

**eSkills Summit 2010**



**Panel Discussion**  
**Skills Surveys in the ICT Sector**

**Input from**  
**Prof. Barry Dwolatzky**  
**Director JCSE at Wits University**

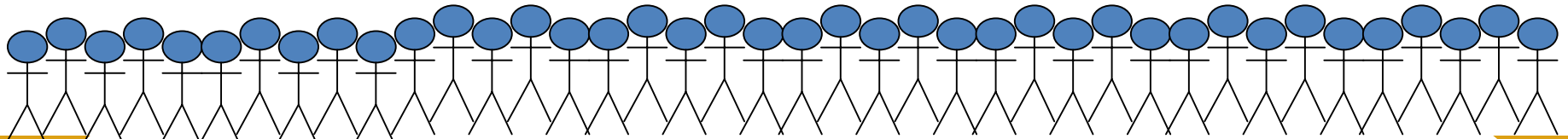
# Surveys show ...

- We need more skills in certain categories:
  - Architects
  - Project managers
  - “Expert” developers
  - Process experts
  - etc.
- South African IT staff are required to fill a large number of roles
- **Conclusion: we need more graduates from ICT-related disciplines, eg. Engineering, Comp. Sci., Info. Sys.**

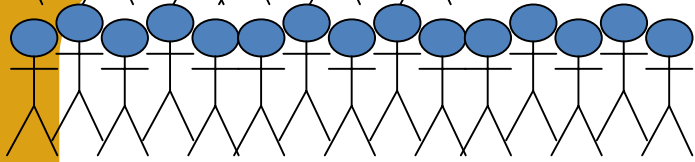
# Solutions - 1

- Train more graduates
- **What factors limit the number of graduates?**
  - Number of suitably qualified school leavers

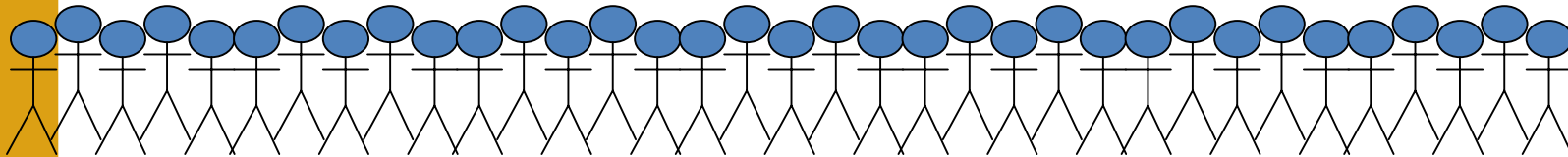
# The sausage machine: 2007



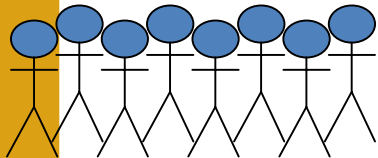
2007: 564,744 matric candidates



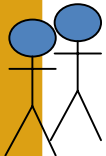
368,217 passed matric



85,454 passed with endorsement



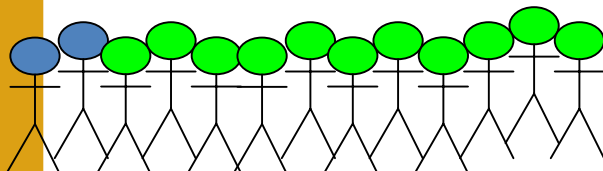
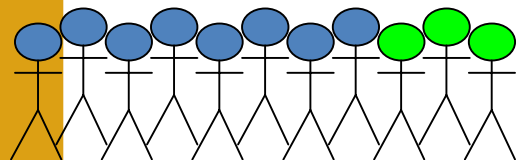
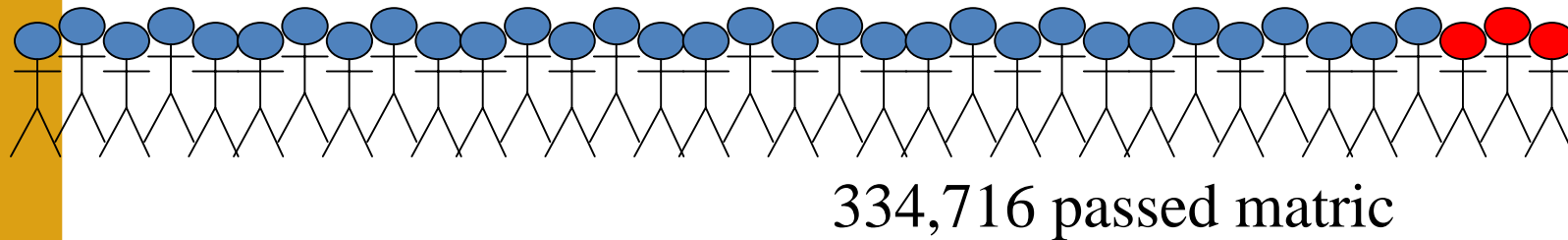
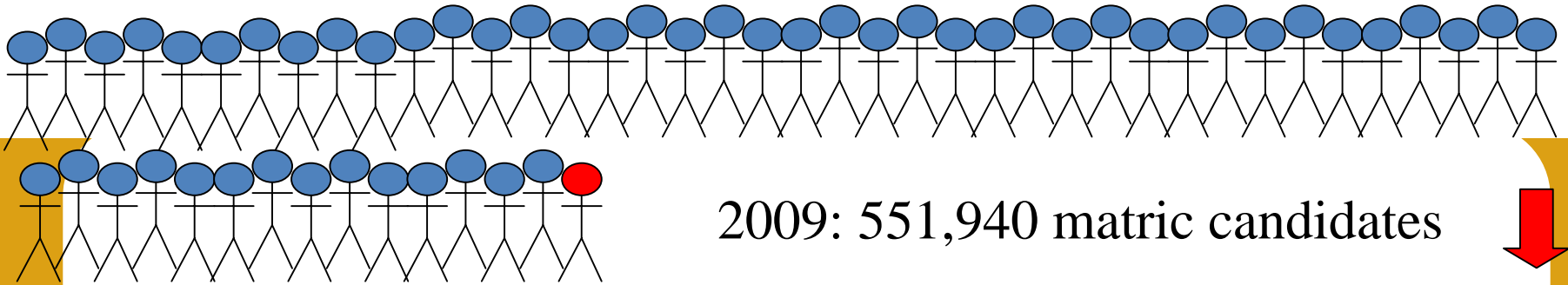
25,415 passed Maths HG



28,122 passed Science HG

Less than 8,000 received high enough marks to enter science or engineering degree programs

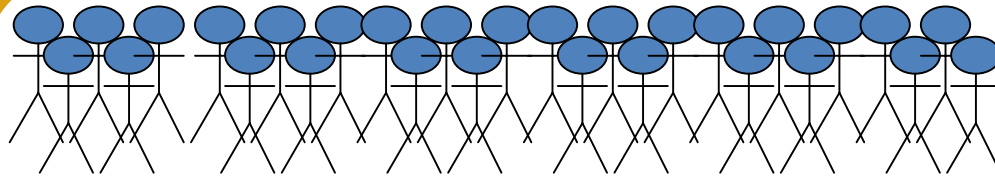
# The sausage machine: 2009



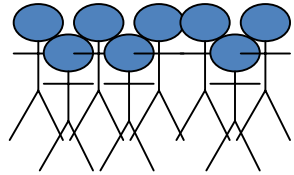
> 60% is required in maths and science to enter science or engineering degree programs

# The sausage machine: 2009

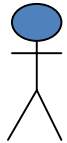
## Physical Science



220,882 wrote



81,356 “passed”  
[>30 %]



10,258 “university”  
[>60 %]

# Solutions - 1

- Train more graduates
- **What factors limit the number of graduates?**
  - Number of suitably qualified school leavers
  - Capacity of Universities
  - Appropriateness of university curricula

# Solutions - 2

- Alternative routes to developing “graduate-level” skills
- **Can you suggest any?**
  - **Upskill ICT professionals already in the workforce**
    - JCSE’s “CPD” programme
    - Master classes
    - Short course
    - **Strategic partnership with world class institutions**
      - JCSE’s links with Carnegie Mellon Univ (USA)



# Crucial Ingredient

- PARTNERSHIP between
  - University
  - Industry
  - ICT professionals
  - Government