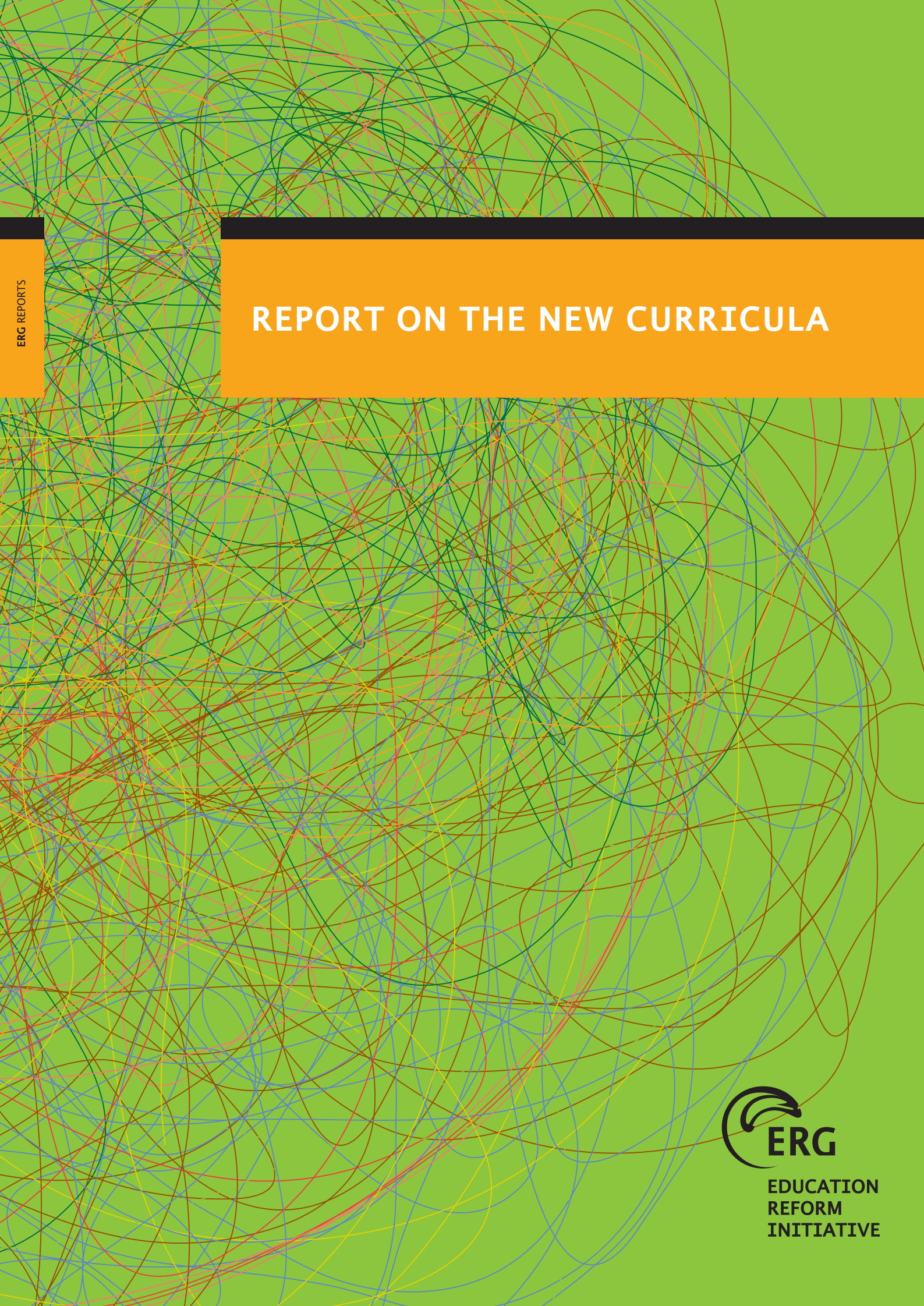
ERG REPORTS

REPORT ON THE NEW CURRICULA



ERG

EDUCATION
REFORM
INITIATIVE

REPORT ON THE NEW CURRICULA

REPORT ON THE NEW CURRICULA - 1

PRIMARY FIRST LEVEL

LIFE SKILLS (GRADES 1-3)

TURKISH (GRADES 1-5)

MATHEMATICS (GRADES 1-5)

SCIENCE AND TECHNOLOGY (GRADES 4-5)

SOCIAL SCIENCES (GRADES 4-5)

Education Reform Initiative (ERI), is a project launched within the Istanbul Policy Center at Sabancı University to improve education policy and decision making through research, advocacy and monitoring. ERI is committed to quality education for all.

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"The new curricula provide important opportunities for the development of our education in the long run"

The new Turkish, Mathematics, Life Skills, Social Sciences, and Science & Technology curricula developed by the Board of Education for grades 1-5 were first implemented in 2005-2006 academic year. The new programs represent a great step in supporting the multifaceted development of students and laying the foundations for the transformation from "passive citizen" to "active citizen". However, the implementations of these changes are even more vital than transformation and require effort and patience of every stakeholder. Critical success features of the new curriculum are ensuring the mental transformation of the teachers, adoption by the school administrations and parents, provisions to enact immediate solutions through a positive approach for the problems that may arise during the implementation period and an independent and transparent evaluation of the practice.

As indicated in the "Report on the New Curricula" prepared by university professors under the leadership of Prof. Petek Aşkar and presented to the public opinion in June 2005, the new curricula stress skills such as critical thinking, creative thinking, communication, problem solving, research, decision making, utilization of information technologies, entrepreneurial qualities and respecting the individual and social values. In other words, it may be declared that a social transformation from "passive citizen" towards "active citizen" is being targeted. The "passive citizen" is an outcome of an education system that employs 'ancient and conventional' perspectives and approaches and is based on students being required to memorize an immense amount of information with no analysis or questioning. Provided that the new programs are supported by the factors aforementioned, for the students who will be completing their primary education in the next 10 years, we foresee the potential of developing the necessary infrastructure required for becoming individuals who possess the skills of problem solving and critical thinking, being in charge of their own personal development and learning processes, who are open to change and have the ability to manage it, and can foresee and develop solutions to undertake leadership.

One of the criticisms included in the report in question is that the new programs do not put the necessary emphasis on aesthetic development. Based on the premise that every individual should acquire a minimum knowledge and appreciation of fine arts, aesthetics should be integrated into all programs.

The new curricula are concrete and important theoretical steps towards eliminating the long-lasting quality problems of our education system. The implementation of the programs is more critical than the conceptual development stage and will constitute a prolonged and

challenging process. Among the factors of critical importance in this process; teacher training occupies the first place. Priority must be given to the education of teachers. There is no chance of success for this reform if the teachers decline to reorganize the learning processes in class in accordance with the current curricula or lack the necessary skills to do so. Teachers must agree with the underlying philosophy and values of the program. This necessitates a new approach to in-service training. The meetings held for the introduction of the new programs or the trainings focusing on the new pedagogical techniques have failed to satisfy this need.

The school administrations' support for the teachers throughout the implementation period is also vital. The management of change and in-service training should be carried on with the whole school approach rather than focusing on individual teachers. Institutional support for the schools must ensure that the administrative staff and parents as well as the teachers are informed, have their awareness raised and be encouraged to embrace the transformation by being included in the process.

Experts have worked meticulously and embraced a participatory approach for nearly two years in terms of program development; yet it is not possible to assert that the programs are perfect or completely ready for implementation under varying circumstances. An analysis made on the basis of documentation, the "Report on the New Curricula" draws attention to the shortcomings of the programs. A serious, independent and transparent evaluation of the implementation practice is yet another critical success factor.

The new curricula provide an important opportunity for the progress of our education in the long run. The improvement and transformation will be a prolonged and arduous process. Students, teachers, administrators and parents will undoubtedly face problems in adopting the new curricula in implementation. Nevertheless, in order to change the current situation, we should all embrace the transformation and contribute to finding solutions for these challenges.

Curriculum Review Commission

September 20th, 2005

EXECUTIVE SUMMARY

The aim of this report is to provide an analysis and evaluation of the curricula prepared as per decisions no.114, 115, 116, 117 and 118, dated 12 July 2004 of the Board of Education of Turkish Ministry of National Education, regarding Turkish, Mathematics, Life Skills, Social Sciences and Science and Technology for grades 1-5.

Evaluation is the process of reaching a decision regarding the value of an outcome in view of specific criteria. Thus, it can be asserted that in general, the evaluation process encompasses three stages. The first stage is determining the criterion or set of criteria. The second stage is the collection of data and the last stage is reaching a decision on the value, quality, feasibility, efficiency and significance of the outcome.

An evaluation regarding curriculum may be executed over four distinct aspects, namely, the scope, the input, the process and the outcome. While the aspect of scope predominantly compels an analysis of documentation, the aspects of input, process and outcome require the analysis of implementation.

Data can be gathered through numerous means in an evaluation activity. These methods include opinions of the specialists, teachers, administrators, students and parents as well as the in-class observations and the direct assessment of the features predicted by the program in relation with the students. A multi-dimensional data gathering approach is important for evaluating all aspects of the curriculum.

The report herein relies solely on analysis of documentation based on expert opinion.

The criteria that form the basis of the analysis are either external or internal criteria. The prior curricula and the international curricula constitute the external criteria; whereas the internal criteria are the fundamental approach, values/skills, clarity, flexibility, student aptitude, sustainability and consistency. Recommendations regarding the implementation of the curricula constitute the final part of the report.

COMPARISON WITH PRIOR CURRICULA

Thematic approach is employed in the organization of contents and the learning domains are defined within this framework. One of the most significant differences of the new curricula is the identification of sub-disciplines and integration of these disciplines with the learning domains.

Terminology used for the learning outcomes is extremely different. In all former programs with the exception of one, the terms "objective", target" and "targeted behavior" were used; in the new program this terminology is abandoned in favor of the term "acquisition". This practice is in accordance with the philosophical approach adopted by the program. A student-centered attitude is reinforced through the utilization of the expression "acquisition" within the programs.

The new curricula accentuate skills. Skills such as critical thinking, creative thinking, communication, problem-solving, research, decision-making, proficiency in information technologies as well as skills related to entrepreneurial spirit and respect for personal and social values are prominently underlined in each program.

The learning-teaching processes and the role of the teacher are elaborated in a more detailed manner. Suggestions about the acquisition of knowledge and skills in the implementation process are made and "Sample Activities" are presented. The fact that these are just examples is stressed and the significance flexibility is afforded to take individual differentiations and other circumstances into consideration.

Use of instruments and materials is promoted and more concrete examples are given in relation to this subject. Activities to enable students to participate in the processes of research, inquiry, problem solving and decision-making are suggested, the importance of activities supporting "learning by doing and thinking" is emphasized, and collective learning strategies are promoted. "Multiple intelligences" framework has been utilized in the development of the activities. The role of the teacher within the education process is specified as facilitating the learning process by offering guidance to the students.

Measurement and assessment are related not only to the outcome but also to the process. Various measurement methods are proposed both for self-evaluation of the student and for evaluation of the student by the teacher.

COMPARISON WITH OTHER COUNTRIES

Australia, United Kingdom, Ireland, the USA, New Zealand, Spain, Finland, Israel, Austria, Canada and Singapore might be cited among the countries which have been inspired by the constructivist approach and have enacted changes in their curricula in this direction.

With respect to the Mathematics curriculum, all but the sub-domain of geometry and the learning sub-domain of rhythmic counting have significantly benefited from the recent developments and researches.

The Life Skills and Social Sciences curricula were apparently prepared in accordance with the new approaches, but were not organized in an integrated manner with other approaches relevant for our educational system.

The Science and Technology curriculum, judging from the expressions in the introduction chapters is in tandem with the latest developments in science education and the science programs of some countries (USA, Ireland, Canada and Singapore). The content and the spiral approach is highly analogous with Ireland's "Environmental and Scientific Education" program. The content and discourse also present similarities with the "Science and Technology" program developed by Canadian researchers regarding "Science, Technology and Society". In some sections (such as suggestions to the teacher, the students and the parents) there are quotations taken from the cited program.

FUNDAMENTAL APPROACH

The new curricula promote an active individual who asks questions, creates and solves problems, engages in activities for attaining and evaluating the needed information like a scientist, builds his/her own cognitive structure by means of activities rather than someone who listens, does exercises and answers questions. The student is an individual who knows how to reach information, who reconstructs this information in his/her mind and who generates new knowledge.

The teacher is now "facilitator", "guide", "mentor" rather than "teach"er. The primary function of the teacher is to organize the learning-teaching environment and to guide the students through the activities. Functions related to facilitating cooperation, assisting, mediating, planning, conducting, managing individual differentiations as well as providing hygiene and safety functions are also stressed.

Yet, all of these functions are not reflected in the program. In various activities, cases where the teacher is at the center as the conveyer of information have also been observed.

VALUES / SKILLS AND CORRELATIONS

The correlations between the programs are of crucial importance with respect to the consistency and continuity of the characteristics, skills and values to be developed through education. In the new curricula this correlation is inadequate. For instance, while it is presumed that Life Skills would have a significant relation with the other subjects, the level of correlation is 20% for Turkish and only 4% for Mathematics for the 1st grade.

Within the Mathematics program, several correlations -both interdisciplinary and intra-disciplinary- have been made, yet how these correlations will be made requires clarification. Some correlations seem particularly irrelevant, others are not elucidated sufficiently. Correlations with Science and Technology are very inadequate.

Some skills are used by different disciplines. For instance, the skills related to graph representation, graph reading and interpretations are used in Mathematics, Science and Technology, Life Skills and Social Sciences. Yet, there are no cues about the timing of the treatment of the topic within different disciplines. It is recommended that studies on correlations between programs are conducted.

ADAPTABILITY AND FLEXIBILITY

Various components of the new curricula exhibit the capacity for adapting to changes in informational, technological and social conditions.

A very important factor determining the adaptability of curriculum is the program assessment model. Program assessment and evaluation is an integral aspect of the program development process and each program has to have its own evaluation model. It has to be indicated how the program will be evaluated throughout implementation, how this process will be supported by research, how data will be utilized in decision-making and how development and transformation will be monitored.

Developing a new program requires continuous monitoring of the change and development within the curriculum, student, teacher, materials and institutional environment. It is essential that this monitoring is done by the teachers/specialists/training staff in school as well as by external specialists. It has been found that sufficient attention has not been paid to this assessment process in the new curricula in general. This circumstance hinders the development of skills such as management of change, foreseeing and providing solutions to future problems, developing foresight and taking a leadership role in relation to transformation for the individuals being brought up with this program.

One of the primary characteristics stressed by the student-centered approaches and the contemporary theory of learning is critical thinking. This is a cognitive and emotional characteristic which needs to be developed in the individual's interaction with knowledge, parallel to problem-solving and attaining, applying and creating knowledge, enabling one to

control his/her self development and learning processes. In this sense, it is an instrument providing liberty and independence in learning.

The new curricula are inadequate in terms of aesthetic development. For instance, in the Life Skills program, aesthetic development and fine arts education is mentioned in a limited form within some acquisitions of “Creative Thinking” skills and the individual quality/value of “Protection and Development of Cultural Values”. While there is no emphasis on aesthetics within the acquisitions of Science and Technology curricula, some of the proposed activities include traces of aesthetics. Aesthetics should be considered a sub-discipline and integrated to all curricula.

RECOMMENDATIONS

The success of the curricula depends ultimately on the continuity of the evaluation process and its contribution to the development of the programs. Developing the appropriate evaluation model affects the sustainability of the program and its adaptability to change. Curricula should be interactive, living and responding to change as well as individual and social needs. This, however, requires a meticulous planning and monitoring model for the implementation process as well as the need to develop a human resources capacity building model.

1. Comprehensive and well organized teacher training is vital for the successful implementation of the new curricula. It is essential that the homeroom teachers are well informed regarding the structure, philosophy and implementation of the program. In- service training should be built upon this basis on teacher skills required for student-centered education.
2. The school environment should be reorganized and schools should be equipped with reference centers. The resources, materials and activities prepared for the teachers will help promote their utilization and improve quality. The Ministry of National Education should develop effective strategies for encouraging the use of resources and material.
3. The suggested materials duplicated by copying machines are to be used in classrooms but the fact that many schools are without photocopiers jeopardizes the use of course materials. The preparation of the materials is yet another issue to be dealt with. It is imperative to support the teachers regarding the acquirement of materials. Schools need be supported concerning the instruments and materials to be used in the suggested activities.
4. Information technology rooms are being set up in each school within the Primary Education Project. The curricula contain no suggestions as to how information technologies will be used. It is essential for the related units to collaborate for an informative activity regarding the integration of information technologies.
5. It is essential that classroom size be reduced for the proper implementation of the new programs. Studies on how the proposed activities can be performed in crowded classes have to be conducted and teachers have to be trained accordingly. Similarly, mixed-grade classrooms need also to be considered.
6. The weakest aspect of the programs concerns student assessment. Instead of comparative examinations held on a provincial scale, mechanisms enabling teachers and schools to conduct self-assessment for timely detection of strengths and weaknesses must be developed.

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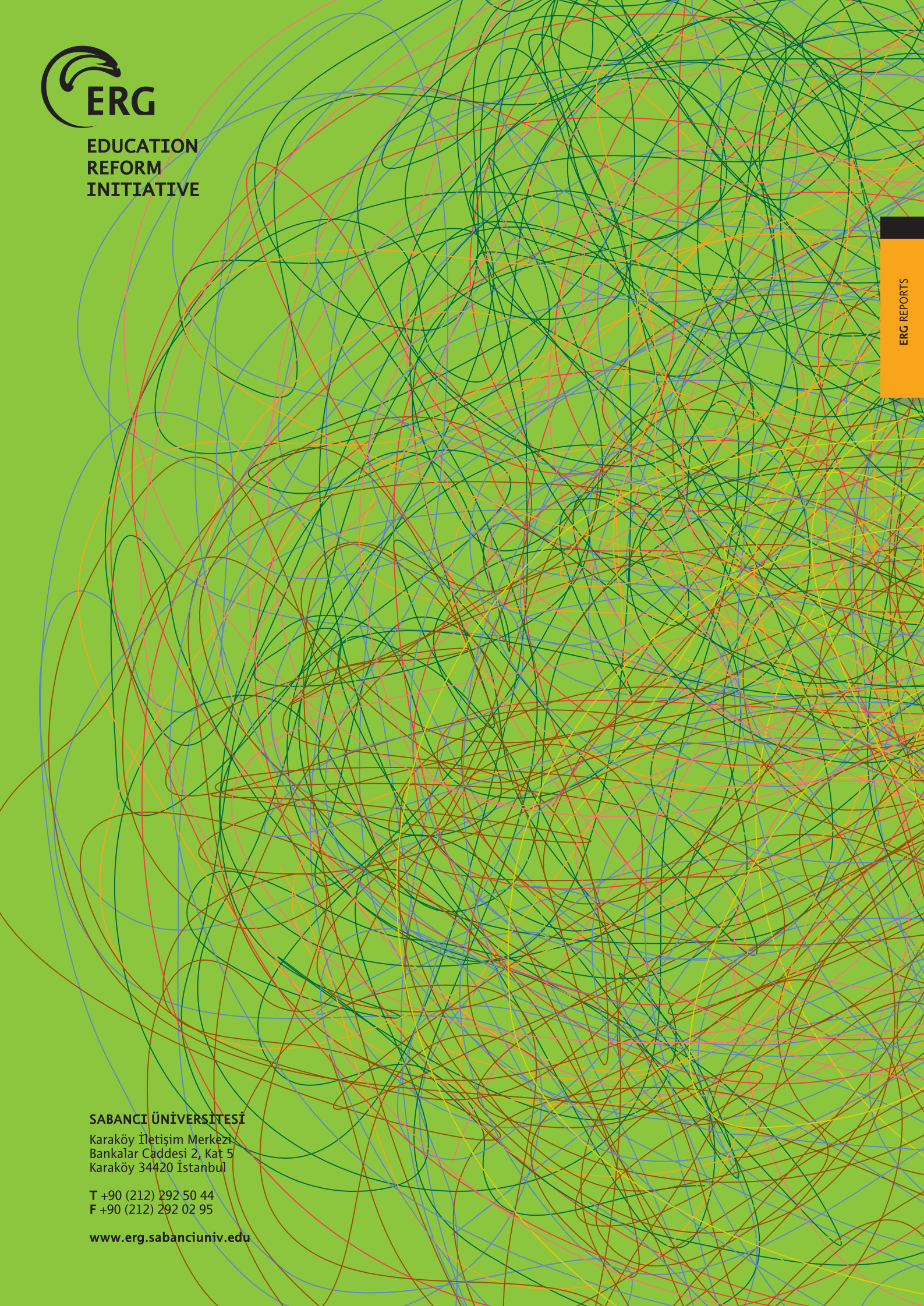

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