

Inclusion of the students in schools with an intercultural profile: an assessment from the migrant perspective in STEMS project

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ABSTRACT

The STEMS project (Supporting Teachers and Immigrant Students at School) aims to develop teaching methodologies to promote integration at school and to improve learning abilities of new foreign students or drop out students. Teachers have to develop competences to promote peer education methodologies and peer mentoring approaches to foster effective and individualized learning processes for migrant students or students at risk of social exclusion. To obtaining a multi-perspective picture of the impact (both positive impact and challenges) of migrant pupil population in the pilot schools to identify solutions to be implemented in the project next phases, three surveys were implemented, one per each target group (students, teachers and parents). Moreover, the survey for students involved both locals and migrants. The present work is focused on the analysis of the results focusing on migrant students distinguished by country.

CCS CONCEPTS

• **General and reference** → **Surveys and overviews** • **Social and professional topics** → **User characteristics**

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KEYWORDS

Intercultural schools, migrant students, assessment, European project, social inclusion.

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1 INTRODUCTION

Since the Second World War migration to the European Union (EU) has increased dramatically. Foreign citizens made up 7.5% of persons living in the EU Member States on 1 January 2017 [1]. According to the European Political Strategy Centre, 66% of migrants in Europe are Europeans [2]. On the other hand, given Europe's geographic position and reputation as a beacon of stability, generosity, and openness amid growing global instability, Europe represents a source of refuge for asylum-seekers [2]. In particular, from 2014 to 2016, 48% of the world's 6.7 million asylum-seekers were registered in the EU. 538000 asylum-seekers were granted protection status in the Member States of the EU in 2017 [3].

The flow of refugees and other migrants makes governments take decisions and strategies to manage the current situation. The key challenges facing by European governments are complex: the huge volume and the speed of people moving across Europe, diversity, origin, safety, vulnerability and hard

ways to move. European governments are facing changes in policies to cover their needs, to ensure the protection of all migrants and to make long-term strategies to manage it including global migration.

STEMS project (Supporting Teachers and Immigrant Students at School) is a European Project funded by the Erasmus+ Programme (Table 1). It is coordinated by Bursa Provincial Directorate of National Education (Turkey), and it started at November 2016 and will be developed along two years, until April 2019.

The project is born from the necessity of a change in the education focusing on the social inclusion of migrants. Usually, migrant students find a different context when they arrive at their new school. The main language, the culture and also the education system can be different from the established in their countries of origin. These situations bring them difficulties of adaptation, making a gap in early school leaving. In this educational context, the main stakeholders involved are teachers, students, and their parents.

Table 1. Project details

Title	STEMS: Supporting Teachers and Immigrant Students at School
Acronym	STEMS
Funding entity	European Union
Call	Erasmus + KA2 – Cooperation and Innovation for Good Practices. Strategic Partnerships for school education
Reference	2016-1-TR01-KA201-034681
Project leader	Mr. Yasin Keskin
Coordinator	Bursa Provincial Directorate of National Education (Turkey)
Partners	University of Salamanca (Spain) State school for the district of Gießen and the Vogelsbergkreis (Germany) Szczecinska Szkola Wyzsza Collegium Balticum (Poland) IES Ruiz de Alda (Spain) Mihraplı Abdulkadir Can Anadolu Imam Hatip Ortaokulu (Turkey) Torre dei Giovani (Italy)
Budget	198.270€
Start date	03/10/2016
End date	02/04/2019
Web	http://stemseurope.com

It focuses on the needs of changing and strengthening teachers to develop methodologies to promote integration at the school, both for migrant students and students at risk of social exclusion. In particular, the aims of the project are:

- To promote a more inclusive education system and lead to a decrease in the achievement gap between pupils with and without a migrant background.
- To create innovative integration process with the help of special language support, mentoring and parent involvement.
- To develop teachers' skills in the field of multilingualism/multiculturalism, diversity management, intercultural pedagogy.
- To create an online toolkit, a sharing, interactive environment for teachers.
- To develop teaching methodologies to promote integration at school and to improve learning abilities of new foreign students or drop out student.
- To foster the family and community involvement in the integration of immigrant students, taking an active role in their inclusion in the school context.

The first step defined in the STEMS project is focused on obtaining a multi-perspective picture of the impact (both positive impact and challenges) of migrant pupil population in the pilot schools to identify solutions to be implemented in the project next phases, including the design of a guidebook, an online tool for teachers and a Student Integration Programme (SIP).

To identify the “intercultural profile” of the schools involved in the project, three surveys were implemented, one per each target group (teachers, students and parents). The GRIAL Research Group [4, 5] of the University of Salamanca (Spain) was defined and coordinated the study.

The objective of this work is to analyze the results focusing on migrant students distinguished by country.

Finally, this work is set out in five sections. The second section describes the methodology used to identify the intercultural profile. The third section presents an overview of the results. The fourth section discusses the results. Finally, the last section summarizes the main conclusions of the study.

2 METHODOLOGY

2.1 Participants

The surveys were applied in schools from five countries: Germany, Italy, Poland, Spain, and Turkey. Two pilot schools were directly involved in the project as part of the consortium, and two schools were involved as associated partners. Moreover, the Polish partner carried out the study in several schools in Szczecin. Finally, the study was carried out in the following contexts:

- Seven schools in Szczecin (Poland).
- IES Ruiz de Alda (San Javier, Spain).
- IPSSEOA Carmine Russo (Cicciano, Italy).
- Mihraplı Abdulkadir Can Anadolu İmam Hatip Lisesi ve Ortaokulu (Bursa, Turkey).

- Wirtschaftsschule am Oswaldsgarten (Gießen, Germany).

The main profiles of the school community were involved in the study to get a multi-perspective picture. First, students who attend a compulsory secondary school level, both with a migrant and non-migrant background. Second, the parents of migrant children but also local parents. Finally, the teachers experienced in working with foreign students.

The present work is focused on the results obtained from the students, with the emphasis on students with a migrant background.

2.2 Instrumentation

Three instruments were defined to identify the intercultural profile of the schools involved in the study, three instruments were defined, one per each target group (teachers, parents, and students).

The instruments collect the underlying problems of the day-to-day school's life about the inclusion of students with a migrant background. The emphasis in the questionnaires is the perspectives of the different stakeholders about the inclusion of students in the school. First of all, the most important position for this assessment is the migrant student viewpoint.

First, the instrument for teachers is aimed to detect and subsequently develop strategies to address the most frequent problems found in the school context concerning the social inclusion of students with a migrant background in schools. It is formed by a set of demographic questions (name of school, subject, levels taught, sex, number of years in this role) and a set of questions organized in seven dimensions: (A) the migrant pupil population in the classrooms; (B) the impact of migrant pupils in the school community; (C) the challenges relating to migrant pupils in the school community; (D) the current school practices relating to migrant pupils; (E) teaching strategies in classroom relating to migrant pupils (regardless the government or school policies); (F) possible developments to school practices relating to migrant pupils; and (G) resources needed to improve school practice in relation to migrant pupils.

Secondly, the instrument for parents is aimed to know the perception of the parents of the students about their children's school community. It is formed by a set of demographic questions (sex, year of birth, country of birth, country where he/she lives, years in the country where he/she lives, level of schooling, professional occupation) and a set of questions organized in six dimensions to get an overview about: (A) the family; (B) the impact of school in his/her children / family; (C) the challenges relating to his/her children at school; (D) current school practices relating to inclusion; (E) possible measures to adopt; and (F) possible ways to collaborate.

Finally, the instrument for students is aimed to get an overall profile of students in the pilot schools. The survey is formed by a set of demographic questions (sex, year of birth, country of birth,

country where he/she lives, years in the country where he/she lives, course, father's level of schooling, father's country of birth, mother's level of schooling, mother's country of birth, number of brothers/sisters) and a set of questions organized in five dimensions: (A) relationship with schoolmates; (B) relationship with teachers and tutors; (C) academic expectations and school learning achievement; (D) possible measures to adopt; and (E) possible ways to collaborate.

The assessment of the migrant perspective in the different schools involved in STEMS project is focused on the results obtained through the instrument for students. In particular, the items that compose the four mandatory dimensions are:

- Overview of the relationship with schoolmates:

- RS1: Students in my school treat one another with respect
- RS2: I feel emotionally safe in my classes.
- RS3: I feel emotionally safe outside of the classroom (restrooms, lockers, hallways, cafeteria, etc.).
- RS4: Students in my school help one another even if they are not friends.
- RS5: I feel that I belong (am accepted and liked) at school.
- RS6: I feel that I contribute to the integration of other classmates.

- Overview of the relationship with teachers and tutors:

- RT1: My school respects all races and cultures
- RT2: Teachers at my school are respectful toward one another and toward students.
- RT3: Students are involved in decisions about things that affect them in school.
- RT4: Most of my teachers are enthusiastic about teaching and communicate this to students.
- RT5: Most of my teachers know my name.
- RT6: I respect most of my teachers.
- RT7: Teachers at school help students to solve their problems.

- Overview of the academic expectations and school learning achievement:

- AE1: I attend class regularly.
- AE2: I participate regularly in class.
- AE3: I get good grades.
- AE4: I study regularly.
- AE5: I often need extra help with schoolwork.
- AE6: I really want to learn.
- AE7: I'm going to finish high school.
- AE8: I'd like to continue education after high school.

- Overview of possible measures to adopt:

- MA1: Linguistic support with the country's language.
- MA2: Extra help with schoolwork.

- MA3: More occasion for the socialisation (sport, theatre, music...)
- MA4: More one-on-one attention from teachers.
- MA5: More examples of how the things I learn in school matter in the real world.

To measure the internal consistency of the instrument, we calculated the Cronbach's α coefficient using the data gathered from the migrant students obtaining a score of 0.888 well above the recommended value of 0.7.

The instruments were implemented using LimeSurvey (<https://www.limesurvey.org>), an open source software to carry out online surveys. The online tool was customized with the design of the STEMS project. Moreover, the instruments were translated into Arabic, German, Italian, Polish, Spanish, Turkish and Ukrainian. English version of the instruments is available in a technical report [6].

2.3 Study design and data collection

The study was carried out from May 2017 to November 2017 in the selected pilot schools. Each partner was in charge to define how to collect a minimum number of responses from the different target groups (20 teachers, 50 families of immigrant students, 50 families of local students, 50 immigrant students and 50 local students).

The surveys were applied before the end of the school year 2016-2017 in Italy, Poland, Spain, and Turkey. On the other hand, Germany applied them at the beginning of the school year 2017-2018.

The pilot schools from Spain, Turkey, and Germany collected the data using the online version based on LimeSurvey, Italy used a printed version, and Poland combined both online and printed versions. Printed data were digitalized to be available in LimeSurvey.

School community (teachers, parents, and students) voluntarily participated in this study and decided whether to complete the surveys. The anonymity of personal information was guaranteed.

Finally, in addition to the data collected, a datasheet with basic information about its socioeconomic and cultural context and the migrant background was provided by each pilot school.

To analyze the data, the first database in SPSS format was obtained from the automatic entry of results of the instrument applied in LimeSurvey. The database was imported into SPSS Statistics 23 (License of the University of Salamanca Campus).

2.4 Sample

The survey for students was answered by 406 students where 401 responses were completed, and 5 were uncompleted. To differentiate local and immigrant students, the researchers used the question about how many years he/she is living in the country is used. In particular, responses with the value "All your life" are considered by local students. The opposite value, any of the other options, from less than 6 months to more than 5 years but less than all your life, are considered answers from immigrant students. A total of 201 responses are from immigrant students and the rest, 205 are from local students (Table 2).

Table 2. Local and immigrant students by country

Country	Total	Local	Immigrant	% Immigrant
Poland	147	98	49	33.33
Spain	96	77	19	19.79
Italy	29	1	28	96.55
Turkey	63	0	63	100.00
Germany	71	29	42	59.15

3 RESULTS

As a first step in the analysis process, we calculated the descriptive statistics of the answers of the students grouped according to the variable country. As we can see in Table 3, although all of the countries have average scores above the medium value of three, there are important differences between them.

Table 3. Results of the descriptive analysis of the items in the five countries

	Poland			Spain			Italy			Turkey			Germany		
	avg	sx	N	avg	sx	N	avg	sx	N	avg	sx	N	avg	sx	N
RS1	3.57	.91	46	3.60	1.14	20	3.50	.96	28	3.26	1.34	65	3.88	1.15	42
RS2	3.83	.88	46	3.85	1.35	20	3.04	.69	28	3.60	1.37	65	4.43	.89	42
RS3	3.89	.82	46	3.70	1.34	20	3.04	.79	28	3.31	1.33	65	4.31	1.16	42
RS4	3.13	1.00	46	3.15	1.46	20	2.67	1.11	27	3.42	1.17	65	3.67	1.22	42
RS5	3.65	.67	46	4.00	1.08	20	2.86	1.08	28	3.55	1.16	65	4.05	1.10	42
RS6	3.30	.76	46	3.70	1.22	20	3.64	.78	28	3.54	1.21	65	3.74	1.31	42
RT1	3.59	.69	46	3.85	1.31	20	4.39	.63	28	3.69	1.17	65	4.26	.94	42
RT2	3.65	.92	46	3.80	1.20	20	2.89	.79	28	4.20	.81	65	4.33	1.12	42

RT3	3.39	.93	46	3.15	1.09	20	2.61	.74	28	3.65	.87	65	3.50	1.25	42
RT4	3.02	.86	46	3.05	1.28	20	3.43	1.03	28	3.75	.98	65	3.93	1.24	42
RT5	4.17	.68	46	3.65	1.18	20	4.18	.82	28	4.03	1.05	65	4.60	.83	42
RT6	4.13	.69	46	4.25	1.07	20	3.75	1.08	28	4.51	.92	65	4.67	.75	42
RT7	3.33	.87	46	3.75	1.12	20	3.00	.90	28	3.77	1.09	65	4.17	1.10	42
AE1	4.07	.88	46	4.15	1.35	20	3.71	.98	28	4.22	.96	65	4.52	.77	42
AE2	3.74	.91	46	3.10	1.02	20	3.71	1.12	28	3.49	1.20	65	4.45	.89	42
AE3	3.85	.87	46	3.00	.97	20	2.89	1.07	28	3.14	1.17	65	3.81	.94	42
AE4	3.91	.81	46	3.35	1.09	20	2.86	1.18	28	3.75	1.00	65	3.74	1.13	42
AE5	3.11	.95	46	3.05	1.28	20	3.29	.81	28	4.12	1.17	65	3.21	1.39	42
AE6	4.13	.78	46	4.35	.99	20	3.82	.72	28	4.74	.57	65	4.43	1.11	42
AE7	4.28	.72	46	4.40	1.05	20	4.54	.58	28	4.66	.73	65	3.81	1.19	42
AE8	4.30	.81	46	4.25	1.16	20	2.04	.96	28	4.63	.80	65	3.67	1.30	42
MA1	3.50	.81	46	2.85	1.57	20	3.39	.63	28	4.22	.80	65	3.88	1.31	42
MA2	3.09	.81	46	2.95	1.19	20	3.68	.67	28	4.09	.96	65	3.52	1.15	42
MA3	3.98	.61	46	3.50	1.00	20	4.32	.55	28	4.02	1.04	65	3.36	1.51	42
MA4	3.15	.87	46	3.05	1.15	20	3.79	.63	28	4.02	.94	65	3.26	1.25	42
MA5	3.91	.78	46	3.60	1.10	20	4.68	.48	28	4.06	.86	65	3.55	.99	42

In order to find out if these differences are significant at a statistical level, we conducted a hypothesis contrast. As a previous step, we carried out the Kolmogorov-Smirnov and Shapiro-Wilk normalcy tests (Table 4) in order to select the most appropriate statistic to test the mean difference.

Table 4. Results of the normalcy test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
RS1	.302	200	.000	.854	200	.000
RS2	.210	200	.000	.851	200	.000
RS3	.211	200	.000	.870	200	.000
RS4	.187	200	.000	.906	200	.000
RS5	.231	200	.000	.880	200	.000
RS6	.229	200	.000	.886	200	.000
RT1	.242	200	.000	.851	200	.000
RT2	.235	200	.000	.853	200	.000
RT3	.188	200	.000	.905	200	.000
RT4	.225	200	.000	.896	200	.000
RT5	.272	200	.000	.765	200	.000
RT6	.300	200	.000	.710	200	.000
RT7	.192	200	.000	.886	200	.000
AE1	.276	200	.000	.758	200	.000
AE2	.208	200	.000	.872	200	.000
AE3	.209	200	.000	.898	200	.000
AE4	.235	200	.000	.882	200	.000
AE5	.214	200	.000	.892	200	.000
AE6	.320	200	.000	.710	200	.000
AE7	.340	200	.000	.715	200	.000
AE8	.310	200	.000	.774	200	.000
MA1	.221	200	.000	.868	200	.000
MA2	.217	200	.000	.886	200	.000

MA3	.252	200	.000	.840	200	.000
MA4	.185	200	.000	.896	200	.000
MA5	.227	200	.000	.850	200	.000

The results of these test entail the rejection of the normalcy hypothesis. Therefore, we used non-parametric statistics for the hypothesis contrast, specifically, we selected the Kruskal Wallis test given the polytomous nature of the variable (Table 5).

Table 5. Kruskal Wallis results for the variable gender

	Chi squared	df	Asintot. sig.
RS1	7.688	4	.104
RS2	34.360	4	.000
RS3	33.493	4	.000
RS4	13.789	4	.008
RS5	25.379	4	.000
RS6	9.006	4	.061
RT1	23.576	4	.000
RT2	47.302	4	.000
RT3	23.525	4	.000
RT4	25.516	4	.000
RT5	20.801	4	.000
RT6	33.157	4	.000
RT7	30.629	4	.000
AE1	18.227	4	.001
AE2	31.118	4	.000
AE3	27.057	4	.000
AE4	18.952	4	.001
AE5	32.849	4	.000
AE6	42.266	4	.000
AE7	22.775	4	.000
AE8	74.955	4	.000

MA1	32.875	4	.000
MA2	39.430	4	.000
MA3	13.027	4	.011
MA4	27.062	4	.000
MA5	30.315	4	.000

As we can see in the Table 5, the results of the Kruskal Wallis test indicates that there are statistical differences in all of the items of the questionnaire except RS1 and RS6 for a significance level of 0.05.

In the dimension of relationships with other students, the students from Germany have the higher mean scores in the four items with significant differences, while the students from Italy present the lower values (Figure 1).

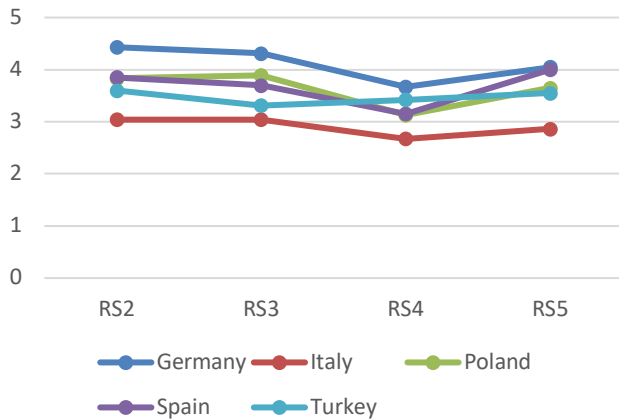


Figure 1: Mean scores of the students from the five countries in the dimension RS

In the items from the dimension relationship with teachers, the German students also have the higher scores in all of the items except in RT1. However, the lower scores are more heterogenous; the Polish students have the lower scores in RT1 and RT4, the Italian students in the items RT2, RT3, RT6 and RT7 and the Spanish students in the item RT5 (Figure 2).

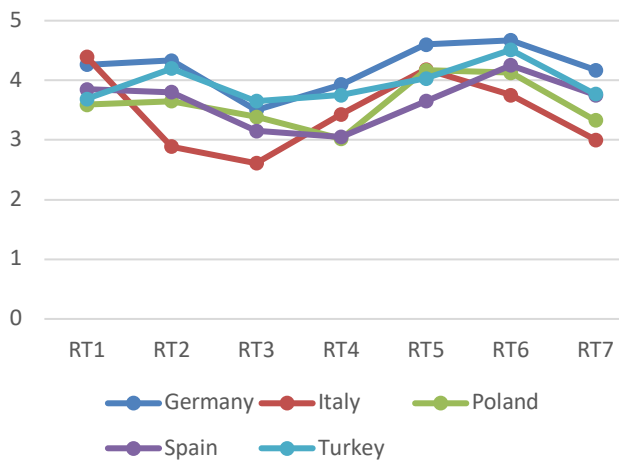


Figure 2: Mean scores of the students from the five countries in the dimension RT

Thirdly, in the dimension AE the students from Turkey have the higher scores in four out of the eight items, the students from Germany in two and the students from Poland in one. On the other hand, the students from Italy and Spain alternate in the lower scores (Figure 3).

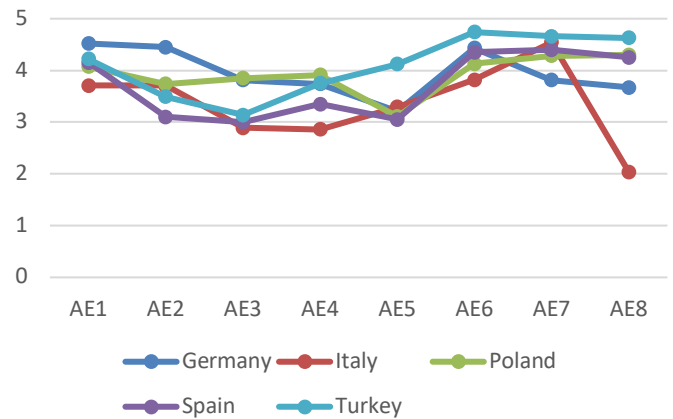


Figure 3: Mean scores of the students from the five countries in the dimension AE

Finally, in the dimension MA, the students from Turkey has the higher scores in three of the five items, and the students from Italy in the two remaining items. The students from Spain have the lower scores in three of the items and the students from Germany in two (Figure 4).

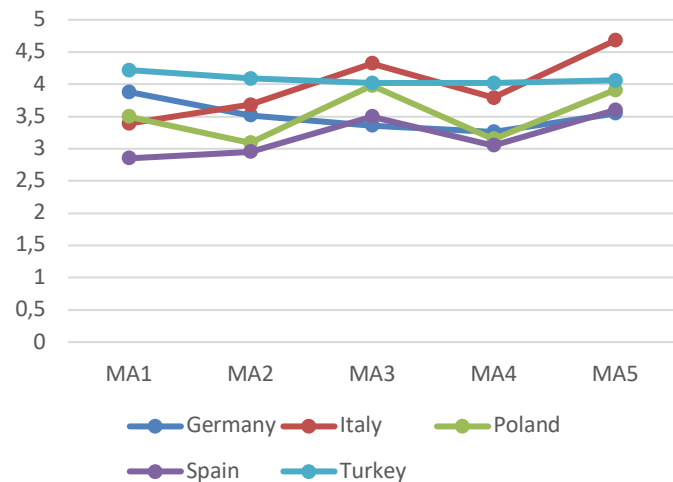


Figure 4: Mean scores of the students from the five countries in the dimension MA

4 DISCUSSION

The results obtained in this study show important differences between the schools from the five countries in all the items of the scale.

Germany is the country that shows a higher level of social integration of the students in the school, being the country that obtained the higher scores in the two dimensions related with the interactions of the students, namely, relationships with the students and relationships with the teachers.

In these dimensions, the two countries with the lower scores are Italy and Turkey in the items that measure the relationships with other students and Spain and Italy in the items that measure the relationships with the teachers.

Therefore, the results suggest that there is an integration problem in these schools.

As for the academic expectations of the students, it is worth noticing that despite the high levels of school integration Germany is not the country with higher scores in this dimension. The influence of the quality of the migrant student's relationships in the school on their academic expectations constitutes an interesting topic of research that should be addressed in future researches.

Finally, as for the measures to improve their learning the students from Poland, Spain, and Italy ask for more socialization activities and more examples of how the things they learn matter while the students from Germany and Turkey ask for more linguistic support.

It is also worth noticing that the students from Italy and Spain also show the lower scores in these dimensions which may also be caused by their low level of school integration.

5 CONCLUSIONS

The European projects STEMS emerges from the necessity for adapting the continuous changes in the world of education; this requires innovative, technological and renewable educational practices, system or solutions for school managements. While European countries have well-established education systems, socioeconomically disadvantaged immigrant communities

experience inequality of access and a lower quality of education across the continent.

Immigrant students at schools encounter a new language, culture and a system at school and consequently have difficulties in adapting them, which leads to failure at school or early school leaving.

To identify solutions to be implemented in the next phases, a need analysis study was carried out at the beginning of the project. In particular, three surveys were implemented to obtaining a multi-perspective picture of the impact of migrant pupil population in the schools involved in STEMS project.

The results evidence the differences between the schools participating in the study and emphasize the need to improve the integration of migrant students.

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