

Survey Process of the National Surveys of Head Teachers in
South East European Countries

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Introduction

The purpose of this document is to set the framework for and guide the research activities in the first phase of the initiative entitled Advancing Educational Inclusion and Quality in South East Europe. It is meant, among others, to ensure the quality of statistical data and analysis in the cross-country survey to be conducted. Lynn (2003, p. 324) identifies three main factors that challenge the development of cross-country survey design standards and their implementation, namely: (1) the accessibility and quality of sampling frames, (2) the different national legislations regulating survey practices, and (3) the availability and capacities of local research partners. Considering these challenges, this document defines and describes the procedures and standards to be followed throughout the research activities, both at international and national levels, in order to ensure the execution of research tasks at agreed quality standards.

For each stage of the survey process minimal quality checks will be developed to ensure that in each country each interviewer collects and handles information carefully and according to the same protocols. Checks and verifications throughout the research process will be carried out systematically, according to pre-established plans. Furthermore, at the end of each stage a consensus building session will be organized with the participation of subject matter experts and survey experts from both the country and international research teams.

The document is structured in seven sections, each detailing a critical milestone of the research process. The first section discusses the need to clearly identify research objectives and formulate the problem statement. The next section deals with the research methodology, detailing among others the sampling plan with a discussion of the population, the availability of a comprehensive sampling frame and the sampling procedures adopted to ensure sample representativeness. The third section introduces the activities related to the questionnaire design with emphasis on the development of the survey instrument, questionnaire structure, translation strategies and the main ancillary documents to be developed and used throughout the surveying process. The fourth section discusses the activities related to the questionnaire pilot. The fifth section deals with the survey. In this, among other, the interviewer selection process, along with the response window and the survey monitoring process are discussed. The sixth section presents the strategies related to data analysis, namely the development of the codebook, data entry, preliminary descriptive analysis and the elaboration of the country studies. Last but not least, in section seven, issues related to data and results handling are introduced.

1. Conceptual design

This section discusses the need to clearly identify the objective(s) of the research. In order to formulate the actual research questions, identify and review the relevant literature and, last but not least, describe the significance and the expected contribution of the country surveys of school directors both topical knowledge and survey technical expertise are required.

1.1 Statement of the problem

Despite fundamental educational reforms (OECD, 2003¹, 2006²), disparities in education opportunities and outcomes continue to rise in all 10 South East European (SEE) countries. The fact that disparities are increasing despite the considerable improvement of country anti-discrimination legislation raises concerns about the extent of equity that may be achieved in schools in the newly developed education systems in the SEE region. While system level measures and policies are likely to provide the necessary framework for the reduction of large scale and systematic discrimination, they are far from being sufficient to ensure at the school level the enrooting of attitudes and behaviour that would provide educational equity. Considering these, the main focus of this research is on identifying the main factors that inhibit the enrooting of values, attitudes and practices leading to educational inclusion and quality at the school level.

The emphasis on the school as the place where equal educational opportunities should be promoted is motivated by at least four reasons. First, in all countries – despite the significant improvement of the general educational policy environment, with the adoption of comprehensive anti-discrimination legislation – limited action at school level is likely to lead to shortcomings in the implementation of the educational equity related provisions. Second, with the rising of educational decentralization and the associated increase in the expectations related to the building of effective school-based governance, the existing limited educational leadership and educational stakeholder involvement in school life become evident. Third, the over-emphasized role of student testing in the evaluation of overall school performance diverts attention from other functions of schools, and if not addressed, it will have a negative impact on attitudes towards extra-curricular activities and other forms of student activities. Forth, the increasing costs for parents of education challenge the principles of inclusive education and are likely to further widen existing inequalities in schools.

All the above and the newly widened role of school directors in managing schools frame a set of recently emerging challenges related to the operations of schools. The role of school directors as the focal point in ensuring the articulation and effective operations of school-based governance structures, while also becoming the promoters of the values, attitudes and actions that would ensure the enrooting of sustained school level efforts towards achieving equal educational opportunities is once more reiterated.

¹ OECD (2003) Thematic Review of Education Policy in SEE countries, available at <http://devdata.worldbank.org/edstats/RegionalIndicators/SEE.pdf>, accessed August 26, 2007.

² OECD (2006) Education Policies for Students at Risk and those with Disabilities in South Eastern Europe: Bosnia-Herzegovina, Bulgaria, Croatia, Kosovo, FYR of Macedonia, Moldova, Montenegro, Romania and Serbia.

Therefore, the values, attitudes, capacities and behavior of school directors largely determine the character of school-based governance structures and school culture. If school directors do not subscribe to the principles of educational equity, school-based governance structures and school culture are not likely to be inclusive and sensitive to educational equity. For this purpose, country level surveys of school directors will be conducted in as many of the ten SEE countries as possible. Based on the findings, strategies to address school level challenges related to educational inequity will be identified.

1.2 The purpose of the empirical research

The purpose of the survey is:

to better understand the capacities, values, attitudes and actions of school directors in what regards educational inclusion and quality at school level in selected South East European countries.

1.3 Research question

Considering the above, the country surveys of school directors are expected to provide systematic evidence on the following main question:

What are the capacities, values, attitudes and actions of school directors related to advancing educational inclusion and quality at school level?

The data to be gathered from the country surveys of school director will point to the sources of inefficiencies in promoting equal educational opportunity at school level, which will be directly relevant for the design of local projects/initiatives. These projects/initiatives will provide empirically tested examples of possible solutions to the identified problems. The evidence resulting from these two main activities, corroborated by the examples of the existing good practices will provide the necessary information to identify the specific focus and develop the design of the advocacy campaigns in each country as well as at regional level in the second phase of the initiative.

1.4 Literature review

A literature review needs to be conducted on the topic of the research in order to provide an overview of the existing literature and the findings of similar research in the field of educational equity. The scope the literature review is to provide critical insights into the empirical debate on the validity of different conceptualisations on the role of the school context and the effectiveness of different research methods to inquire about. The core emphasis of the review will be on identifying existing empirically researchable conceptualizations of educational equity and quality. The review will be also accompanied by an annotated bibliography to be made available for all those involved in the development of the survey design.

Furthermore, the existing country initiatives and regulations on educational equity and participation will be reviewed, along with the existing literature on the survey topic. To ensure that each country survey covers the same headings and includes similar information, the regional research team will develop terms of reference for the elaboration of the country surveys.

Deliverable(s):	<ol style="list-style-type: none"> 1. Overall literature review 2. Annotated bibliography 3. TOR for country context analysis 4. Country survey of existing publication in local languages on educational equity, and identification of existing datasets related to schools.
Period:	October-December 2007
Team:	Regional research team and country research teams.
Responsible:	

2. Research methodology

This section describes the steps leading to the development of the survey instrument, i.e. the questionnaire. The main activities under the research methodology heading include the development of the research design, sample selection, the adoption of response rate standards and surveying procedures and the analysis of local surveying regulations.

2.1 Research design

In the very early inception of the survey process decision needs to be taken in what regards the type of analysis expected to be carried out and the nature of the results expected to be achieved as a result of the survey research. The research efforts seek to describe the capacities, values, attitudes and actions of school directors in what regards educational inclusion and quality at school level, or

2.2 Sample selection

The target population of the survey includes the directors of primary/secondary schools in each of the 10 SEE countries. When developing the sample frame, attention needs to be given to the fact that in different countries secondary school level education has a different meaning, and thus a comparable sample frame needs to be developed. Furthermore, secondary level education is delivered in schools with primary, vocational and/ or high school level education as well. Thus, when building the sample frame, several secondary school categories need to be distinguished, as follows:

- Schools exclusively delivering secondary level education;
- Schools delivering both primary and secondary level education;
- Schools delivering both secondary and gymnasium level education;
- Schools delivering primary, secondary and gymnasium level education;
- Schools delivering education under other forms: needs to be specified for each school if the case.

To help the selection process from the sample frame of schools in which directors will be surveyed and the calculation of the required size of the sample for each country the

table below needs to be filled with the number of secondary schools units (which equals the school director population). For this, reliable secondary school registries need to be compiled for each country concerned. The benchmark standard for a good quality registry is at least 90% of school coverage.

		Number of secondary schools	Sample size	
			±3	±5
1.	Albania ^a			
2.	Bosnia-Herzegovina ^b			
3.	Bulgaria ^c			
4.	Croatia ^d			
5.	Kosovo ^e			
6.	FYR of Macedonia ^f			
7.	Moldova ^g			
8.	Montenegro ^h			
9.	Romania ⁱ			
10.	Serbia ^k			

Once the sample frame has been constructed for each country, we can turn to defining the selection procedures of school directors in the survey. The selection of school directors is guided by three principles, namely (1) the generalizations expected to be made to the whole population, (2) the precision level and (3) the confidence level.

Note: *in countries where the population includes less than 200 schools no sampling is possible due to statistical reasons, and therefore the whole population needs to be surveyed.*

To ensure that reliable estimates of the whole population for each country can be made, country specific probability samples will be designed. Country specific samples will use different probability samples to reduce the likelihood of sample bias. In drawing the simplest random sample in each country the following steps will be applied:

- Step 1. Each school will be enlisted in spreadsheet file.
- Step 2. From a random number list each school is assigned a number.
- Step 3. Schools are listed based on the random number.
- Step 4. Starting from the top, schools are selected until the sample size reached.

If significantly different known population characteristics are identified, more complex sampling methods, such as stratified sampling, will need to be applied. In the case of stratification, the relevant stratification variables need to be identified with justification for their selection and population size for each stratum. In such a case, we will first need to identify the different strata and for each of them carry out the four steps described above.

In terms of the desired precision and confidence interval, the minimum sample size is independent of the population size. Thus, if we set the precision at 95% and the confidence interval at 99% the sample size is about 665. Furthermore, we might adopt to work with a lower (i.e. 90%) confidence level, which in the case of a ±5 precision level would imply smaller samples, but still allowing for the generalizability of findings. Yet, in our case the population size is relatively small in all countries, so

we can apply the finite population correction factors, which will reduce the required sample size. To illustrate this, an example is presented in the box below.

Example. Sampling schools in Romania
Population size: 7023 primary and secondary schools
Sample frame: simple random sample
Desired precision: a) ± 5 , b) ± 3
Confidence level: a) 90%, b) 95%, c) 99%

The 90% confidence level, when correcting for small sample, indicates a sample size of 262 in the case of the ± 5 precision and 364 in the case of the ± 3 precision level. In case of 95% confidence level and ± 5 precision the sample size is 384, but if applying the finite population correction factors the required sample size gets reduced to 364. The sample size in case of 99% confidence level and ± 5 precision is 665, while if applying the same correction, it decreases to 608. Working with an increased precision to ± 3 level and 95% confidence level the sample size is 1067, which in the corrected case becomes 926. While with the same precision, but with 99% confidence level the sample is 1849, and if corrected for small population is 1464. The choice of precision and confidence levels is always a function of available resources. *Note:* For simplicity, in all these cases the response variable was assumed to be dichotomous and evenly split, and simple random sampling was applied.

2.3 Response rate standards

Besides the development of an unbiased sample, careful attention needs to be paid to ensure that the respondent rate is as high as possible. Low response rates could lead to biased results due to non-response error as those who did not respond could have systematically different characteristics compared to those who responded. Thus, besides seeking a high response rate (i.e. over 60%), it is essential that protocols be adopted and communicated to interviewers concerning the recording of non-responses and the circumstances under which these occurred. Under no circumstances should any other person but the school director be interviewed.

2.4 Surveying procedures

Clear surveying procedures will be developed by the regional research team to guide the activities of country surveying teams.

2.5 Legal context

Attention needs to be given also to local regulations related to surveying and possible permits that need to be obtained. Furthermore, the engagement of the Ministry in country as partner (e.g. letter of support provided by the Ministry) is crucial to build school directors confidence in the survey.

Deliverable(s):

- 1) A detailed research design.
- 2) TOR for the sampling procedures: identification of the populations, sample selection procedures, etc.
- 3) Sampling frame for each country.
- 4) School director samples.
- 5) Guide for surveying procedures.

Period: November 2007 – January 2008.

Team:

Responsible:

3. Questionnaire design

Following the definition of the research question and the completion of the literature review, the questionnaire development process can be initiated.

An important decision that influences the design and elaboration of the questionnaire is the survey method chosen for the collection of responses. In our case, considering the complex nature of the topic addressed by the survey (i.e. educational equity), the most effective method to collect data is face-to-face interviewing. Despite higher costs compared to other methods, this approach will ensure, among others, that the questionnaire is completed according to the set guidelines and is indeed answered by school directors. Furthermore, the pilot will also offer the opportunity to transform some of the open-ended questions into closed ones.

3.1 The development of the questionnaire

The development of the questionnaire is a multi-task process, which builds on the adopted operational definitions of the key variables relying on the stated research objectives and the findings of the literature review. Therefore, this phase is defined as a team effort, which is essential to guarantee the development of a valid, reliable and unbiased survey instrument. To ensure content correspondence among countries we will need to ensure that the possibility for local context to feed in the questionnaire pilot process to be ensured. The main steps in this phase include:

- Subject matter experts individually formulate questions related to the research objectives.
- Verifying the content correspondence of formulated questions for the common questions of the questionnaire.
- The assigned researcher combines questions in a single list, where questions are grouped by topic and concept.
- First tentative standardization of response categories for the same questions.
- A meeting is organized (this should be face-to-face) with subject matter experts to finalize the elaboration of the internal questions to which the survey seeks answers.

These activities will provide the background for the development of the actual questionnaire items. In this phase, the following aspects related to the questionnaire will be defined:

- The structure of the questions (i.e. open-ended questions and close-ended questions) and response formats (e.g. Likert scales, etc.).
- Question wording (questions need to be simple, short, clear, unbiased, etc.);
- The question sequence (i.e. introductory, substantive, filter and demographic).
- The layout of the questionnaire.
- The length of the questionnaire.

The developed draft questionnaire will be sent out to subject matter experts for review and the questionnaire will be improved based on the observations and suggestions received.

3.2 Anchoring vignettes

Question development and questionnaire item identification should consider the sophisticated nature of the core concepts of the survey (e.g. educational equity, educational quality, and educational stakeholder participation). To avoid multiple interpretations of questions the method of anchoring vignettes will be applied in the questionnaire (King et al.: 2004). The methodology paper on applying anchoring vignettes is attached to the paper.

3.3 Questionnaire structure

To ensure that in each country the same questionnaire items are used, content correspondence will be verified and an identical layout applied. Nevertheless, to ensure the necessary flexibility of the survey to the different local policy contexts in each country, a pre-defined number of questions will be formulated for the given situation. This will take the form of a module of optional questions each country team could promote? These questions will be presented in a different section of the questionnaire.

3.4 Translation procedures

The questionnaire will be applied in the local language(s) of each country. Therefore the goal of the translation process is to generate functionally equivalent questionnaires in the different languages. The questionnaire translation procedure includes the following main stages:

- Two independent translations by persons familiar with survey research.
- These translations will then be individually re-translated into English by experienced persons in survey research.
- Any disagreement in the two versions will need to be reconciled by experienced researchers.

3.5 Ancillary documents

Besides the survey instrument (i.e. questionnaire), a series of other documents will need to be designed, such as questionnaire accompanying letter, thank you letter for those who responded, etc.

Deliverable(s): 1) The final draft of the survey instrument in English language.
 2) TOR for translation of the survey instrument.
 3) Ancillary documents.

Period: January-March 2008.

Team:

Responsible:

4. Interview guidelines for the pilot

In each country a questionnaire pilot will be planned and carried out to identify possible problems related to questions/ answers and to determine whether the questions are the relevant ones and respondents can understand them. At the same time, it needs to be tested whether the order of questions is logical, the answer choices are appropriate, or there are any concepts that prove to be hard to understand. Furthermore, the layout of the questionnaire is tested for clarity and visibility. Last but not least, the pilot can be viewed as a simulation of the survey, which would reveal any organizational or logistical problem as well.

4.1 Piloting plans

As the pilot is essential to avoid possible shortcomings of the survey instrument, the questionnaire will be tested in the local language(s) in each participating country. The pilot will be carried out by interviewing a small number of school directors (5 to 10) in each country. To ensure that this is executed in a coordinated manner, pilot plans will be devised. The plans will include, among others, the procedures of selecting interviewees from the identified sample, the way in which questionnaires will be applied, etc.

4.2 Piloting

The actual piloting will involve country research teams, which will organize face-to-face interviews with selected school directors. During the piloting special emphasis will be put on finding out whether the research objectives are indeed significant to the responding school directors. This phase will also seek to assess the extent to which the layout of the questionnaire is appropriate and the time needed for responding to the questionnaire. The pilot also offers a unique occasion to discuss with participating school directors about their personal interest in the survey and their satisfaction with the survey process.

4.3 Piloting evaluation

The evaluation of the piloting will refer to both the surveying protocols and the quality of the survey instrument. First, the clarity of the surveying instructions will be assessed. Second, the filled questionnaires accompanied by the reports of the country research team members carrying out the interviewing will be remitted and centrally assessed to identify the common problems related to the survey instrument in each country and at cross-country level.

4.4 Final questionnaire

Based on the conclusions of the pilot the questionnaire will be modified. If the number of modifications minimal these interviews will be counted in the final country datasets.

Deliverable(s):	<ol style="list-style-type: none">1. TOR for the questionnaire pilot.2. Dataset with pilot results.3. Reports of interviewers on school director observations and comments related to the survey instrument.4. The final survey instrument.5. Translations of the questionnaire.
Period:	February-March 2008.
Team:	
Responsible:	

5. The survey

Following the testing of the questionnaire, making the necessary changes and the approval of the final version of the questionnaire, the actual surveying will start.

5.1. Interviewer selection and training

To ensure that there are no biases during the surveying process, qualified and motivated interviewers need to be selected and trained in each country. Surveying will be carried out individually in each country and will be led by the country research team. To assist country research teams in the selection and training of interviewers, common protocols will be developed for all countries. Alternatively, research organizations with substantial surveying experience could be identified to carry out the surveying. These choices will depend on the local context and existing research capacities.

5.2. Questionnaire multiplication and distribution

Controlling distribution is essential to ensure the validity of the research approach. Considering the cross-country nature of the survey and the use of multiple languages, prior to distribution, each questionnaire needs to be uniquely identified. The unique code will be used in data entry and will be also introduced in the individual country datasets and the regional merged document.

5.3. The response window

Similarly, a surveying period needs to be defined. A period between four to six weeks will be allowed for surveying.

5.4. Monitoring response rate

To ensure that the emerging problems during the surveying process are dealt with as early as possible a system of monitoring will be devised. The minimum acceptable response rate needs to be 60%. In the eventuality in which the response rates are lower, refusals and non-responses need to be re-sampled and surveyed to verify

whether there is any systematic difference between the responding and the non-responding groups.

Deliverable(s): 1) Local survey teams and logistics.
 2) Multiplication and distribution of questionnaires.
 3) TOR for survey monitoring procedures.

Period: March- April 2008.

Team:

Responsible:

6. Data analysis

6.1 Developing the codebook

The English language questionnaire will be the template document throughout the survey process. The codes developed for questionnaire items in English will apply in the different language versions. The codebook will be developed and translated into national languages.

6.2 Data entry

In each country the country survey team will be responsible for the double-blind entry of survey data using the pre-defined template developed by the regional research team.

6.3 Preliminary descriptive analysis

Each country research team will be required to conduct the descriptive analysis of the survey data based on common SPSS syntax provided by the international research team.

6.4 Country studies

Each country team will be responsible for the elaboration of a country study based on the findings of the country survey. To aid this process and to ensure comparability of the studies elaborated, terms of reference will be developed by the regional research team and communicated to the country research teams. The country reports will be elaborated in the country language(s) of the given country and translated into English language as well. To ensure that all reports adhere to the same quality standards a report template will be provided and a peer review process will be set-up.

Based on the country studies a regional volume will be elaborated summing up the main results.

Deliverable(s): 1) Template codebook.
 2) Data entry protocols.

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- 3) Country survey datasets.
 - 4) Regional dataset.
 - 5) TOR preliminary descriptive analysis.
 - 6) Preliminary country descriptive data analysis.
 - 7) TOR for country studies.
 - 8) Country studies.
 - 9) Regional study.

Period:

Team:

Responsible:

7. Handling data and results

A critical aspect of the cross-country survey is the development and use of unified protocols for ensuring confidentiality of survey data. Furthermore, these protocols should also include provisions about survey ethics and ownership of survey results.

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