosz Michel (2011). *Prédire la réussite des enfants en quatrième année à partir de leurs habiletés cognitives, comportementales et motrices à la maternelle*. Québec: Institut de la statistique du Québec.
- Pakarinen Eija, Kiuru Noona, Lerkkanen Marja-Kristiina *et al.* (2011). “Instructional support predicts children’s task avoidance in kindergarten”. *Early Childhood Research Quarterly*, vol. 26, n° 3, July, pp. 376–386.
- Potvin Pierre (2007). “Les types d’élèves à risque de décrochage scolaire et leur dépistage”. In Centre de transfert pour la réussite éducative du Québec, *Carrefour de lutte au décrochage scolaire*. Montréal: CTREQ.
- Potvin Pierre (2011). “Procédure de dépistage des élèves à risque au primaire”. In Association québécoise des troubles d’apprentissage (AQETA), *Intervenons en toute “connaissance”*. Montréal: AQETA.
- Royer Égide, Morand Céline & Gendron Martin (2005). *Guide d’introduction au programme PEC – Pratiquons ensemble nos compétences: un programme basé sur les forces des adolescents et de leurs parents*. Donnacona (Québec): Centre de santé et de services sociaux de Portneuf.
- Terrisse Bernard & Larose François (2001). “La résilience: Facteurs de risques et facteurs de protection dans l’environnement social et scolaire du jeune enfant”. *Cahiers du Centre de recherche sur les formes d’éducation et d’enseignement*, vol. 16, pp. 129–172.
- Tessier Odile & Schmidt Sylvine (2007). “Élèves à risque: Origine, nature du concept et son utilisation en contexte scolaire”. *Revue des sciences de l’éducation*, vol. 33, n° 3, pp. 559-578.
- Toczek Marie-Christine (2006). “Des situations scolaires “à risques””. *Diversité Ville-école-intégration*, n° 147, December, pp. 57–62.
- Van Grunderbeeck Nicole & Payette Mylène (2007). “Portraits de lecteurs faibles en compréhension au début de l’école secondaire”. *Repères*, n° 35, pp. 73–91.
- Vergne Francis (2010). *Décrochage et décrocheurs: Comprendre et agir*. Clermont-Ferrand: Service académique d’information et d’orientation.
- Wentzel Kathryn R., Battle Ann, Russell Shannon L. & Looney Lisa B. (2010). “Social support from teachers and peers as predictor of academic and social motivation”. *Contemporary educational psychology*, n° 35, pp. 193–202.
- Wentzel Kathryn R. (2003). “Motivating Students to Behave in Socially Competent Ways”. *Theory into Practice*, vol. 42, n° 4, pp. 319–326.

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- Marie Musset (2011). 'Contemporary Perspectives on Childhood'. *Current Literature Review in Education*, n°68, november.

On line : http://ife.ens-lyon.fr/vst/DA/detailsDossier.php?parent=accueil&dossier=68&lang=en

- Marie Gaussel (2011). 'Health Education (part1): Toward a Halth Democracy '. *Current Literature Review in Education,* n°69, December.

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