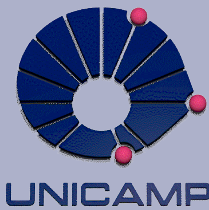


programa de formação interdisciplinar superior  
universidade estadual de campinas



**Student quality,  
selection and support**

**ProFIS, a Novel  
Approach for Access  
and Success in Brazilian  
Higher Education**

# ProFIS

**Symposium on  
Excellence in Higher  
Education  
FAPESP  
23-24/02/2014**

Marcelo Knobel  
UNICAMP - Brazil



*Programa de Formação Interdisciplinar  
Superior (ProFIS)*

Interdisciplinary Higher Education Program

- **Marcelo Knobel**

IFGW, Universidade Estadual de Campinas  
(Unicamp)

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# Outline

- Higher education in Brazil and at Unicamp.
- AA at Unicamp
  - The PAAIS (affirmative Action and Social Inclusion Program).
  - The ProFIS (Interdisciplinary Higher Education Program).
- Challenges and perspectives





**NATIONAL  
CONTEXT**

# The context: higher education

- Organized according to the European (French, Italian) tradition of professional schools; first universities are from the 1930s
- Limited coverage: in spite of recent expansion, only about 14% of the age cohort is enrolled;
- Public higher education is free, but enrolls only 25% of the students
- Quality is very uneven both in public and private institutions

# Brazil's HE system - 1960-2010

- 1960: less than 200,000 students enrolled in HE
- 1960-1980: enrollment grew to 1.4 million (600%)
- 1980-1994
  - longest period of economic stagnation in Brazil's history
  - there was little development in HE, public or private

Undergraduate Enrollment 1980-2010  
(Presential Programs)

- 1995-2010

Political stability and economic growth

Increasing demand for qualification

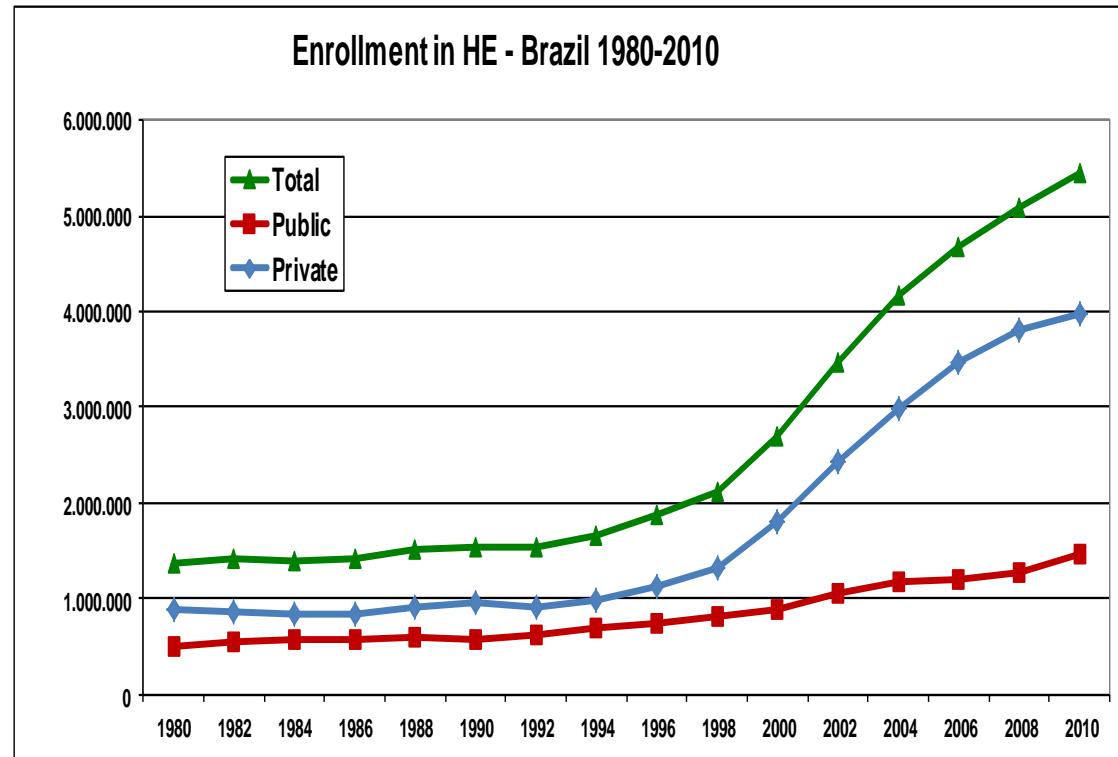
Expansion of private sector

New National Law of Education (1996)

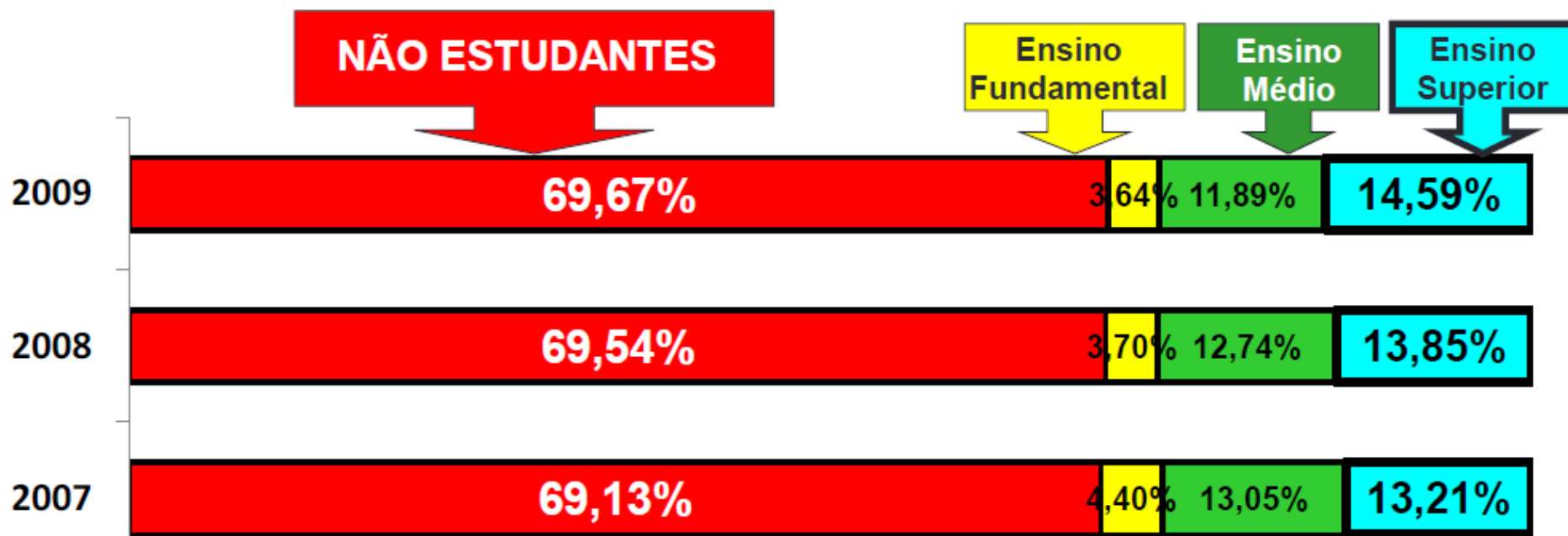
New paths for diversification of system  
Deregulation

Universalization of basic education (1st-8th grades)

Expansion of secondary education --->  
Increasing demand for Higher Ed



## Where are the young people (18-24) in Brazil



Fonte: PNAD/IBGE.

Argentina	32,9%
Bolívia	18,2%
Chile	35,9%
México	21,0%

Fonte: Socio-Economic Database for Latin America and the Caribbean (CEDLAS).

\* Ano de referência: 2006.

An aerial photograph of a coastal city, likely São Paulo, Brazil. The image shows a dense urban area with a mix of greenery and buildings, situated on a hillside overlooking a blue ocean. The text "STATE OF SÃO PAULO" is overlaid in white, bold, sans-serif font in the bottom right corner.

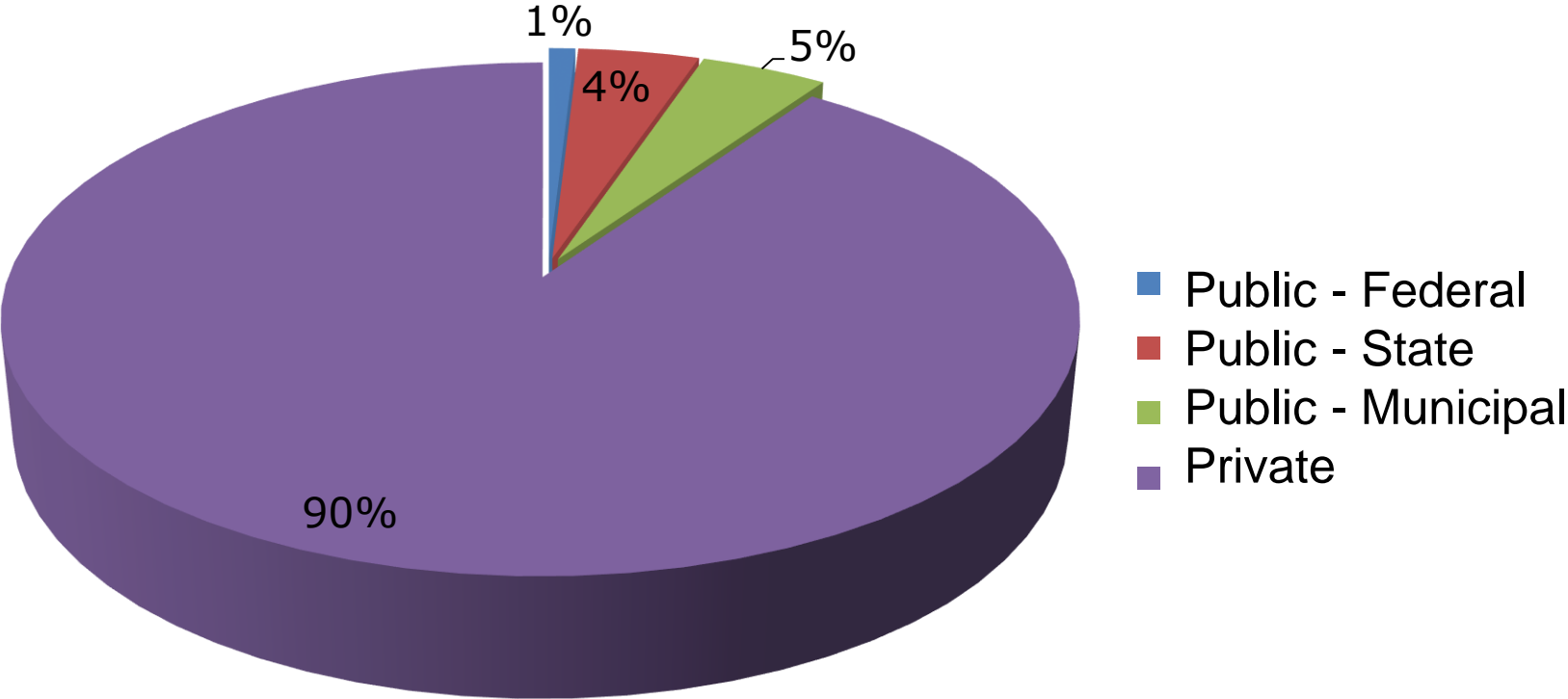
**STATE OF  
SÃO PAULO**



# Higher Education in São Paulo 2010

- 22% of the Brazilian population: 41 million
- 33% of Brazilian GDP = U\$ 700 billion (U\$17,000 GDP/capita)
- Almost 50% of Brazilian Science
- Higher Education
  - 26% of all enrollment = 1.63 million students (1.47 million in presential programs)
  - 32% of graduating class (2010): 260,000 of 830,000 total
  - Net enrollment ratio: 18% (34% gross enrollment ratio)
  - 85% in private HEIs (3/4 of those in for-profit system)
  - Small federal participation, only 1.5% of enrollments
- State Public HE system
  - Best university system in Brazil
  - 3 universities, 28 campuses, 120,000 undergrad students, 50,000 grad students
  - 50 Technical Colleges (FATECs), 50,000 students
- *But still, only 14% of all enrollment is in public institutions*

# Institutions of Higher Education in the State of São Paulo

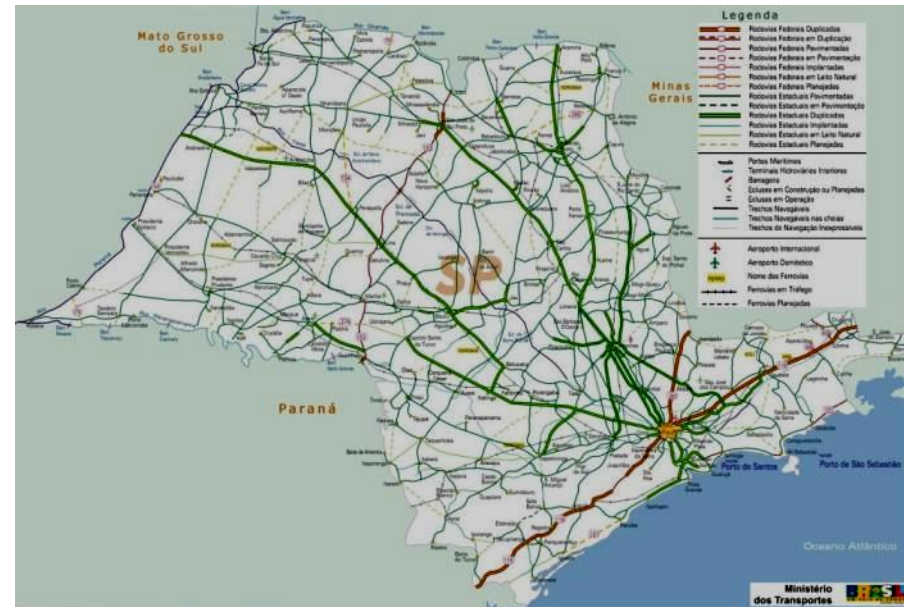


# CAMPINAS



# Campinas

- **City**
  - ~1 million people
  - GNP  
R\$ 30 billion (2008)
- **Metropolitan area**
  - 19 municipalities
  - 2.8 million people (2009)
  - HDI = 0.835
    - São Paulo State: 0.833
    - Brazil: 0.819
  - GNP = R\$ 80 billion (2008)
    - 7.8% of São Paulo State
    - 2.7% of Brazil





UNICAMP

# Unicamp

- Founded in 1966
  - 6 campuses
  - 3.5 million m<sup>2</sup>
  - 22 Academic Units
  - 3 Hospitals
  - 778 beds
- Faculty
  - 1800 professors
  - 98% PhD
  - 90% of PhDs full time
- Staff
  - 7916 employees
  - 3370 in hospitals

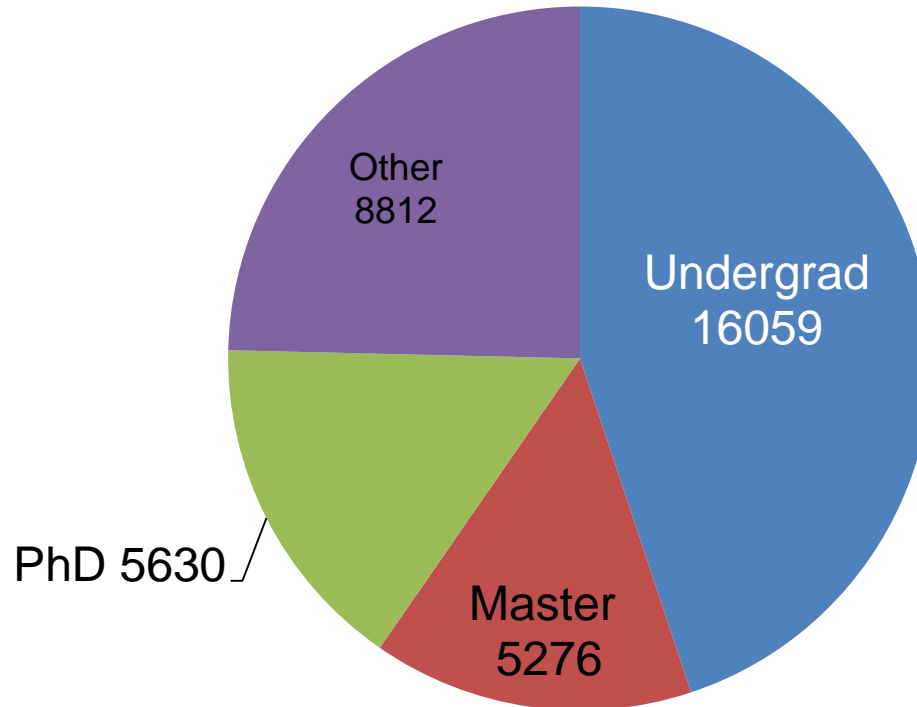


# UNICAMP

- One of the three public universities maintained by the São Paulo State Government.
- Situated in Campinas, the 14<sup>th</sup> largest city in Brazil, with 1.08 million inhabitants.
- 66 undergraduate programs with about 17,000 students.
- 66 graduate MSc and PhD programs with about 19,000 students.
- Admits only 5% of the applicants to the undergraduate courses.

# Students (2010)

**35777 Students**



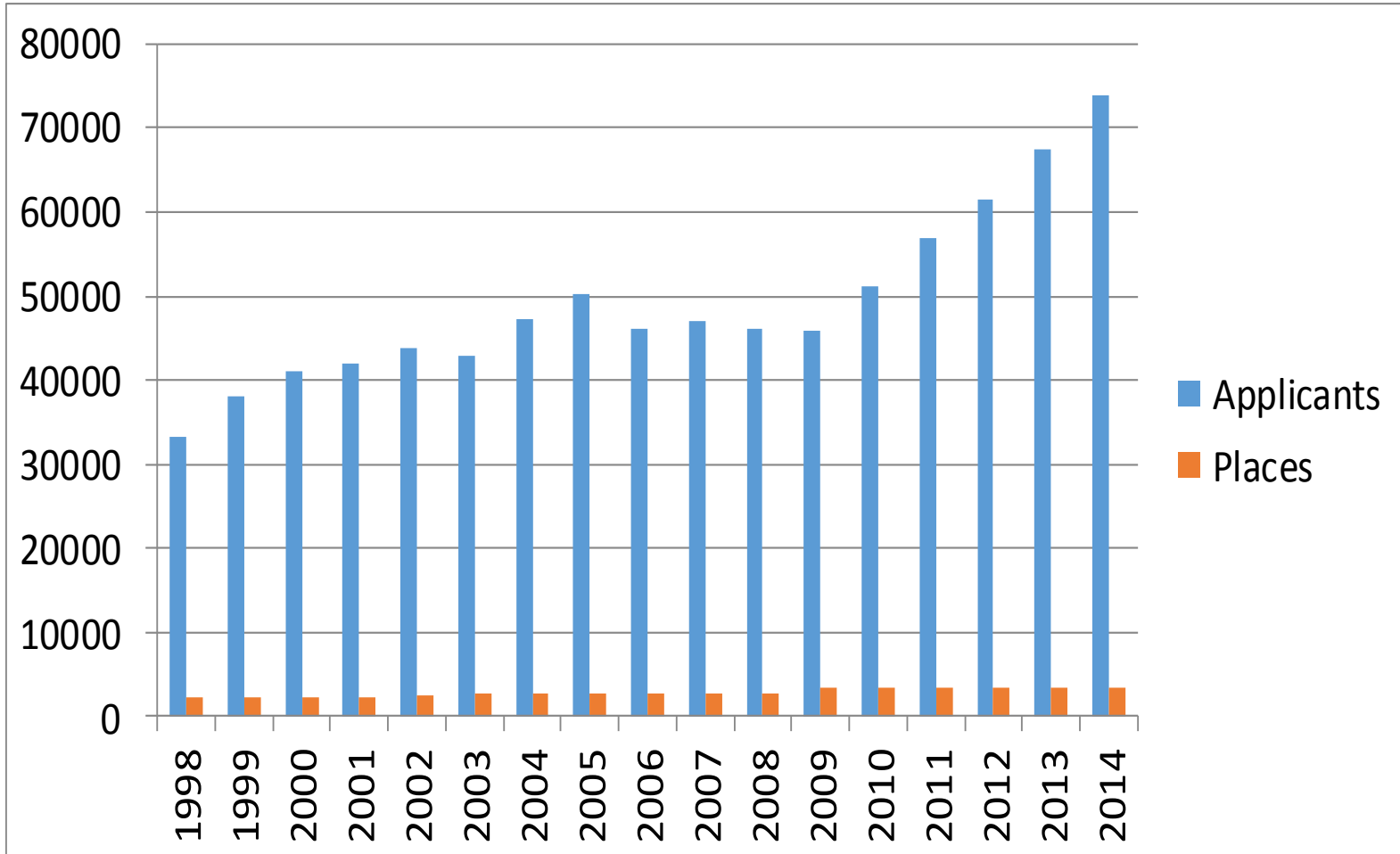
Student/Faculty rate  
 $16,059/1,800 = 8,9$





# UNDERGRADUATE PROGRAMS

# Undergraduate Access

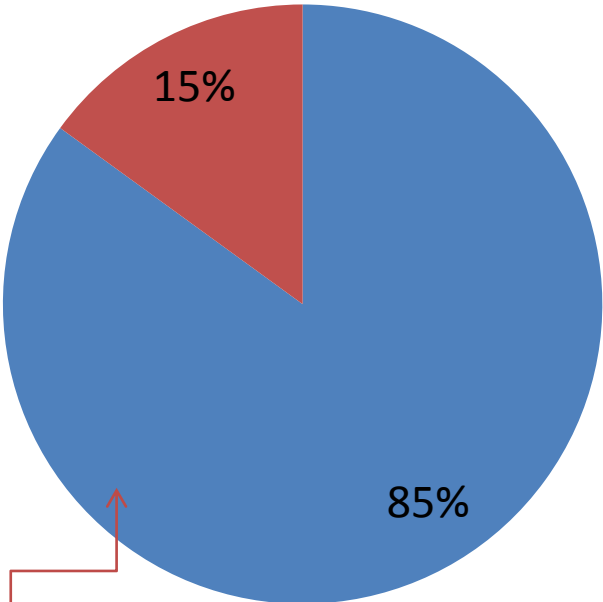


Vestibular

# Self-Exclusion?

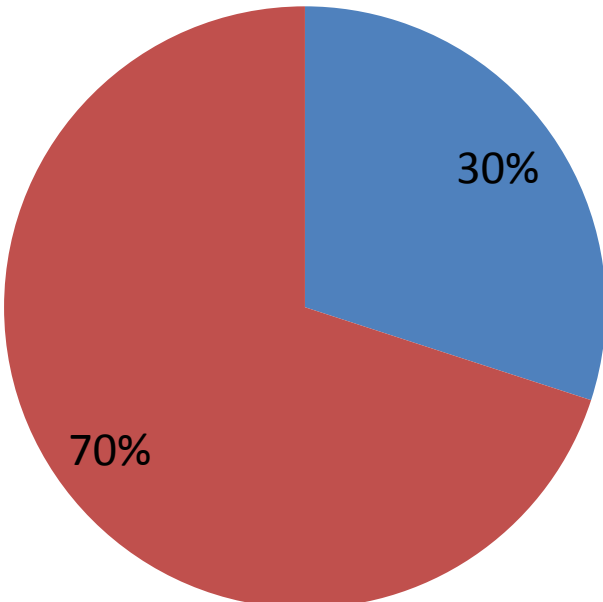
## High School Graduates

- Public Schools
- Private Schools



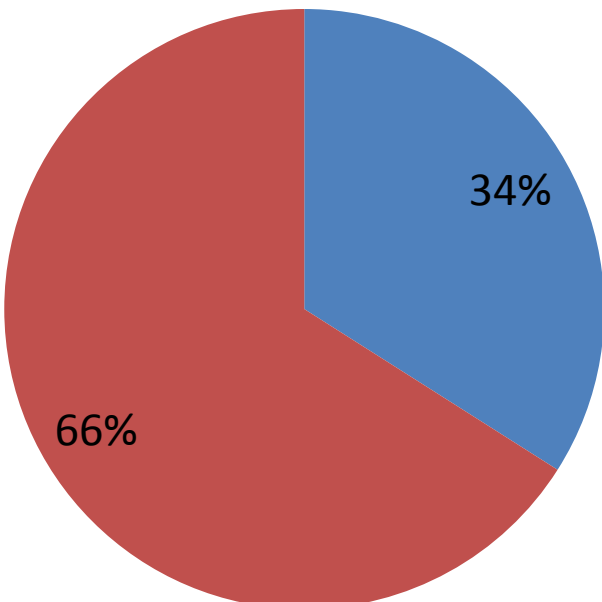
## Vestibular Applications

- Public Schools
- Private Schools



## Enrolled @ Unicamp

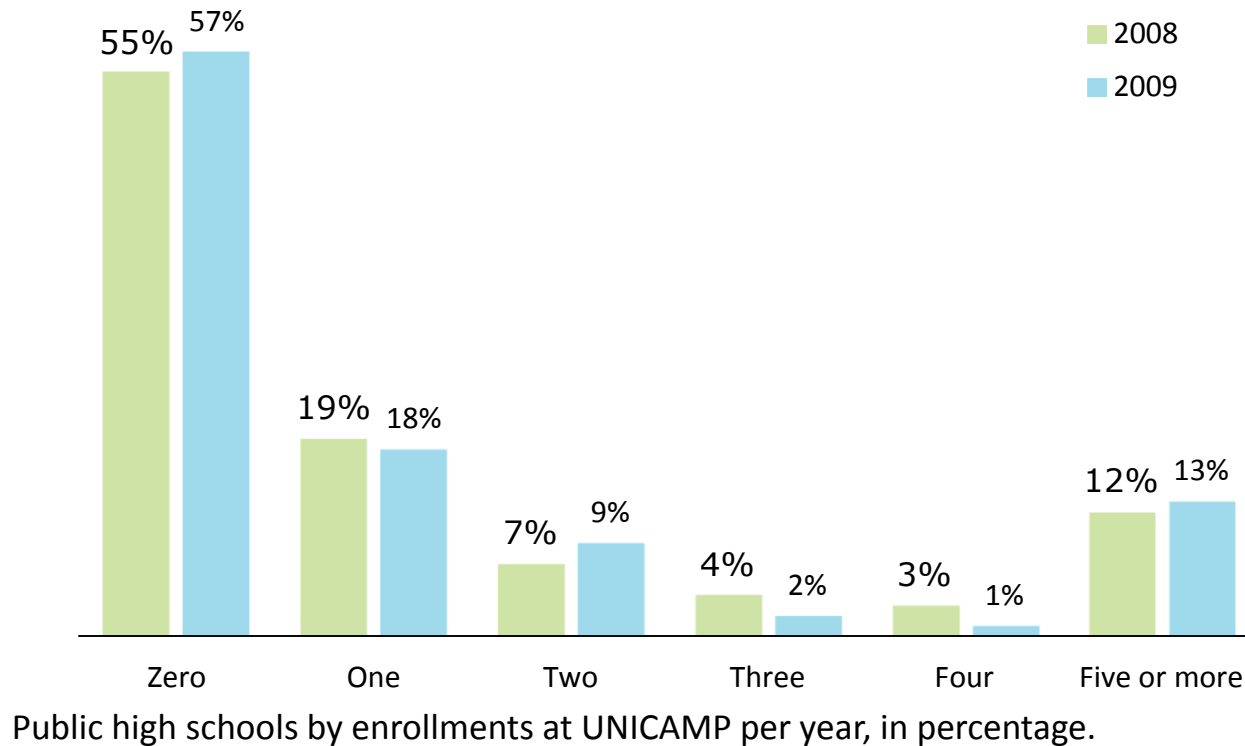
- Public Schools
- Private Schools



460,000 only in the state of SP

- PAAIS: Social inclusion at UNICAMP.
  - Affirmative action program that gives additional points as to increase the “vestibular” score of
    - Low income students from public high schools.
    - Black, mulatto and native Brazilian applicants.
  - Benefits around 30% of the university students.

# Public high schools and UNICAMP



- Even with the PAAIS, few UNICAMP students come from Campinas' public high schools (total of 96 high schools).

# The ProFIS

## Interdisciplinary Higher Education Program



# The ProFIS

- General education program.
- Restricted to graduate students from public high schools of Campinas.
- 2 year program.
- Aimed to
  - Increase the access of low-income and minority students to UNICAMP.
  - Give the students a broader education.
- Established in 2011, after 2 years of discussions. An initial working group studied several cases from USA, Europe and Asia, and they presented a conceptual project that was discussed within each school and department of the University. Each school presented ideas and criticisms, as well as possible courses to be given for ProFIS. Final document discussed in several central commissions prior to the final approval of the “senate” of the University.

## ProFIS goals.

- The ProFIS is aimed at developing student's skills, including
  - Critical analysis
  - Abstract reasoning.
  - Written and oral communication.
  - Knowledge of the natural world.
  - Teamwork and problem solving.
  - Quantitative and qualitative research.
  - Multiculturalism.



# Curriculum

- The ProFIS curriculum includes courses on
  - Language (reading and writing, English, literature)
  - Mathematics and statistics.
  - Humanities and arts (planet Earth, art and culture, history, economics, psychology).
  - Natural sciences (IT, environment, physics, chemistry).
  - Biological and health sciences (the human body, evolution, health promotion and quality of life, first aid, ethics and bioethics).
  - Academic research.

# Migration to other traditional professional degree

- After concluding the ProFIS, the student may enroll in another university undergraduate course, without taking the “vestibular”.
- Most UNICAMP programs reserved some vacancies exclusively for ProFIS students.
- The admission for these vacancies is based on merit, taking into account the students’ performance in the compulsory disciplines of the program.
- Important observation: this adds two more years of study to the degree program

# The ProFIS admission system

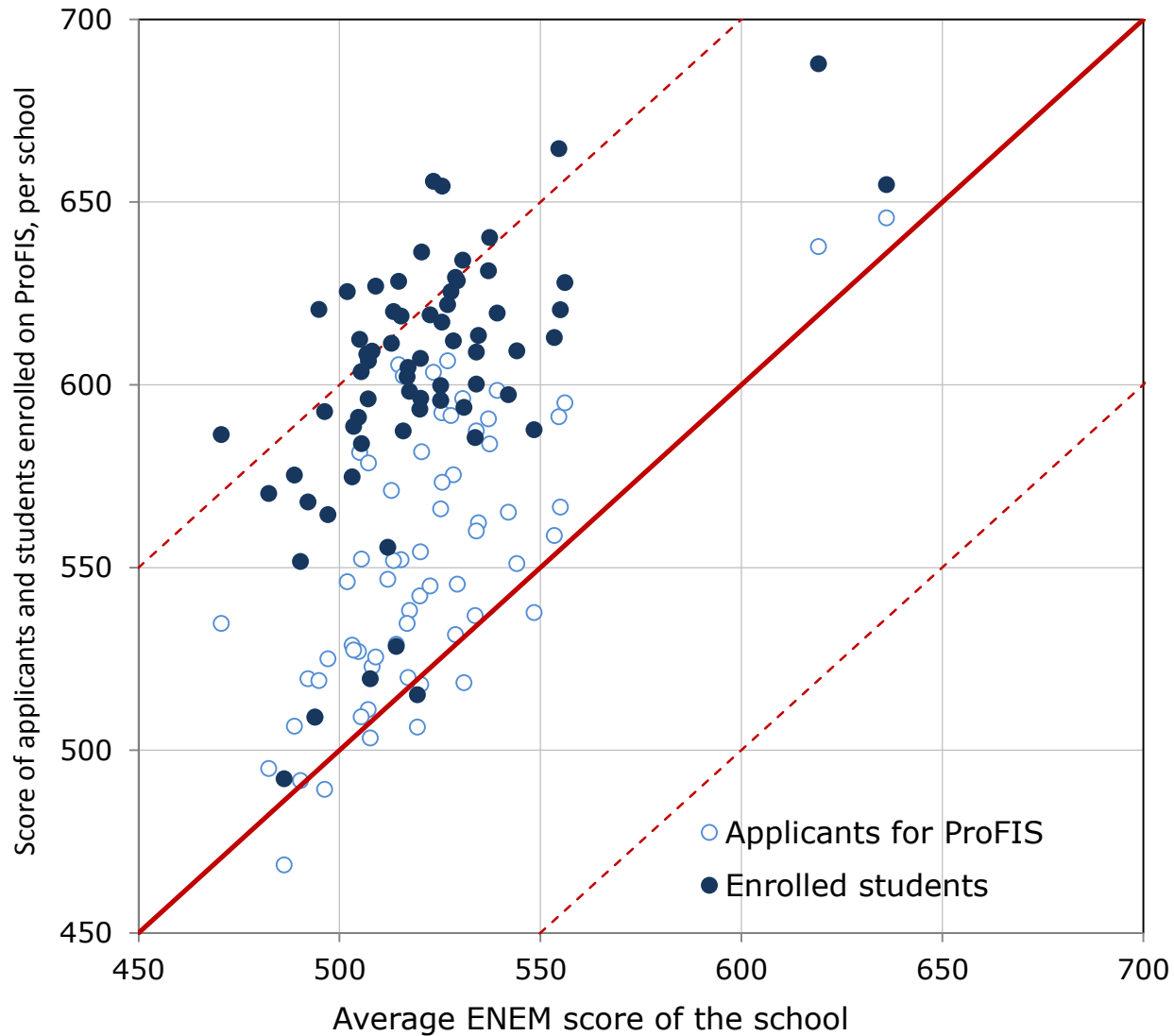


# Admission and social inclusion.

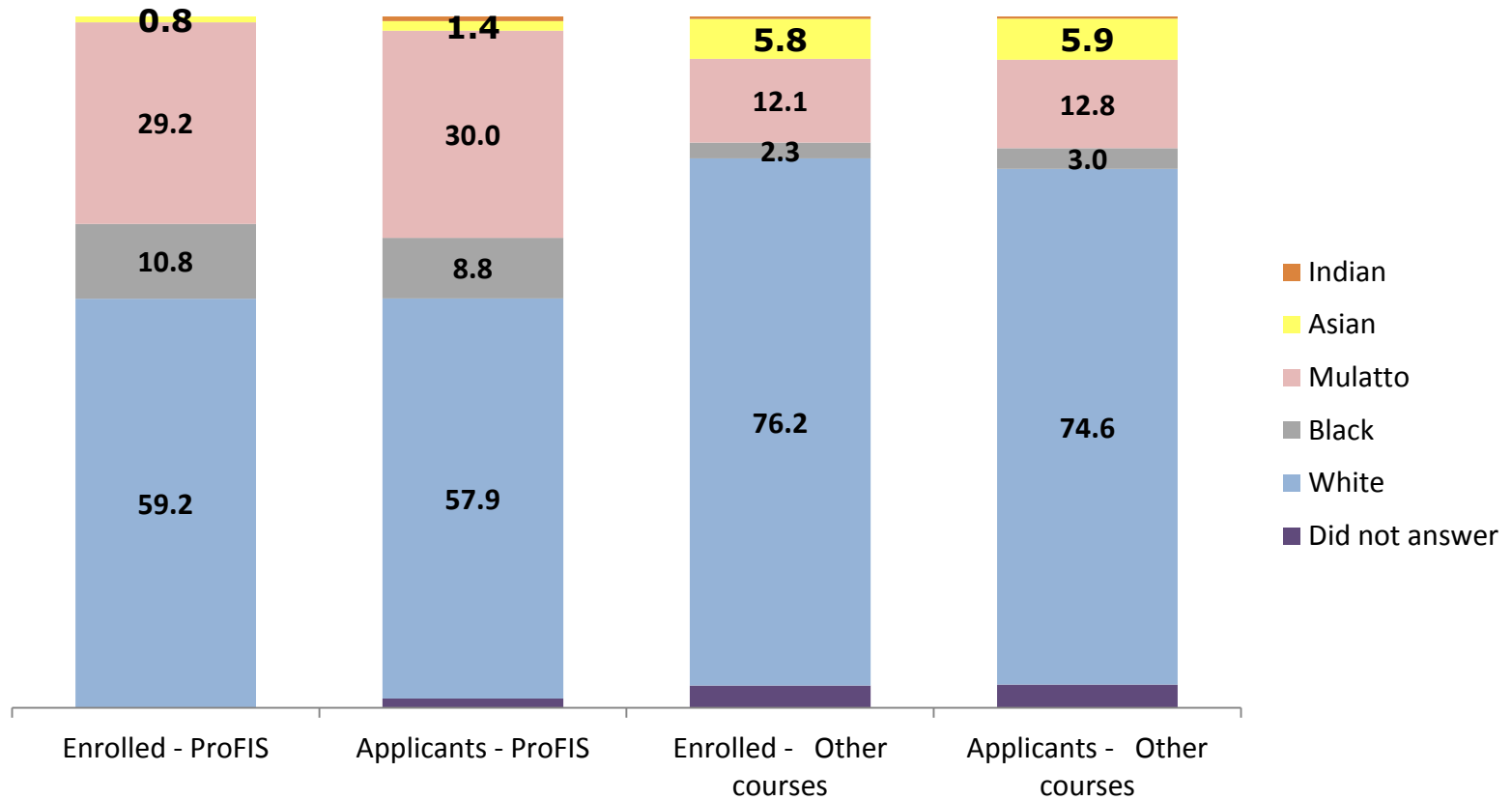
- The admission to ProFIS is based on the performance of the applicants on the Nationwide High School Exam (ENEM)
- To check the impact of the new program on the profile of the university undergraduate population, we analyze
  - The performance of the students on the ENEM test
  - The self-declared race of the students.
  - The household income of the students.
  - The instruction level of the parents.



# Average ENEM score, per school.



# Self declared race, in percentage.



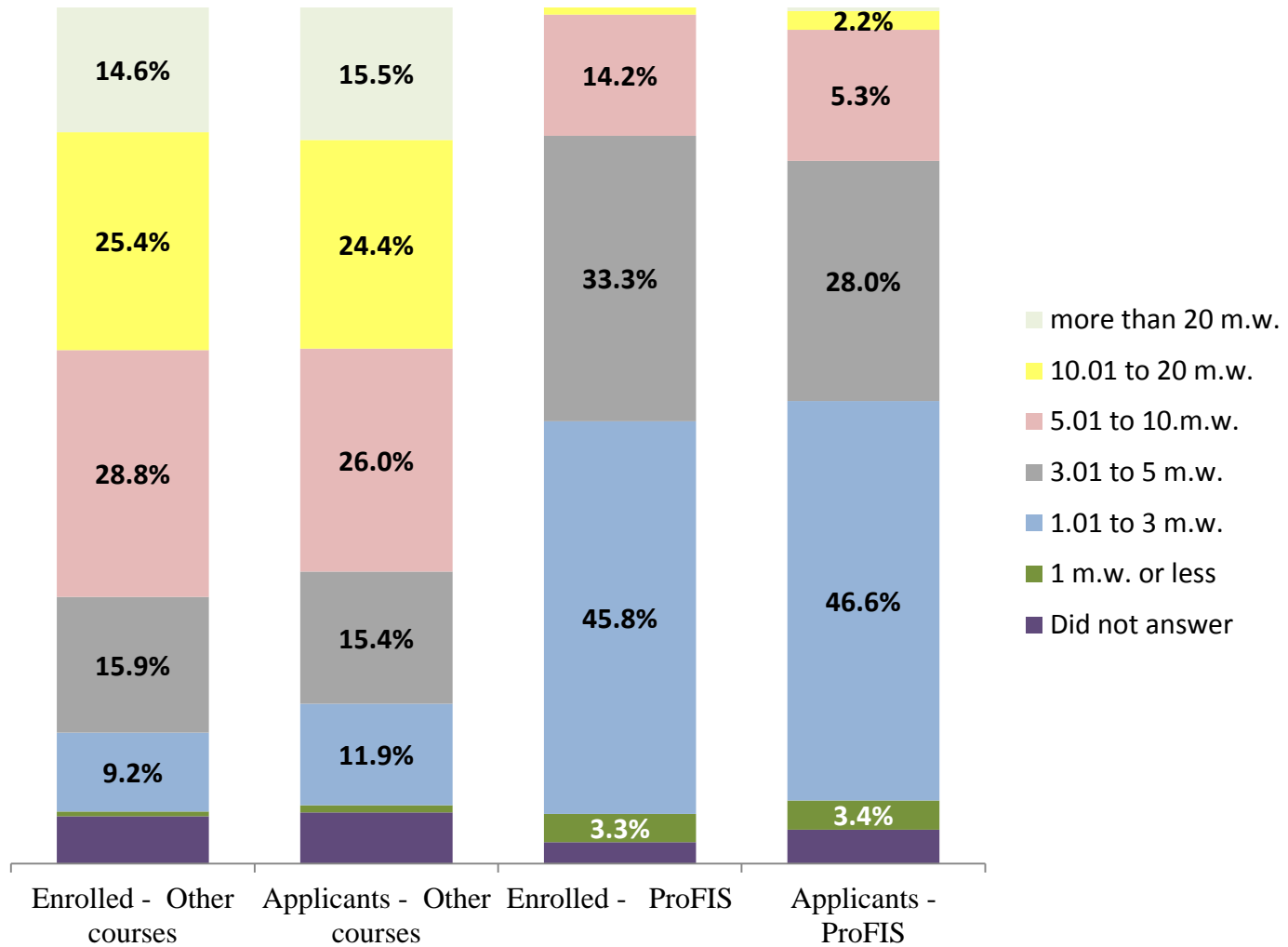
18-24 year old population.

- White+Asian: 64%
- Black+Mulatto+Indian: 36%

Pop. with access to higher education:

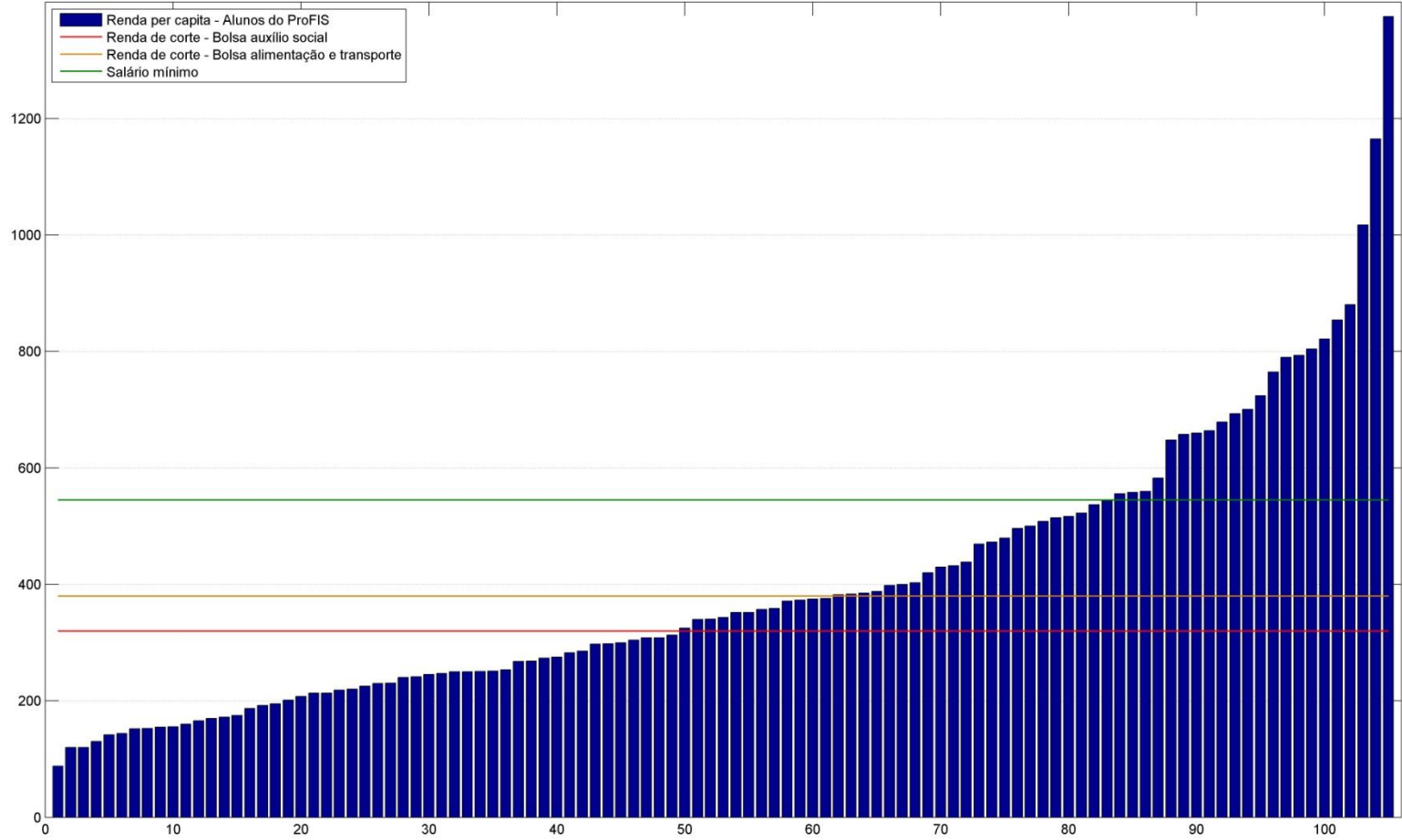
- White+Asian: 82%
- Black+Mulatto+Native Brazilian: 18%

# Household income

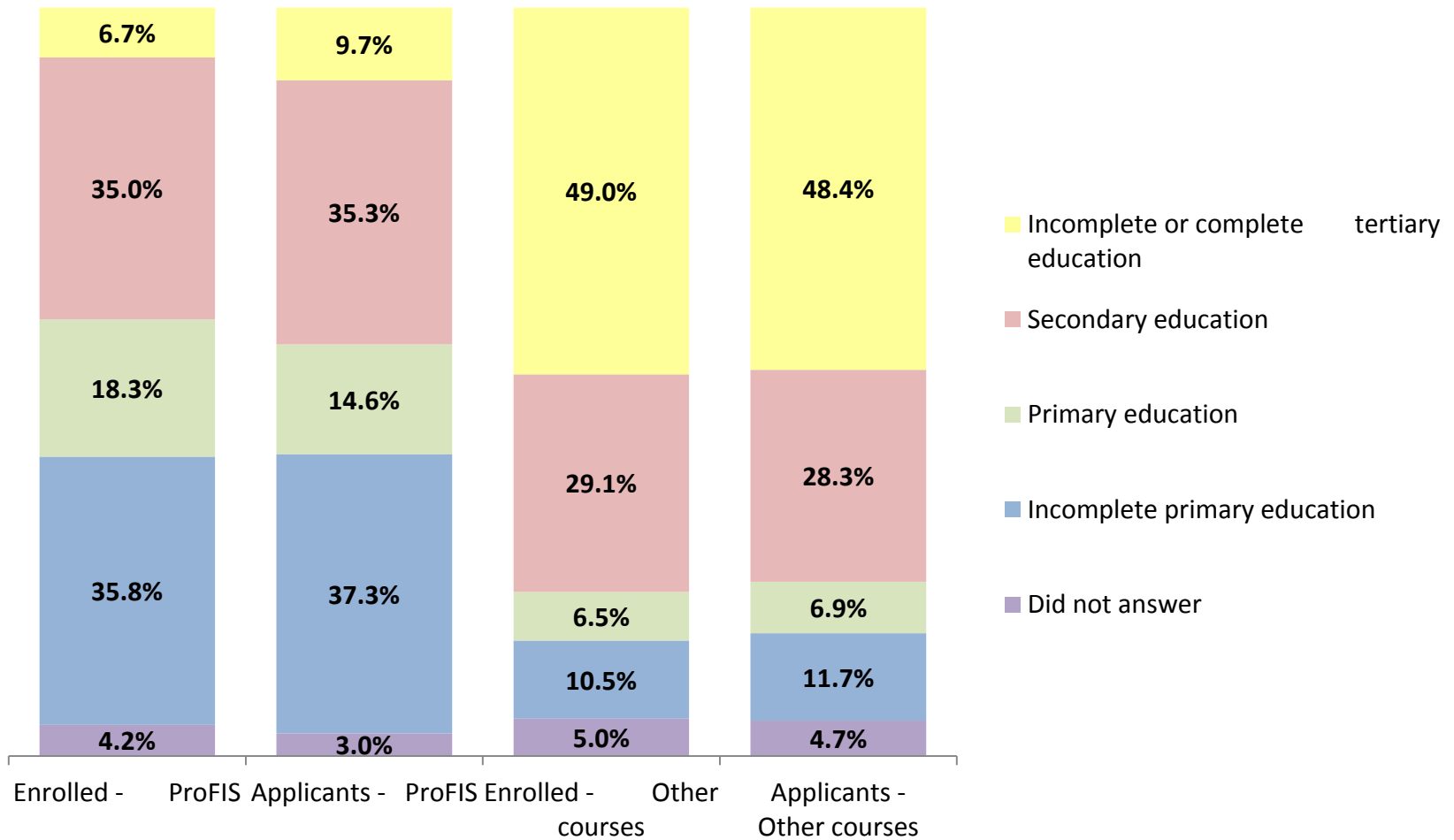




Seleção de bolsas do SAE



# Instruction level of the father, in %.



- First generation to enroll a higher education program: 86%.

# Student Success

- Special scholarships of **R\$ 625,00** per month were created. 60% have this fellowship, chosen by socioeconomic criteria. Other students with lower value scholarships.
- Food and Transport support for all ProFIS students.
- Social Assistants with continuous support.
- Full medical support, including psychological counselling.
- Several TAs helping on daily basis to support studying.
- Second year allows participation in research activities (with fellowships from federal government)



- Capa
  - Esporte
  - Entretenimento
  - Tv Correio
  - Blogs
  - Colunistas
  - Especiais
  - Motor
  - Turismo
- Campinas e RMC   Nacional   Mundo   Projetos Correio

ENSINO SUPERIOR

## Do DIC IV para as salas de aula da Unicamp

### Aluno de escola pública em bairro carente, Gabriel Alexandre vai cursar medicina na universidade

22/01/2014 - 11h51 | Inaê Miranda  
inae.miranda@rac.com.br

✓ Recomendar 395 Tweet 0 +1 0

Foto: Divulgação



O futuro médico Gabriel com sua mãe, Valéria: "Estamos anestesiados. Acompanhamos de pertinho a transferência dele. Gostamos muito dele, mas não podemos..."

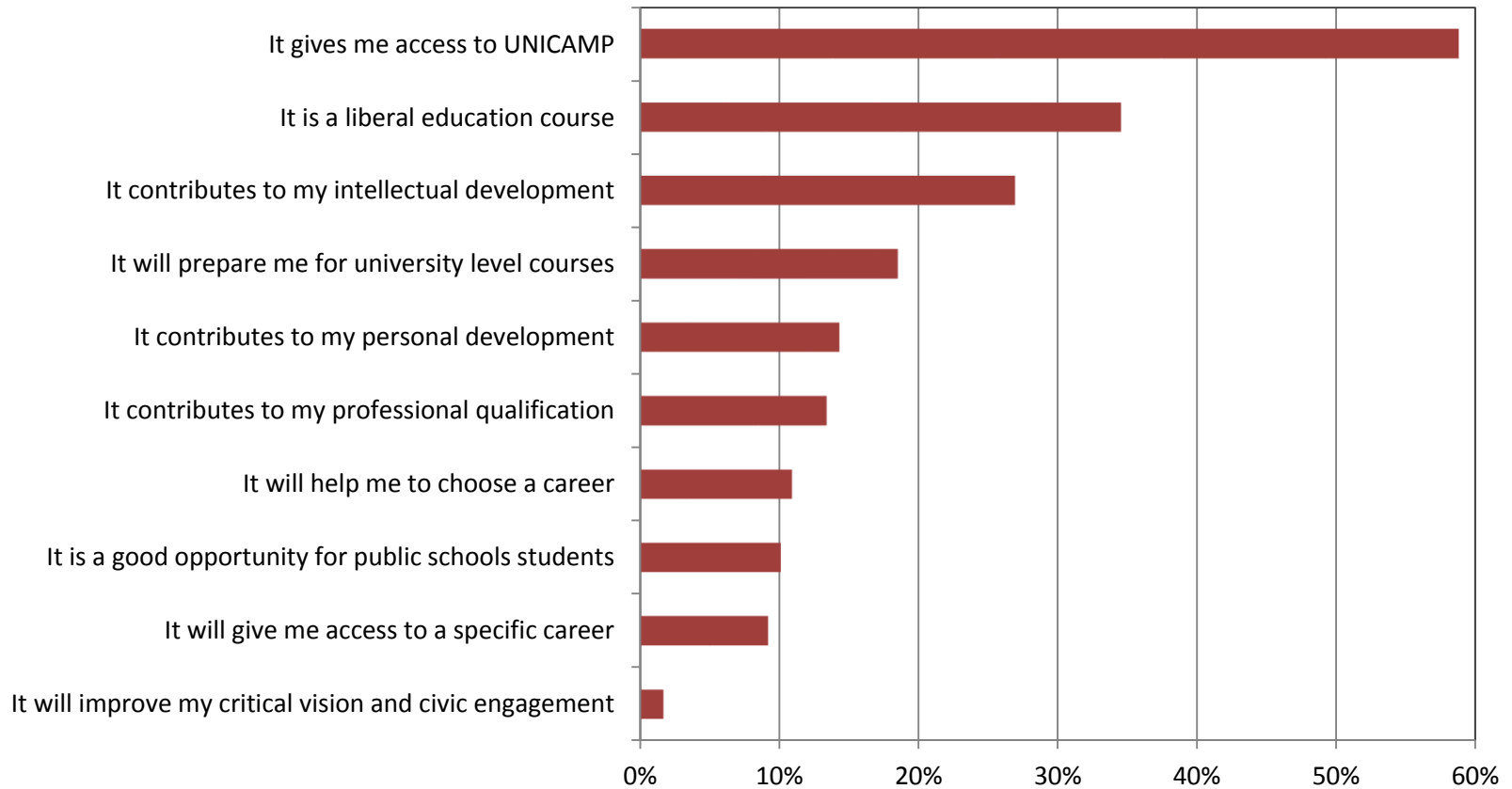
# Challenges

- The final shape of the program is a kind of hybrid between a “college” model (new in Brazil) and a traditional professional degree.
  - This adds two years to any traditional degree!
  - The program is new, and nobody knows or understand it (family, potential employers, students).
  - It competes with other social inclusion initiatives from the federal government (Prouni).
  - It does not fit in any practical procedure (census, accreditation, assessment, tests, etc...)
- New profile of students at Unicamp.
  - Public schools (fundamental level) deliver a disastrous education!
  - PISA 2009 data in Math show that Brazil has 89% below level 2 and 8% on level 3, 3% in 5, 0.7 in 5 and 0.1% in 6. In levels 5 and 6: 0,8% of 3.200.000, 25.600 students all over Brazil.
  - Competition with the work market (even with scholarships).

# Challenges

- New culture of general education.
  - Faculty members and other University students don't fully get the idea.
  - Difficulty to introduce a multidisciplinary approach.
  - Faculty workload.
  - Proper infrastructure.
  - Inter-institutional approach.
- Future unknown. Recognition from the market?
  - Lack of culture of General Education in Brazil.
  - Rigidity of Curricula and entrance exams (public jobs).
  - Strength of professional careers, councils and associations (CREA, OAB, CRM, etc..)

# Motivation for enrolling on ProFIS.



# Perspectives

- ProFIS is an ongoing project, which is being continuously evaluated.
- It represents a new model and a paradigm in Brazilian Higher Education, that in principle could be adapted in other universities.
- It is a further step towards diversification of HE in Brazil, and it promotes Social Inclusion keeping the merit.

Thank you!

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