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## **In Search of School's Sausative Power. Review of Research and Effective School Models**

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### **Abstract**

The article has a format of a review. As such, it focuses on previous research and proposals for effective school models developed on its basis. It has been recognised that the category of *school effectiveness* is hardly present in Polish pedagogy, and its implications for research and improvement of school work are significant. Therefore, familiarisation with global achievements in this area is deemed valuable as a motivational and inspirational factor for scientific research among pedagogues who deal with school issues. For this purpose, a critical review of selected effective school models, which are important in the development of educational research focused on improving both the school and the school system, was carried out. The article justifies the change of approach that has been introduced into this area, as well as delineates perspectives for further research and exploration.

**Keywords:** efficiency, school, effective school models, school development.

There are numerous scientific studies on factors that determine school's causative power, understood here as an ability to self-improve by means of creating an environment conducive to the development of pupils' potential, which

translates into high achievements and a sense of educational success (Nowosad, 2017). In the 1980s and 1990s, these factors were often presented in the form of a list of characteristic features. And although some of the conclusions may now serve as documents of the forgone *Zeitgeist*, they must also be considered as cornerstones, first in the development of research on school effectiveness, then of school systems, and finally as incentives to launch a string of research on the effectiveness of educational processes (EER) (Rubacha, 2008; Reynolds et al., 2014). The initially developed simple multi-factor models of effective school were later elaborated by researchers into multidimensional structures that were comprehensive models of effective education. Studies concerning this area, although conducted worldwide, are hardly known and developed in Poland. This argument prompted the author to view and analyse the state of research on the international forum in four installments:

1. The context of researchers' interest in school efficiency
2. Identification of features of effective schools
3. Comprehensive models of effective education
4. Conclusions and recommendations

The purpose of the article is to make a critical analysis of models of educational effectiveness in school institutions. It is also meant to scrutinise discussions and debates that permeate the scientific community. Attention was focused on those models that have most intensely resonated within the research community. In our opinion, they constitute an interesting base for undertaking research and exploring new areas in Polish pedagogy.

### **The context of researchers' interest in school efficiency**

In 1966, James S. Coleman's team published an over 700-page report: *Equality of Educational Opportunity*, commonly known as the *Coleman Report*, which initiated the ongoing debate on the effectiveness of not only American education and instigated interest in researchers from around the world. What was surprising was a conclusion that there is little connection between conditions at school and pupils' achievements. However, differences in environmental conditions that directly penetrated into schools turned out to be of significance. As a result, the report contributed to the creation of "compensatory education" programmes, which dominated school improvement for decades afterwards. According to Ron Edmonds, these programmes focused on changing the behaviour of individual pupils in order to compensate for their adverse environment in a manner consistent with teaching methods preferred by most schools, but

failed to make sufficient efforts to change the behaviour of school communities (pupils and teachers), i.e. of the broader learning environment.

The Coleman report revealed a viewpoint that “schools do not matter” without considering family conditions and that “education cannot compensate for the society” (Bernstein, 1968). He exposed “school’s inefficiency” in predicting pupils’ achievements, and inspired a vigorous research-oriented response among researchers that laid the foundation for the subsequent school efficiency movement. The search supported the assumption that all children can learn and develop their potential, and that schools can control factors necessary to let pupils master the core curriculum (obviously, this did not mean overlooking the importance of family on pupils’ learning processes). It should be emphasised that initially these were relatively small-scale studies published by Weber (1971), Reynolds (1976) and Edmonds (1979), followed by larger investigations by Rutter’s (1979), Smith and Tomlinson’s (1989) and Mortimore’s teams (1988). In each of these studies, the determinants of the efficiency of intra-school processes proved to be consistent, and despite independently conducted research, their conclusions overlapped.

### **Identification of features of effective schools**

In 1982, Ron Edmonds published an article entitled *Programs of school improvement: an overview*, in which he stated that schools can and should be responsible for how pupils operate in them. In retrospect, this text can be read as an appeal to the research community to indicate the factors that determine the strength of school’s own potential in determining the development of learning processes for children and adolescents. The first task undertaken by researchers was to identify the existing effective schools, i.e. schools that effectively educate all their pupils regardless of the socio-economic status of their families. Examples were found virtually everywhere, in different locations, both in large and small communities. After identifying the facilities, the task was to identify their common features. In other words, the philosophies, policies and practices that were shared. On closer inspection, the researchers found that particularly effective schools shared common characteristics that were defined as indicators of effective schools.

Table 1. Indicators of effective schools

M. Rutter et al. (1979)
<ul style="list-style-type: none"> <li>• school ethos</li> <li>• effective class management</li> <li>• high expectations of teachers</li> <li>• teachers as positive models</li> <li>• positive opinions and treatment of pupils</li> <li>• good working conditions for workers and pupils</li> <li>• reinforcement of pupils' responsibility</li> <li>• shared classes for school employees and pupils</li> </ul>
R. Edmonds (1982)
<ul style="list-style-type: none"> <li>• strong administrative leadership</li> <li>• high expectations from pupils</li> <li>• well-organised learning environment</li> <li>• emphasis on basic skills</li> <li>• regular monitoring of pupils' progress</li> </ul>
S.C. Purkey & M.S. Smith (1983)
<ul style="list-style-type: none"> <li>• goal-oriented policy</li> <li>• clear goals related to basic skills</li> <li>• frequent assessment</li> <li>• training / development of the teaching staff</li> <li>• strong leadership</li> <li>• time for handling tasks (reinforcement of the learning process)</li> <li>• high expectations</li> </ul>
D. Weindling (1989)
<ul style="list-style-type: none"> <li>• emphasis on learning</li> <li>• learning environment</li> <li>• goal-oriented teaching</li> <li>• high expectations</li> <li>• common vision and goals</li> <li>• professional leadership</li> <li>• monitoring of progress</li> <li>• home-learning partnerships</li> <li>• pupil's rights and responsibilities</li> <li>• positive reinforcement</li> <li>• development of the teaching staff</li> <li>• external support</li> </ul>

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L. W. Lezotte (1991)

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- strong leadership
  - clear orientation on school mission
  - safe and ordered environment
  - atmosphere of high expectations towards pupils' achievements
  - frequent monitoring of pupils' achievements
  - positive relations between families and school
  - opportunity to learn and to make use of time for task completion
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P. Mortimore et al. (1991), P. Sammons (1994), D. Reynolds et al. (1996)

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- head teacher's goal-oriented leadership  
assistant head teachers' involvement
- teachers' involvement
  - cohesion among teachers
  - well-organised teaching
  - high expectations from pupils
  - work-oriented environment
  - maximum communication between teachers and pupils
  - enhanced interactivity within classes
  - parental involvement
  - record-keeping;
  - positive atmosphere at school
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J. Scheerens (1992)

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- emphasis on achievements
  - consensus, mutual planning, organised atmosphere
  - school and pupil's achievement evaluation
  - educational leadership
  - parental support
  - structured teaching, time/space for effective learning
  - external stimuli supporting school effectiveness
  - material features of schools
  - teachers' experience
  - the character of school context
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D. Reynolds (1995)

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- the character of head teacher's leadership (mission control, involving personnel)
  - emphasis on learning: high expectations from pupils, creation of ample learning space (including homework) and frequent testing/ public examinations
  - parental involvement (parents as partners and supporters of education)
  - pupils' involvement (learning and other aspects).
  - organisational control over pupils (reinforced by cohesion, consistency, cooperation and effective communication)
  - organisational cohesion between particular classes of the same subject
  - Organisational cohesion (limited rotation of the personnel)
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Source: Authors' compilation.

In the phase of constitution of research focused on pupils' educational effectiveness, attention was paid to identifying a "system" of factors that have a measurable impact on improving pupils' achievements and may be called "a universal system". It was important to look for the answer to the question: does school affect pupils' achievements? The distinction between effective and less effective schools was meant to help (Nowosad, 2017). Initial evidence indicated that a small number of factors affect school performance (Edmonds, 1979). However, methodological criticism and further surveys expanded the list of effective school characteristics. As a result, the number of key factor groups indicated by researchers was different. And so Smith and Tomlinson (1990) pointed to four groups, Edmonds (1982) distinguished five of them. Lezotte (1991), Purkey and Smith (1983) and Reynolds (1995), when summarising many studies in this field distinguished seven. Rutter's team (1979) identified eight. Scheerens (1992) – ten. Sammons, Hillman and Mortimore (1995) and Reynolds syndrome (1996) stipulated eleven, while Weindling (1989) and Mortimore et al. (1988), Mortimore (1991), Sammons (1994) and Reynolds et al (1996) pointed to twelve. However, not the number of factors indicated by the researchers, but the overlapping areas were of key importance. On this basis, modern researchers have elaborated a common effective school model. However, the "static" of such a solution turned out to be of little importance in strengthening school efficiency and achieving lasting improvement in school work.

Table 2. Effective school model

<b>Teachers and teaching</b>
Teachers' high expectations
Effective class management
Teachers as positive models
Positive attitude to pupils and positive treatment of pupils
Well-organised atmosphere in the classroom
Appropriate and stimulating environment
Teachers' coherence, e.g. expectations, conduct, planning
Didactic session organised: focused on teaching and learning
Environment focus on work and coping with problems
Monitoring of progress and record keeping
<b>Curriculum</b>
Well-planned curriculum
Clear goals and tasks translated into classroom practice
Emphasis on high educational standards
Effectively allocated resources

### Management

- Adequate conditions for the teaching staff and pupils
- Effective higher and lower rank leadership
- Ability to identify and solve problems
- Ability to manage changes and development
- Teachers' involvement in decision-making
- Atmosphere of respect between all parties
- Positive atmosphere at school
- Clear, simple and flat structures
- Common vision and goals
- Leadership conducive to teamwork
- Vision of academic success and methods of improvement
- Relevant selection of goals
- Use of data on the quality of undertaken measures
- Teamwork among teaching staff and other employees
- Time and resources for reflection and research
- Non-dominating higher rank leadership

### Pupils

- Pupils take over responsibility
- Common classes for teachers and pupils
- Positive relations between teachers and pupils
- Encouraging pupils to express their opinions
- Care for pupils' general well-being
- Pupils' rights, responsibilities and building own self-esteem
- Pupils' involvement in learning and other aspects of school life
- Positive attitudes of pupils to their school
- Good communication between teachers and pupils
- Adequate conduct of pupils

### Community

- Positive relations with the local community
- Parental involvement in school life
- Planning the partnership between school and home
- Connections with business, trade and industry
- School management

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Source: Authors' study based on: *Defining effective schools*. In: *The Nature of the Effective School*, Routledge, pp. 7–8. Retrieved from <http://cw.routledge.com/textbooks/9780415485586/data/chapters/08DefiningEffectiveSchools.pdf>.

In assessing the developed models, researchers consider this stage as “loosely conceptualised” or “underdeveloped”. There was hardly a systematic, programmatic and coherent approach to school changes in maintaining high quality education regardless of the national context. An attempt to transfer research from the United States to other countries did not completely confirm the regularities adopted in the USA. In general, the list of features was expanded and replication studies showed reliable empirical evidence. Thus, the effective school model required proofreading and further exploration.

Jaap Scheerens saw the greatest weakness of the early period of research in adopting reduced arguments to a simplified economic model labelled as “edu-

ational production process” (input – process – output and context) (Scheerens, 1992, p. 3). Economic models were based on the assumption that paying more attention to input resources leads to improved efficiency. However, evidence to date suggests that many of these external interventions, although very well planned, end up in limited and inconsistent success.

### **Comprehensive models of effective education**

The weakness of early models led to increased emphasis on developing comprehensive projects. Attention was paid to the need to achieve a lasting relationship between the occurrence of the desired conditions at school and the improvement processes (Desimone, 2002). Data accountability gained importance and there was a greater focus on organisational changes and a new approach to staff development which was associated with personal development. The rank of school leadership was also emphasised. The approach promoted by researchers in the 1990s also required reinforcement of the change along the line between school and the educational system (school-state) and successful modernisation of the system towards creating space for schools to develop, but also determining conditions that safeguarded the efficiency of in-school processes (Smink, 1991, p. 3). This had its consequences in changing school management and strengthening school autonomy. The examined processes formed a basis for amplified potential when introducing large-scale changes. Alma Harris claims that the improvement in school management was largely related to systemic changes, which reinforced collaboration between schools (Harris et al., 2010). The new solutions were meant to help schools cope with unprecedented dynamics of processes and phenomena in the school environment (Ainscow et al., 2012, pp. 1–17). Finally, the view that factors affecting student achievement are constant and unchanging was rejected. Thus, three key assumptions were made:

1. The characteristics of schools and teachers change over time.
1. The influence of factors may change depending on how we measure them, i.e. depending on the type of measurement used.
2. Factors can have different effects on different groups of pupils.

The adopted assumptions changed the paradigm in the approach to researching the effectiveness of school as a dynamic system, which is full of various connections and conditions, and as such, inspired the foundations for comprehensive educational effectiveness models (*Comprehensive Educational Effectiveness Models*, Creemers & Kyriakides, 2008).

A convincing argument in the area of research on the effectiveness of schools in the changing environment was made by Jaap Scheerens (1997). He



emphasises that the policy of decentralisation and deregulation, combined with the concepts of 'independent school management' and 'transfer of power to the teacher', as well as stimulating market mechanisms, make the school environment less stable and predictable. Therefore, it is expected that schools, if they are to be effective, will be forced to introduce a more organic structure" (Scheerens, p. 294). Grass-roots strategies for initiating change are characterised by flexibility and changeability. Processes organised in such a way strengthen the possibility of obtaining feedback quickly and thus of prompt responses to emerging new needs. To sum up, Scheerens (2015) indicates theoretical assumptions which must be taken into account when developing contemporary models of effective schools (education).

1. The rationality paradigm. The adopted goals are seen as an optimal choice between alternatives on the way to achieving compliance between individual preferences and organisational goals.
2. Instituting links between planning and bureaucratic structuring (Synoptic Planning and Bureaucratic Structuring). For schools, this means compliance between the content and the teaching methods, and control of pupils' learning progress (mainly based on objective tests). It mostly concerns the planning of school curricula.
3. Introducing the compatibility of structures and random potential as an expression of dependence on uncertain, unpredictable events, i.e. contingent factors being very diverse internal and external events (Fitting Structure and "Contingencies").
4. Introducing compliance between individual and organisational rationality (Alignment of Individual and Organisational Rationality). It combines a certain (micro-) political image of an organisation. Market mechanisms are adopted as steering measures and can be balanced by introducing educational standards.
5. Feedback-responsive (retroactive) planning and the learning organisation (Retroactive Planning and the Learning Organisation). Planning is oriented towards achieving positive changes; the difference between current achievements and their expectations stimulates the dynamics towards higher efficiency (evaluation as a corrective action).
6. Chaos theory, also known as the theory of dynamic systems, in which the study of patterns of the impact of chance phenomena gains importance (small causes can have great effects). The resulting patterns are interpreted through such concepts as synergy or self-organisation.

From his assumptions, Scheerens derives two alternative strategies focused on the effectiveness and improvement of school functioning. The first involves

rational planning with externally developed structured programmes that schools adopt and adapt. The second uses the autonomy of action in terms of evaluation and monitoring.

Empirical evidence obtained by researchers can only define a certain framework, or more precisely a comprehensive framework, which can be completed in the process of recognising schools in the individual context of a given country (Creemers et al., 2007; Creemers & Kyriakides, 2012). Creemers’ team arrived at significant achievements in their comparative research project: *Effective School Improvement* (ESI). They showed that the effectiveness of schools and the process of improving school functioning cannot be studied regardless of the educational context. They developed groups of factors that they described as a framework for the successful development. The factors were divided into contextual (external) conditions – school (internal) conditions, whose impact was confirmed by effective interventions aimed at improving the functioning of schools in different countries.

Table 3. Comprehensive factors of effective education

Contextual conditions		
<b>1. Emphasis on improvement</b> <ul style="list-style-type: none"> <li>• market mechanisms;</li> <li>• external evaluation and formal accountability;</li> <li>• external entities;</li> <li>• society’s participation in education, social change, educational policies stimulating changes.</li> </ul>	<b>2. Resources</b> <ul style="list-style-type: none"> <li>• the extent of autonomy bestowed on schools;</li> <li>• financial resources and adequate working environment;</li> <li>• local support.</li> </ul>	<b>3. Educational goals</b> <ul style="list-style-type: none"> <li>• formal educational goals oriented on pupils’ achievements.</li> </ul>
Internal conditions		
<b>1. Improvement-oriented school culture</b> <ul style="list-style-type: none"> <li>• internal emphasis on improvement;</li> <li>• school autonomy;</li> <li>• common vision;</li> <li>• readiness to become a learning organisation;</li> <li>• history of initiatives oriented on improvement and development;</li> <li>• identification, involvement and motivation;</li> <li>• leadership;</li> <li>• stable Teacher’s Charter;</li> <li>• time allowed for improvement.</li> </ul>	<b>2. Improvement-oriented processes</b> <ul style="list-style-type: none"> <li>• evaluation of needs;</li> <li>• diagnosing of needs;</li> <li>• stipulation of particle goals;</li> <li>• planning of improvement activities;</li> <li>• implementation;</li> <li>• evaluation;</li> <li>• reflection.</li> </ul>	<b>3. Assumed outcome of improvement and development</b> (with regard to the criteria of effectiveness and improvement) <ul style="list-style-type: none"> <li>• change in school quality;</li> <li>• change in the quality of the teaching staff;</li> <li>• change in the quality of pupils’ achievements.</li> </ul>

Source: Authors’ study based on: B. P.M. Creemers, L. Stoll, G. Reezigt, & ESI team (2007). *Effective School Improvement – Ingredients for Success The Results of an International Comparative Study of Best Practice Case Studies*. In: T. Townsend (Ed.), *International Handbook of School Effectiveness and Improvement* (pp. 831–833). Dordrecht: Springer.

The development of schools (and of education systems) aimed at improving the quality and efficiency of intra-school processes is always confronted with contextual conditions. Regardless of the specificities of particular countries, three groups of factors have been distinguished: emphasis on improvement, resources for improvement and educational goals (Reynolds et al., 2002). At the beginning of the improvement process, emphasis on improvement turns out to be the most important contextual factor. Resources come next, because school improvement can only take place within a given context. Finally, there are educational goals. Improving school performance will always have to stay in line with the learning objectives set in the context. Even when schools are free to decide on their own self-improvement achievements, they must operate in line with broader educational objectives set out in a given context.

When analysing factors influencing efficiency and improvement-oriented in-school processes, the ESI team identified three important areas: improvement and development-oriented school culture, improvement and development-oriented processes, as well as the assumed outcome. In school development, school culture is seen as a background against which improvement processes take place, and the assumed outcome means end goals of these processes. The separated areas are closely related and constantly interact with each other. School culture influences not only the choice of processes, but also the choice of the assumed outcome. The selected results influence the choice of processes, and their success or failure can change the school culture. Results also depend on successful implementation of the processes. These interrelationships emphasise the cyclical nature of effective school improvement, which has no clear beginning or ending, and as such, it can be regarded within the structure of culture, processes and outcome (Creemers et al., 2007, pp. 832–833).

## **Conclusions and recommendations**

Focused on the determinants of school's effectiveness in seeking its causative power, educational research has undergone significant evolution over the past forty years. In addition to the aforementioned research, this area also features large-scale international research, such as TIMSS, PIRLS and PISA. They provide valuable information on the effectiveness of schools and school systems in various areas, such as: teaching and learning processes, teacher work or school organisation. The collected data contain information about pupils' achievements at various levels of education (i.e. the primary and the secondary levels) and in various areas (e.g. natural sciences, mathematics, reading skills). In addition,

pupils, parents, teachers, administration staff, or anyone interested in educating children have access to information about the characteristics of pupils, as well as about the processes and the context in which education takes place. This is certainly an important step in the understanding of the intra-school determinants of educational effectiveness. We may surmise that the contemporary approach is characterised by several characteristic features (Creemers et al., 2010; 2006).

- In the generalised approach, researchers nowadays are often willing to adopt general terms such as “comprehensive framework” (Creemers et al., 2007, p. 830) instead of the term “model”. The model is more often used to improve school functioning as an organisational unit, e.g. effective school models, than to schools on the scale of the education system in a given country.
- Change in the approach to efficiency from a simple production-oriented model (input, process, output, context) to more complex models that take into account the dynamics of internal and external conditions in a dynamically changing environment.
- Organisation management theories have not only opened up new research fields, but have also brought forward arguments for educational policies. When imported into organisational culture, the concepts of decentralisation, autonomy, leadership, as well as the principles of total quality management and the theory of change have shaped the modern understanding of school efficiency and its inseparable connection with schools’ drive for continuous improvement.
- Improvement techniques must be compatible with the ‘spirit’ of the society of a country in question, rather than in opposition to it. In this case, blind borrowing of solutions from other cultures may not bring the expected results.
- There are no “quick solutions” to improve conditions in schools, and if improvement is to be permanent, it must involve not only school community, but must integrate the whole set of supporting factors, which take into account the so-called “margins” of changing conditions both inside and outside of school.
- It is assumed that on a systemic scale, schools are not able to overcome the relationship between pupils’ social environment and their school achievements by themselves. This justifies the need for comprehensive recognition of support at various levels of the school system.
- Various forms of initiating changes and their support are accepted. However, schools must make their own decisions about the change. Sup-

port from local authorities and agendas may speed up the improvement process, but will not initiate it.

In the models presented today, the identified conditions of effective school (education) do not completely reveal all new solutions. However, their innovation lies in the fact that they combine ideas and concepts from various theories, justifying it with research findings. Because of their proven effectiveness, they provide hope and inspiration to those who are struggling to improve. In this field, recommendations selected by researchers may be useful for three different audiences: practitioners, researchers and decision makers, but also for wider social circles (Creemers et al., 2007).

- They may be useful in practitioners' scheming, preparing and instrumenting school improvement. They facilitate the understanding of many factors that may support or thwart improvement. They constitute a starting point or starting material for reflection.
- The analysed area appears to be important for researchers who wish to develop similar research on their native soil. In Poland, there is a lack of coherent, large-scale research focused on improving school functioning, as is the case in other countries (Łukasik, 2016). The content presented in the article may inspire them. They may also encourage recognition of native contextual conditions. Bert Creemers and Leonidas Kyriakides (2008) emphasise that in traditional research into the improvement of school education, the educational context is often excluded. Its significance is less frequently analysed, so this area should be explored more thoroughly.
- Policy-makers must be aware that there is no such thing as a clear and unambiguous recipe for school's and/or school system's success (a ready layout for implementation). Research findings only sensitise to factors that should be considered when planning school improvement processes or systemic reforms. They show what should be considered, both in the general context and at school level. This can help policy makers understand the impact of context on schools. This means that in the process of implementing reforms, appropriate resources will be needed for interventions in the context, i.e. school environment, as reinforcement of supporting activities.
- The analysed area may constitute an impulse for general public to initiate a debate on the quality and effectiveness of native education, as well as to sensitise it to the importance of internal processes at schools and at the systemic level, to help understand that schools can compensate

for adverse conditions in pupils' family environment, to strengthen the awareness of the fact that increasing the rank of education in societies may dynamise and accelerate the reform process and inspire researchers to further endeavors.

## References

- Ainscow, M., Dyson, A., Goldrick, S., & West, M. (2012). Making Schools Effective for All: Rethinking the Task. *School Leadership & Management*, 3(32), 197–213, doi: 10.1080/13632434.2012.669648.
- Bernstein, B. (1968). Education Cannot Compensate for Society. *New Society*, 387, 344–347.
- Coleman, J. S. (1966). *Equality of Educational Opportunity*. Washington D.C.: US Government Printing Office.
- Creemers, B. P.M., Stoll, L., Reezigt, G., & ESI team (2007). Effective School Improvement – Ingredients for Success The Results of an International Comparative Study of Best Practice Case Studies. In: T. Townsend (Ed.), *International Handbook of School Effectiveness and Improvement* (pp. 825–838). Dordrecht: Springer.
- Creemers, B.P.M., & Kyriakides, L. (2012). *Improving Quality in Education: Dynamic Approaches to School Improvement*. Routledge: New York.
- Creemers, B., & Kyriakides, L. (2008). *The Dynamics of Educational Effectiveness: A Contribution to Policy, Practice and Theory in Contemporary Schools*. London and New York: Routledge.
- Creemers, B.P.M., & Kyriakides, L. (2006). A Critical Analysis of the Current Approaches to Modelling Educational Effectiveness: The Importance of Establishing a Dynamic Model. *School Effectiveness and School Improvement*, 17, 347–366, doi: 10.1080/09243450600697242.
- Creemers, B.P.M., Kyriakides, L., & Sammons, P. (2010). *Methodological Advances in Educational Effectiveness Research*. London and New York: Taylor & Francis.
- Defining Effective Schools*. In: The Nature of the Effective School, Routledge. Retrieved 10 December 2019 from <http://cw.routledge.com/textbooks/9780415485586/data/chapters/08DefiningEffectiveSchools.pdf>.
- Desimone, L. (2002). How Can Comprehensive School Reform Models be Successfully Implemented? *Review of Educational Research*, 72(3), 433–479, doi: 10.3102/2F00346543072003433.
- Edmonds, R. R. (1979). Effective Schools for the Urban Poor. *Educational Leadership*, 37(1), 15–27.

- Edmonds, R. R. (1982). Programs of School Improvement: An Overview. *Educational Leadership*, 40(3), 4–11.
- Fullan, M. (2010). *All Systems Go: The Change Imperative for Whole System Reform*. Thousand Oaks, CA: Corwin Press.
- Harris, A., & Jones, M. (2010). Professional Learning Communities and System Improvement. *Improving Schools*, 2(13), 172–181, doi: 10.1177%2F1365480210376487.
- Lezotte, L. (1991). *Correlates of Effective Schools: The First and Second Generation*. Okeanos, MI: Effective Schools Products, Ltd.
- Łukasik, J.M. (2016). W stronę nauczycielskiej „wspólnoty wrażliwej” na rozwój [In the Direction of Teacher’s „Community Sensitive” for Development]. In: A. Minczakiewicz, A. Szafrąńska-Gajdzica, & M.J. Szymański (Eds.), *Szkola. Wspólnota dążeń?* [School. Community of Aspirations?], (pp.101–113). Toruń: Adam Marszałek.
- Mortimore, P. (1991). School Effectiveness Research: Which Way at the Crossroads. *School Effectiveness and School Improvement*, 2(3), 213–229, doi: 10.1080/0924345910020304.
- Nowosad, I. (2017). Rozwój i główne nurty w badaniach efektywności szkoły [Development and Main Trends in the Research of School Effectiveness]. *Studia Edukacyjne*, 46, 125–152, doi: 10.14746/se.2017.46.9.
- Nowosad, I. (2018). Rozwój szkoły przez zmianę kultury szkoły [School Development by Changing the Culture of the School]. *Problemy Profesjologii*, 2, 13–23.
- Nowosad, I. (2019). *Kultura szkoły w rozwoju szkoły* [School Culture in School Development]. Kraków: Oficyna Wydawnicza Impuls.
- Purkey, S. C., & Smith, M. S. (1983). Effective Schools: A Review. *Elementary School Journal*, 83, 427–452, doi: 10.12691/education-5-7-2.
- Reynolds, D. (1976). The Delinquent School. In: M. Hammersley, & P. Woods (Eds.), *The Process of Schooling* (pp. 217–219). London: Routledge and Kegan Paul.
- Reynolds, D. (1995). The Effective School: an Inaugural Lecture. *Evaluation and Research in Education*, 9 (2), 57–73.
- Reynolds, D., Creemers, B., Stringfield, S., Teddlie, C., & Schaffer, E. (Eds.) (2002). *World Class Schools: International Perspectives on School Effectiveness*. London: Routledge/Falmer.
- Reynolds, D., Sammons, P., Fraine, B., Van Damme, J., Townsend, T., Teddlie, Ch., & Stringfield, S. (2014). Educational Effectiveness Research (EER): a State-of-the-art Review. *School Effectiveness and School Improvement*, 25, 197–230, doi: 10.1080/09243453.2014.885450.

- Reynolds, D., Sammons, P., Stoll, L., Barber, M., & Hillman, J. (1996). School Effectiveness and School Improvement in the United Kingdom. *School Effectiveness and School Improvement*, 7, 2, 133–158, doi: 10.1080/0924345960070203.
- Rubacha, K. (2008). *Metodologia badan nad edukacja [Methodology of Educational Research]*. Warszawa: Wydawnictwa Akademickie i Profesjonalne.
- Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen Thousand Hours*. London: Open Books.
- Sammons, P. (1994). Findings from School Effectiveness Research: Some Implications for Improving the Quality of Schools. In: P. Ribbins, & E. Burrige (Eds), *Improving Education: the Issue in Quality*. London: Cassell.
- Scheerens, J. (1992). *Effective Schooling*. London: Cassell.
- Scheerens, J. (1997). Conceptual Models and Theory-Embedded Principles on Effective Schooling. *School Effectiveness and School Improvement*, 3 (8), 269–310, doi: 10.1080/09243453.2012.691100.
- Scheerens, J. (2015). *Educational Effectiveness and Ineffectiveness: A Critical Review of the Knowledge Base*. Dordrecht, Heidelberg, New York, London: Springer,
- Smith, D. J., & Tomlinson, S. (1989) *The School Effect: A Study of Multi-Racial Comprehensives*. London: Policy Studies Institute.
- Weber, G. (1971). *Inter-City Children Can Be Taught to Read: Four Successful Schools*. Washington DC: Council for Basic Education.
- Weindling, D. (1989). The Process of School Improvement: Some Practical Messages from Research. *School Organisation*, 9(1), doi: 10.1080/0260136890090105.