

Zašto se prikupljaju podaci?

Politike koje se zasnivaju na verodostojnim podacima su ključni element dobro uspostavljenog procesa donošenja odluka. Ministarstva koja se bave obrazovanjem moraju imati postake o efikasnosti i manama sistema. Vrsta podataka za praćenje bi trebalo da bude odlučena od strane interdisciplinarnе ekspertske komisije. Najvažnije karakteristike procesa prikupljanja tih podataka su regularnost, transparentnost i inovativnost. Kada se taj proces sprovodi istom metodologijom onda su moguća i različita upoređivanja, evaluacija i praćenje promena i ishoda u određenim regionima, kao i vrste pravilnosti koje se razvijaju u školama. Baza podataka svakako može koristiti u svrhe praćenja i davanja povratne informacije u cilju poboljšanja sistema. Sistematsko i produbljeno prikupljanje podataka može značajno smanjiti rizik od osipanja.

Odabir izvora koji govore o ovoj temi:

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest. Ch. IV.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

Network of experts in social sciences of education and training (NESSE) (2010): *Early school leaving. Lessons from research for policy makers*. An independent expert report submitted to the European Commission. <http://www.nesetweb.eu/sites/default/files/early-school-leaving-report.pdf>

European Commission/EACEA/Eurydice/CEDEFOP (2014): *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and CEDEFOP Report. Publications Office of the European Union, Luxembourg.
http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175EN.pdf p. 31-32.

Ključne reči: analiza situacije, signali upozorenja, prikupljanje podataka

Koje metode prikupljanja podataka postoje?

Dve glavne prakse prikupljanja podataka o osipanju postoje u EU: neke zemlje se oslanjaju na podatke Eurostata, dok druge imaju svoj način prikupljanja podataka o ovom problemu. Prikupljeni podaci se vezuju ili za instituciju ili za učenike. Opšte prikupljanje podataka najčešće ima tri nivoa u svim zemljama: postoji nacionalna baza na nivou obrazovnog sistema cele države, iako ovakva baza postoji u svim zemljama njen sami sadržaj se značajno razlikuje, ona najčešće sadrži opšte podatke o učenicima i samoj školi, i o tome informiše obrazovne vlasti. Odvojena baza podataka specifično

vezana za osipanje retko postoji, ali se opšte baze podataka mogu koristiti i u svrhe prevencije osipanja. Pored opšteg sistema postoje i istraživanja o učenicima i školama koja se sporadično odvijaju svuda. Često ova istraživanja budu manjeg opsega i koriste kvalitativnu metodologiju fokusirana su na određenu populaciju, regiju ili projekat.

Osim navedenih nivoa prikupljanja podataka postoji i prikupljanje podataka o osipanju na makro, mezo i mikro nivou. Makro – regionalne ili stope osipanja po tipu škole; inicijalne podatke o učenicu kao što su uzrast ili postignuće; ili podatke o postignuću školskih centara. Ovi podaci se koriste kao početni korak u uspostavljanju obrazovne politike usmerene na određenu regiju ili tip obrazovanja. Mezo – daje povratnu informaciju za same institucije o njihovim učenicima, efikasnosti nastavnika isl. Mikro – se odnosi na samog pojedinca, specifične teškoće, krize i efekte intervencija kao i sveukupni učinak korišćenih metoda može se meriti i pratiti na ovom nivou. Poslednji nivo je veoma koristan u lokalnim zajednicama, ali se mora koristiti sa brojnim ograničenjima zbog osetljivog ličnog sadržaja ovih podataka.

Odabir izvora koji govore o ovoj temi:

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest. Ch. IV.-V.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

Ključne reči: analiza situacije, signali upozorenja, prikupljanje podataka

Koje vrste podataka se prikupljaju?

Danas je lako pratiti učenike u većini zemalja jer imaju sistem prikupljanja podataka zasnovan na ličnom identifikacionom broju koji dobijaju najčešće odmah po ulasku u obrazovni sistem. Ali da bi se formirala baza koja može pomoći u prevenciji osipanja potrebno je mnogo više podataka od onih opštih (pol, uzrast, postignuće u učenju itd.) Širom Evrope izražen je problem nemogućnosti da se odvoji da li je neki učenik napustio školovanje zauvek ili je samo promenio putanju školovanja. Ovaj problem izaziva dupliranje podataka koji zamagljuje pravu sliku o broju učenika koji su napustili školovanje. Iz istog tog razloga svaki sistem mora za sebe definisati problem osipanja, tako da opiše i elaborira ovaj problem u skladu sa lokalnim kontekstom.

Za samu instituciju ukupan broj onih koji su u riziku je ključan. Ali pored broja, jako je važno znati i koje probleme imaju ovi učenici: rezultati u učenju, ponašanje, potrebna socijalna pomoć itd. U veoma dobro razvijenom sistemu za rano otkrivanje (EWS) prikupljaju se i mišljenja učenika i njihove povratne informacije o procesima u školi pa se ugrađuju u preventivne mehanizme.

Odabir izvora koji govore o ovoj temi:

Reducing early school leaving: Key messages and policy support Final Report of the Thematic Working Group on Early School Leaving November 2013
http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest. Ch. IV.-V.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

Većina signala upozorenja nema veze ni sa ponašanjem ni sa postignućem učenika već su donešeni “od kuće”. Kao ilustracija može poslužiti veza nivoa obrazovanja roditelja i ukupnog postignuća učenika, posebno u istočnoj Evropi društvena stratifikacija u ovom pogledu veoma je izražena. Postoji i razlika u odnosu na rod, i to tako da su dečaci češće u riziku. Pripadnost manjini ili izbegličkoj porodici još pojačava rizik u svim školama i snižava obrazovne mogućnosti.

Odabir izvora koji govore o ovoj temi:

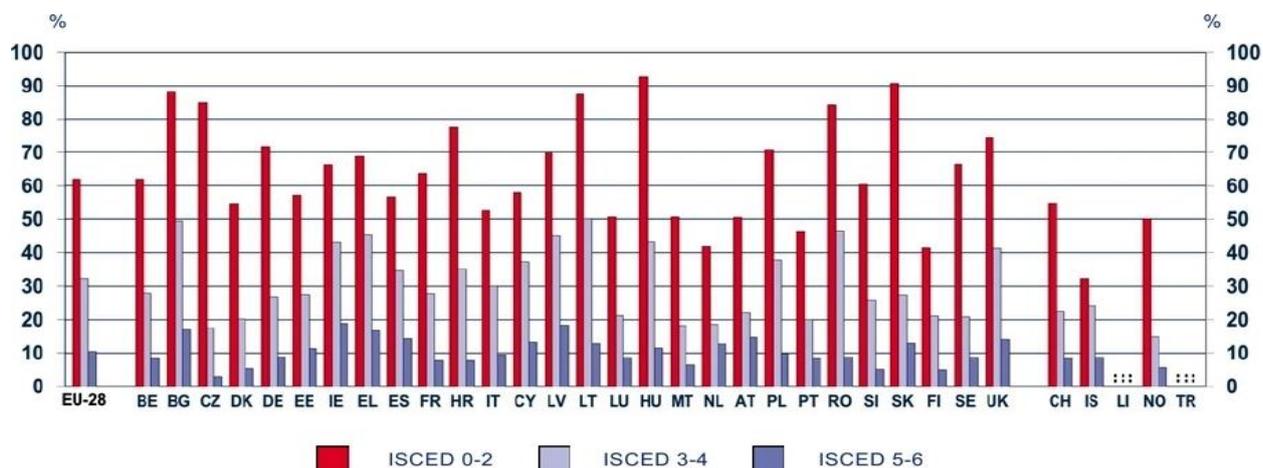
Iannelli, C. (2002): *Parental Education and Young People’s Educational and Labour Market Outcomes: A Comparison across Europe*. Arbeitspapiere, Mannheimer Zentrum für Europäische Sozialforschung.
http://edoc.vifapol.de/opus/volltexte/2014/5139/pdf/wp_45.pdf p. 10-12.

European Commission/EACEA/Eurydice/CEDEFOP (2014): *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and CEDEFOP Report. Publications Office of the European Union, Luxembourg.
http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175EN.pdf p. 36. and 114.

Network of experts in social sciences of education and training (NESSE) (2010): *Early school leaving. Lessons from research for policy makers*. An independent expert report submitted to the European Commission. <http://www.nesetweb.eu/sites/default/files/early-school-leaving-report.pdf> p. 15.

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest. Ch. V.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

Nivo učenika u riziku od siromaštva i društvene isključenosti između 0-17 godina u odnosu na obrazovni nivo roditelja. 2013



Izvor: Eurydice-CEDEFOP 2014 p. 37.

Lični podaci koji se najčešće prikupljaju su: uzrast, pol, socio ekonomski status, nivo obrazovanja roditelja, nacionalnost i državljanstvo, poreklo, maternji jezik i prebivalište.

Najopštiji podaci o školskom postignuću i ponašanju: ponavljanje razreda, odsustvo, obrazovna putanja, postignuće učenika, razvojne teškoće.

Postignuće u određenim predmetima je od izuzetne važnosti, to su na primer zvanični jezik države i matematika, kao i nacionalni jezici kao drugi jezik izbeglica i stranih državljana.

Neke zemlje beleže i veoma specifične podatke, kao npr. o dodeljivanju besplatnog školskog obroka u Škotskoj i Finskoj. Što sve potvrđuje da je važno imati sistem koji je organizovan tako da je u skladu sa specifičnostima određene sredine i lokalnog konteksta.

Odabir izvora koji govore o ovoj temi:

European Commission (2013a): *Early warning systems in Europe: practice, methods and lessons*. Thematic Working Group on Early School Leaving (TWG on ESL), Brussels.
http://ec.europa.eu/education/policy/strategic-framework/doc/europe-warning-systems_en.pdf

European Commission/EACEA/Eurydice/CEDEFOP (2014): *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and CEDEFOP Report. Publications Office of the European Union, Luxembourg.

http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175EN.pdf
p.31.

Potvin, P., Marcotte, D., Fortin L., Royer, É., Leclerc, D., Blondin, D. (2002): *A comparison of dropout students, at risk students and regular high school students*, Université du Québec à Trois-Rivières, Trois-Rivières, Canada; Université de Sherbrooke, Sherbrooke, Canada; Université Laval, Québec, Canada; Université du Québec à Montréal, Montréal, Canada, 63rd Annual Convention of the Canadian Psychological Association University of British Columbia, Vancouver. <http://www.pierrepotvin.com/6.%20Publications/vanc02.pdf> p. 13-15.

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest. Ch. IV.-V.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

Ključne reči: analiza situacije, signali upozorenja, prikupljanje podataka, razlozi za osipanje

Korišćenje podataka

Korišćenje podataka je još jedna veoma važna, ali često zapostavljena tema. U mnogim zemljama zvaničnici prikupljaju ogromnu količinu podataka koristeći samo njihov neznatan deo za unapređivanje sistema. U Mađarskoj na primer, samo povezivanje podataka iz obrazovanja i srodnih sektora može biti izvrsna osnova za kreiranje sistema za rano otkrivanje osipanja. Ovi podaci bi se mogli povezivati sa podacima o: zaposlenosti, sistemu socijalnih davanja kako bi se stekao potpuniji uvid u poreklo učenika, sistemu obrazovanja odraslih, zdravstvanim sistemom u kom se pomoću identifikacionog zdravstvenog broja mogu sagledati zdravstveni problemi učenika itd. Ipak, eksperti naglašavaju da je uspostavljanje baze podataka vezane isključivo za osipanje veoma važno.

Odabir izvora koji govore o ovoj temi:

Judit Juhasz (2015): *Final report on Crocoos – Cross-sectoral cooperation focused solutions for the prevention of early school leaving project background research*. Tempus Public Foundation, Budapest.Ch. IV.
http://oktataskepzes.tka.hu/content/documents/CroCooS/Final%20research%20report_Early%20school%20leaving%20policies_Crocoos.pdf

European Commission/EACEA/Eurydice/CEDEFOP (2014): *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and CEDEFOP Report. Publications Office of the European Union, Luxembourg.
http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175EN.pdf p. 29. and 34.

Iver, M. A., Mac Iver, D. J. (2009): *Beyond the indicators: An integrated school-level approach to dropout prevention*. Arlington, VA: The Mid-Atlantic Equity Center, The George

Repozitorijum SR #2



Washington University Center for Equity and Excellence in Education.
<http://diplomasnow.org/wp-content/uploads/2013/06/dropout-report-8-11-09.pdf> p. 2. and
[18.](#)

Ključne reči: analiza situacije, signali upozorenja, prikupljanje podataka

Primeri prikupljanja podataka za prevenciju osipanja na mikro nivou

Student Name	2007-2008: Days Absent	2008-2009: Days Absent	Negative Behavior Comments	Math Grade 3/1/2008	Math Grade 6/1/2008	Literacy Grade 3/1/2008	Literacy Grade 6/1/2008	Reading Level 6/1/08	PSSA 2008 Math	PSSA 2008 Reading
Student A	53	0	10	D	D	F	F	5	Proficient	Basic
Student B	36	2	7	B	D	D	D	6	Basic	Basic
Student C	14	0	1	C	B	C	C	6.5	Basic	Proficient
Student D	5	1	6	C	B	D	C	7	Basic	Basic
Student E	18	0	7	C	C	D	F	5.5	Below Basic	Below Basic
Student F	29	2	1	D	C	D	D	6	Below Basic	Below Basic
Student G	6	0	8	D	D	F	D	5.5	Below Basic	Below Basic
Student H	46	2	3	B	B	D	F	5.5	Basic	Below Basic
Student I	41	0	4	D	C	D	D	3.5	Below Basic	Below Basic
Student J	17	0	1	B	B	C	D	2	Below Basic	Below Basic
Student K	61	4	7	C	F	D	C	7	Below Basic	Basic
Student L	24	0	10	F	F	C	D	6.5	Below Basic	Basic
Student M	18	0	2	B	D	D	C	3.5	Below Basic	Below Basic
Student N	3	0	6	B	B	B	C	7	Basic	Basic
Student O	2	1	5	C	D	D	D	5.5	Basic	Basic
Student P	15	1	4	D	D	F	D	5.5	Basic	Below Basic
Student Q	15	1	10	C	D	D	D	6.5	Below Basic	Below Basic
Student R	6	0	1	D	D	D	D	3	Below Basic	Below Basic
Student S	16	1	4	D	D	D	D	5	Below Basic	Below Basic
Student T	15	0	7	C	F	D	D	6	Below Basic	Basic
Student U	18	0	6	C	D	D	D	6.5	Below Basic	Below Basic
Student V	23	0	7	C	F	C	F	6	Below Basic	Below Basic
Student X	16	0	6	C	F	D	D	6.5	Basic	Basic
Student Y	18	1	3	B	C	D	D	6.5	Basic	Basic
Student Z	4	0	7	C	C	D	D	6.5	Proficient	Below Basic
Student AA	42	2	1	D	C	D	D	5.5	Below Basic	Below Basic
Student AB	13	0	2	D	D	D	C	4	Below Basic	Below Basic
Student AC	8	0	2	D	D	D	D	2	Below Basic	Below Basic
Student AD	22	1	8	C	F	D	D	6	Below Basic	Below Basic
Student AE	50	1	0	D	D	C	C	4.5	Below Basic	Below Basic
Student AF	18	0	6	C	C	F	D	5	Below Basic	Below Basic
Student AG	1	0	3	NG	D	NG	D	6	Below Basic	Basic

* Pennsylvania System of School Assessment (PSSA) Forrás: Iver, M. A., Mac Iver, D. J. 2009 23.

Repozitorijum SR #2



Prilog alatke 15 – instrument za praćenje učenika u riziku, mikro nivo

Key Data for an "Early Warning System" with

On- and Off-Track Indicators That Become

the Basis for Tiered Interventions

Purpose: This tool provides various ways to analyze school data related to students who are in danger of falling off-track, students who are slumping and entering a danger zone, and students who are firmly on-track. By knowing the number of all students in each category it is possible to see which groups of students need help, and to make some estimates about the kind of help that can be targeted to their unique circumstances. While our example uses first-time ninth graders, this analysis can also be done beneficially for students in all other grades – 6, 7, 8 and 10 especially. It is also useful to disaggregate the information, especially by gender.

Foundation: Matching interventions with need is the most important part of an Early Warning System. The essential first step is to systematically understand how many students are in each category in each school. The second step is to look at the absolute numbers and determine what is feasible given the capacity in the school and community.

Inventory One: In Danger of Falling Off-Track In the Past Semester				
	Missed 5-9 days of school	Had 2 or more in-school suspensions	Had C or D average	Received one F in a core academic subject
All students				
First-time 9th graders				
Students who are repeating a grade				

Repozitorijum SR
#2



Students who are two or more years overage for grade					
Inventory Two: Fallen Off-Track In the Past Semester					
	Missed 10 or more days of school	Had 3 or more in-school suspensions	Had 1 or more out-of-school suspensions	Received two or more Fs in a core academic subject	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
Inventory Three: Academic Slumping Coupled with Attendance Slumping				Number of students with a C or D average, with multiple days missed in a specific time period	
	C/D average	0-4 days missed	5-9 days missed	10-19 days missed	20+
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
Inventory Four: On-Track for Success			Number of students		
with an A or B average, 95% or higher attendance, and no suspensions					
	A or B average	95% attendance	No in- or out-school suspensions		
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
All of our examples are for a 9th grade early warning system. Use a similar approach to analyze grades 6, 7, 8 and 10.					

Repozitorijum SR
#2



The charts below are ways to collect the needed data					
ATTENDANCE. Number of students with this number of missed days in a specific time period	0-4 days	5-9 days	10-19 days	20+ days	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
BEHAVIOR - IN-SCHOOL SUSPENSIONS. Number of students with this number of in-school suspensions in a specific time period	0-1	2-3	4-5	6+	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
BEHAVIOR - OUT-OF-SCHOOL SUSPENSIONS. Number of students with this number of out-of-school suspensions in a specific time period	0-1	1	2	3	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					

Repozitorijum SR
#2



ACADEMIC FAILURE. Number of students with this number of Fs in a specific time period	1	2	3	4	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
ACADEMIC FAILURE. Number of students with an F in English, mathematics or both in a specific time period	1	2	3	4	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					

Izvor:: Guidance, relzvor:s and tools to help your community and your schools raise graduation rates and better prepare young people for success. Robert Balfanz and Joanna Hornig Fox from the Everyone Graduates Center at the Johns Hopkins University School of Education and by John M. Bridgeland and Mary Bruce of Civic Enterprises.

Repozitorijum SR #2



Mikro nivo

Student Data Entry Screen (Semester 1):

Student Information				Semester One Student Data						
Last Name	First Name	Student ID	Grade	20 Day Count	Days Absent Quarter 1	Days Absent Quarter 2	No. Courses Failed (All)	No. Courses Failed (Core)	No. Credits Earned	GPA
Example Student 1		1234	9	6	7	4	0	0	3	3.90
Example Student 2		5678	9	0	5	15	2	2	2.5	1.80
Example Student 3		9512	9	0	1	0	0	0	3	4.00
Example Student 4		7532	9	1	2	3	2	0	3	3.10
Example Student 5		6541	9	5	6	12	3	1	1.5	2.10
			9							
			9							
			9							



Student Report Screen (Semester 1 and Full Year):

Student Information				Semester Indicators of Risk					Full Year Indicators of Risk			
Last Name	First Name	Student ID	Grade	Flag for 20 Day Attendance	Flag for Q1 Attendance	Flag for S1 Attendance	Flag for Course Fs	Flag for GPA	Flag for Attendance	Flag for Course Fs	Flag for GPA	Flag for "Off-Track"
Example Student 1		1234	9	Yes	Yes	Yes	No	No	Yes	No	No	On-Track
Example Student 2		5678	9	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Off-Track
Example Student 3		9512	9	No	No	No	No	No	No	No	No	On-Track
Example Student 4		7532	9	No	No	No	Yes	No	No	Yes	No	On-Track
Example Student 5		6541	9	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Off-Track
			9									
			9									
			9									

Izvor.: Heppen, J. B., Bowles Therriault, S., 2008 6.

Srednjoškolci koji pokazuju signale upozorenja, mezo nivo

Early Warning Indicator*	Number of students off-path	Number of these students still off-path in March 2009	Percent reduction in the number of students off-path
Failed math	65	25	62 percent
Failed literacy	86	22	74 percent
Less than 80 percent attendance rate	38	23	39 percent
Three or more negative behavior comments on report card	409	225	38 percent

Izvor:: Iver, M. A., Mac Iver, D. J. 2009 27.

<<< Disclaimer >>>

This material was made in the framework of CroCoos – Prevent dropout! project. For more information visit this site: <http://crocoos.tka.hu>. This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. This material can be found on the project website: <http://crocoos.tka.hu>.

CroCooS Resource Pool elements by [CroCooS partnership](#) is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#). Based on a work at <http://crocoos.tka.hu>. Permissions beyond the scope of this license may be available at <http://crocoos.tka.hu>. For more information about this CC license, visit [this site](#).

