

Name of Project:
**Fast Automated System for
Teachers Evaluation and Ratings
(FASTER)**

Study Area: Division of Rizal, Rizal, Philippines

Group members:

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I. Background

- Teachers spend a substantial time in grade preparation reducing time for academic activities
- Delayed grade computations delays feedback to students, teachers and schools
- Congressman believes that if this time for grade preparation can be reduced, then the teacher can spend more of his/her time in academic activities
- Congressman contracted a software developer to develop an electronic grading system that can be provided to teachers/schools
- Decision making on interventions is slow because no timely indicators of student, teacher and school performance
- Computer utilization of teachers is low
- Beyond the political and immediate reason for the project- long term contribution
 - Promotion of computer literacy- in an area where it's relevant
 - Creates a database for informed policy making at the division and national level
- Description of the Division of Rizal

Division of Rizal

	Elementary Public	Secondary Public	Total
Number of Schools	197	52	249
Enrollment (2007-08)	194,380	87,478	281,858
Nationally-Funded Teachers (2007-08)	4,085	1,683	5,768

Results Chain

Inputs	Activities	Outputs	Outcomes	Long-term Outcome
<ul style="list-style-type: none"> • E-grading software • Users' Manual • Computers • Teachers • Results of computer literacy and hardware assessment 	<ul style="list-style-type: none"> • Basic Literacy Training if necessary • Users training for: Administrators / ICT coordinators/ Teachers • Installation of software into flash discs and school computers • Collecting grades by teacher/school • Analysis of data and reporting to the Division officials and parents of grades across teachers, classes and schools 	<ul style="list-style-type: none"> • Teachers trained on basic computer skills • Teachers trained on the use of the software • Teachers using software to compute grades • Database of grades at the school and division level • Reports from analyses of database 	<ul style="list-style-type: none"> • Less time consumed for grade preparation, more time for academic preparation • More timely interventions by teachers • Greater computer utilization by teachers • Students are motivated to improve their academic performance due to timely feedback of grades • Identification of interventions for better school and teacher performance 	<ul style="list-style-type: none"> • More effective and efficient teachers and schools • Improved learning outcomes • Promoting evidence-based education policy-making at the division and national levels

Research Questions

1. Will automated grading system reduce time spent on grade preparation and hasten grade submission?
2. Will reduced time for grade preparation increase time for academic preparations?
3. Will faster grade preparation lead to more timely teacher intervention?
4. Will student performance improve if teachers have more time spent for academic preparations?
5. Will grade awareness among students enhance their motivation and performance?
6. Will performance awareness among teachers improve teacher performance?
7. Will automated grading system improve teachers' job satisfaction?
8. Will automated grading system enhance overall computer literacy and utilization of teachers?
9. Will there be difference in impact between elementary and secondary teachers?
10. Will timely information on grades enhance identification of interventions at the school and division levels?
11. Will the database generated by the automatic grading system improve school performance?

IV. Outcome Indicators

1. Time allocation of teachers (academic preparation, grade preparation, extra-curricular activities)
2. Teacher job satisfaction index
3. Teacher utilization of computers
4. Student outcomes (tests scores, attendance, dropout)

V. Identification Strategy / Method

1. Randomized phased distribution of software to (a) elementary (b) secondary teachers in the initial phase; Randomization will be at the school level to avoid contamination
2. Randomized provision of information generated by the software to (a) students, (b) teachers, (c) school heads, and (d) parents
3. Comparison of outcomes of interest between treatment and control schools (to measure intent-to-treat effects because some teachers in the treatment schools may opt not to use the software)

Evaluation Design Matrix

With Software									No Software (A)
Information shared (C)									Information not shared (B)
Share information about students (D)			Share information about teachers (E)			Share information about schools (F)			
Share info with other students (G)	Share with other students, teachers (H)	Share with other students, teachers, school heads (I)	Share to students, teachers, school heads, parents (J)	Share with other teachers (K)	Share with teachers, school heads (L)	Share with other teachers, school heads, parents (M)	With other school heads (N)	With other school heads, parents (O)	

Impact Measurements – 1/2

- A. Impact of software = A-B
- B. Impact of information sharing on student, teacher and school performance=C-B-A
- C. Sharing information on student performance=D-C-B-A
 - Impact of sharing info on student perf with other students= G- D-C-B-A
 - Impact of sharing info on student perf with teachers=H- G- D-C-B-A
 - Impact of sharing info on student perf with school heads=I- H- G- D-C-B-A
 - Impact of sharing info on student perf with parents=J- I- H- G- D-C-B-A

Impact Measurements – 2/2

- D. Sharing information on teacher performance=E-C-B-A
- Impact of sharing info on teacher perf with other teachers=K- E-C-B-A
 - Impact of sharing info on teacher perf with school heads=L- K- E-C-B-A
 - Impact of sharing info on teacher perf with parents=M- L- K- E-C-B-A
- E. Sharing information on school performance=F-C-B-A
- Impact of sharing info on school perf with other school heads=N- F-C-B-A
 - Impact of sharing info on school perf with parents=O- N- F-C-B-A

VI. Sample size and Data

- All elementary and secondary schools in the division will be included in the study (249 schools: 22 schools for each of the 10 treatment cells with remaining 29 for the no software cell)
- Baseline/endline data on outcomes
 - By survey (baseline/end line)
 1. Teachers
 2. Students

VII. Timeframe

1. Software development and training module preparation – July-Dec 2008
2. Gathering of baseline data – January – March, 2009
3. Selection treatment schools – March 2009
4. Division achievement test – February 2009 and 2010
5. District achievement test – February 2009 and 2010
6. Periodical tests – August 2009, Oct 2009, January 2010, March 2010
7. Training of ICT coordinators and trainers – January 2009
8. Training of teachers – April – May 2009
9. Gathering of end-line data for teachers – March 2010

VIII. Sources of Financing

1. Software development, USBs, training module - Congressman Duavit
2. Training of teachers - DepEd
3. Data Collection and Analysis – World Bank/ADB/OP?