



Examination systems and Democratic Values in the Post Soviet Society:

The Georgian Example



RECENT BACKGROUND

❖ ***Fundamental principles of fairness and equity destroyed***

~ ***3 mil. USD - paid in bribes***

~ ***80% of enrollment - non merit based***

❖ ***Crisis in secondary education***

~ ***Lack of educational resources***

~ ***Institution of private tutors***



UEE - Merit Based Selection

- ◆ **Fair**
- ◆ **Transparent**
- ◆ **Scientifically valid**



Main principles

- **Standardized selection**
- **Complex assessment of achievement and skills**
- **State scholarship to successful students**



● 2005

3 compulsory Exams (Georgian language and literature, GAT, Foreign languages)

1 optional exam (Mathematics)

● 2006 - 2009

3 compulsory exams

4 optional exams (mathematics, literature, science, social studies)

● 2010

3 compulsory exams

7 optional exams (mathematics, literature, physics, chemistry, biology, history and geography)



General Ability Test

**Predicting possible success of students
in the higher educational institutions**

- **Adequately perceiving and processing information;**
- **Logical reasoning;**
- **Understanding basic relations between events.**



METHODOLOGY

Classical Test Theory

TEST DEVELOPMENT

- *Compatibility studies of school and university requirements*
- *Try outs*
- *Piloting*



METHODOLOGY

SCALING

First stage

- **Equating**

Second stage

- **Allocation of Equated scores in each subject on a common standardized scale**



● **14 Exan**

● **Vid**

● **Se**
etc

strars



IT

- **Development of a bar-code system**
- **Development of a special software for registration, coding, decoding, scaling, enrollment and allocation of state scholarship**



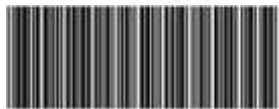
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Markers' bar-codes



PI



Student's bar-code

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$x^2 - 2x - a = 0$

$D = 4 + 4a$

$2 \pm \sqrt{4 + 4a}$

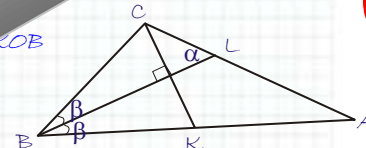
$x_1 = x_2$
 $x_1 = x_2$
 $+ \sqrt{4 + 4a} = 4$

33 4 4

34 4 4

35 3 4 4

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$BC + BC + AC = 31$

$3BC = 21$

$BC = 7$



31 0 0

32 1 2 2

32.

$$a_2 = a_1 + x$$

$$a_3 = a_2 + x$$

$$a_3 - a_1 = a_3 - a_2$$

$$a_1 + a_1 + x + a_1 + 2x + \dots + a_1 + (n-1)x = a_n$$

$$a_1 + \frac{x(n-1)^2}{2n} = 100 \quad 100n = \frac{a_1 n + x(n-1)^2}{2n}$$



Electronic marking of Test papers

- **More professionals involved in Marking (especially from Regions)**
- **Confidentiality of marking process increased**
- **Marking process takes less time**

MEETINGS



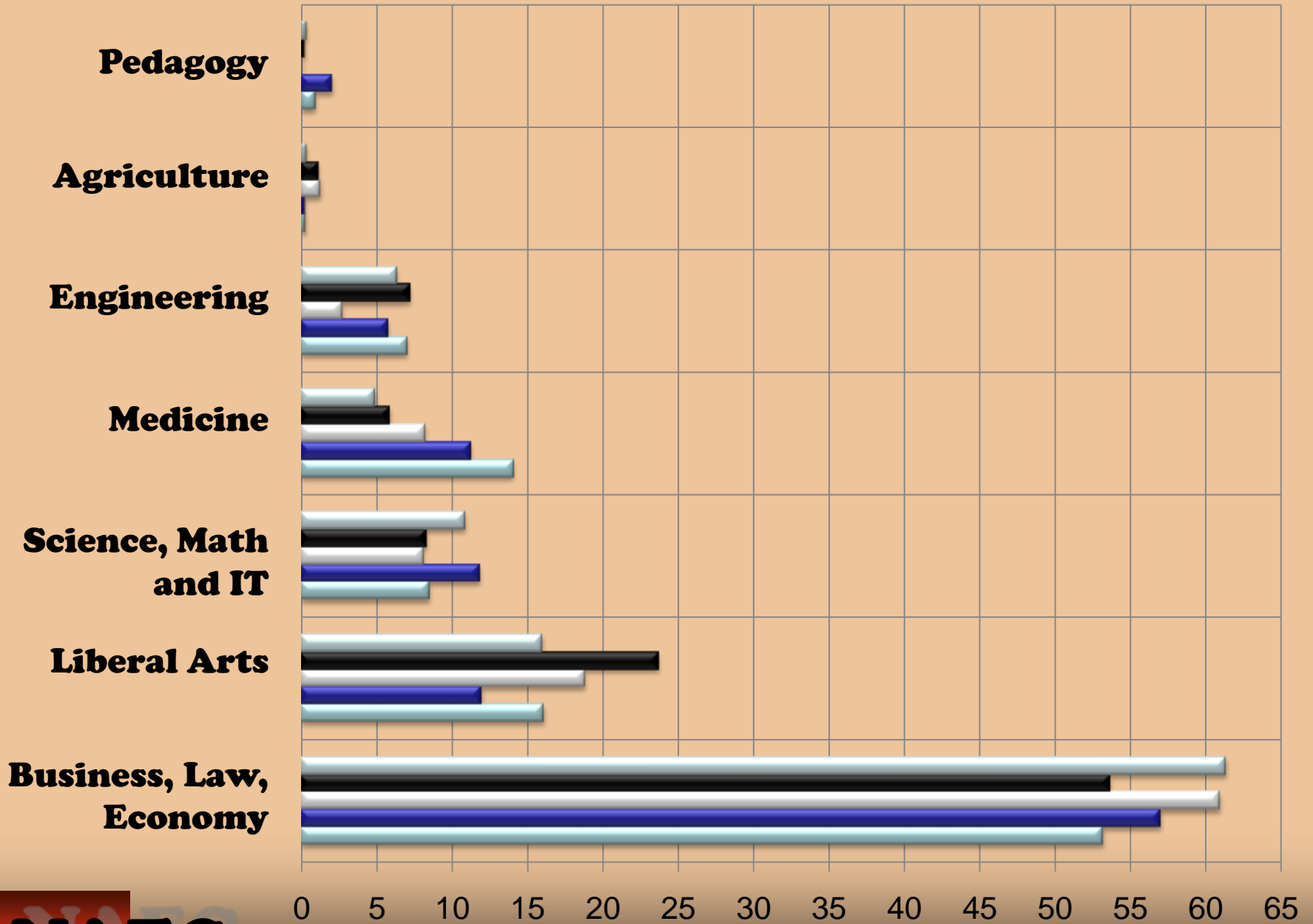


The new system of Financing

Reasons

- **Financing system of universities**
- **Many important faculties left without financing**

2009 2008 2007 2006 2005





Novelties of 2010

3 compulsory exams + 1 optional exams

- **GAT**
- **Georgian language and literature**
- **Foreign languages**

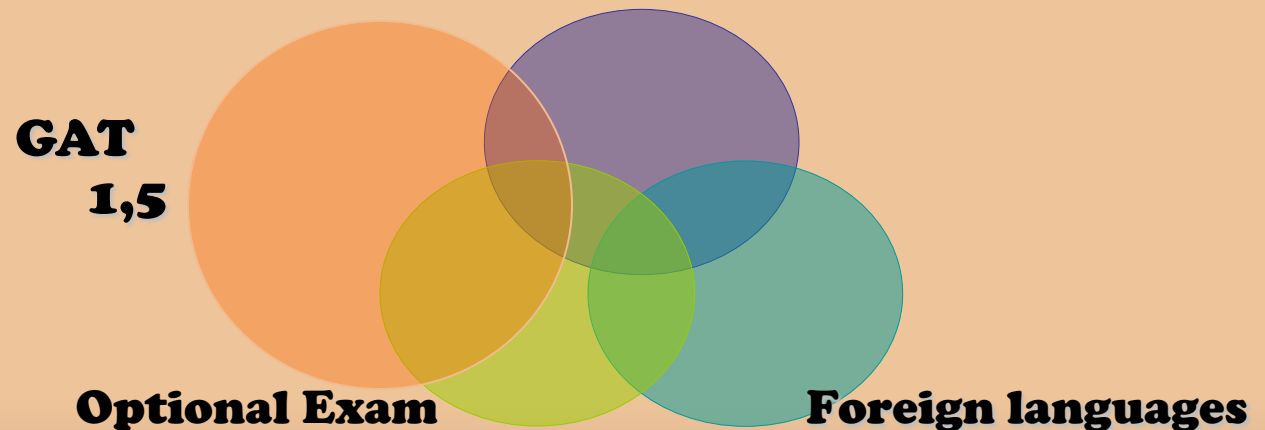
- **Biology**
- **Physics**
- **Chemistry**
- **Mathematics**
- **Geography**
- **Literature**
- **History**



Novelties of 2010

State Scholarship is based on weighted sum of the results of 4 exams

Georgian language and literature





Novelties of 2010

State Scholarship

X_1

7% equally

X_2

93% according to
competition

- **Biology - 1%**
- **Physics - 1%**
- **Chemistry - 1%**
- **Mathematics - 1%**
- **Geography - 1%**
- **Literature - 1%**
- **History - 1%**



OUTCOMES

International observers:

*“unified admission Exam
Georgian History, it prov
conduct objective and un
scale. New examination n
momentum for reforming
system”*

Level of trust in UEE

• 2005 - 91%

Students from rural regions:

- Enrollment ~ 55%
 - State scholarship ~ 45%
- Gender**
- Girls ~ 56%
 - Boys ~ 44%



Responsibilities

- **University Entry Examinations – since 2005 (about 45 000 university entrants)**
- **Unified Graduate Examinations – since 2009 (about 7000 students)**
- **Teacher Certification Examinations – from 2010 (about 14 000 applicants)**
- **International Surveys – since 2005 (PIRLS, TIMSS, TEDS, PISA)**
- **National Olympiads – since 2009 (about 180 000 applications)**
- **School leaving and university entry examinations at the same time – from 2011**



Thank you!