



The Intent of Mobility of students from Marrakech University

GDR DREEM Conference

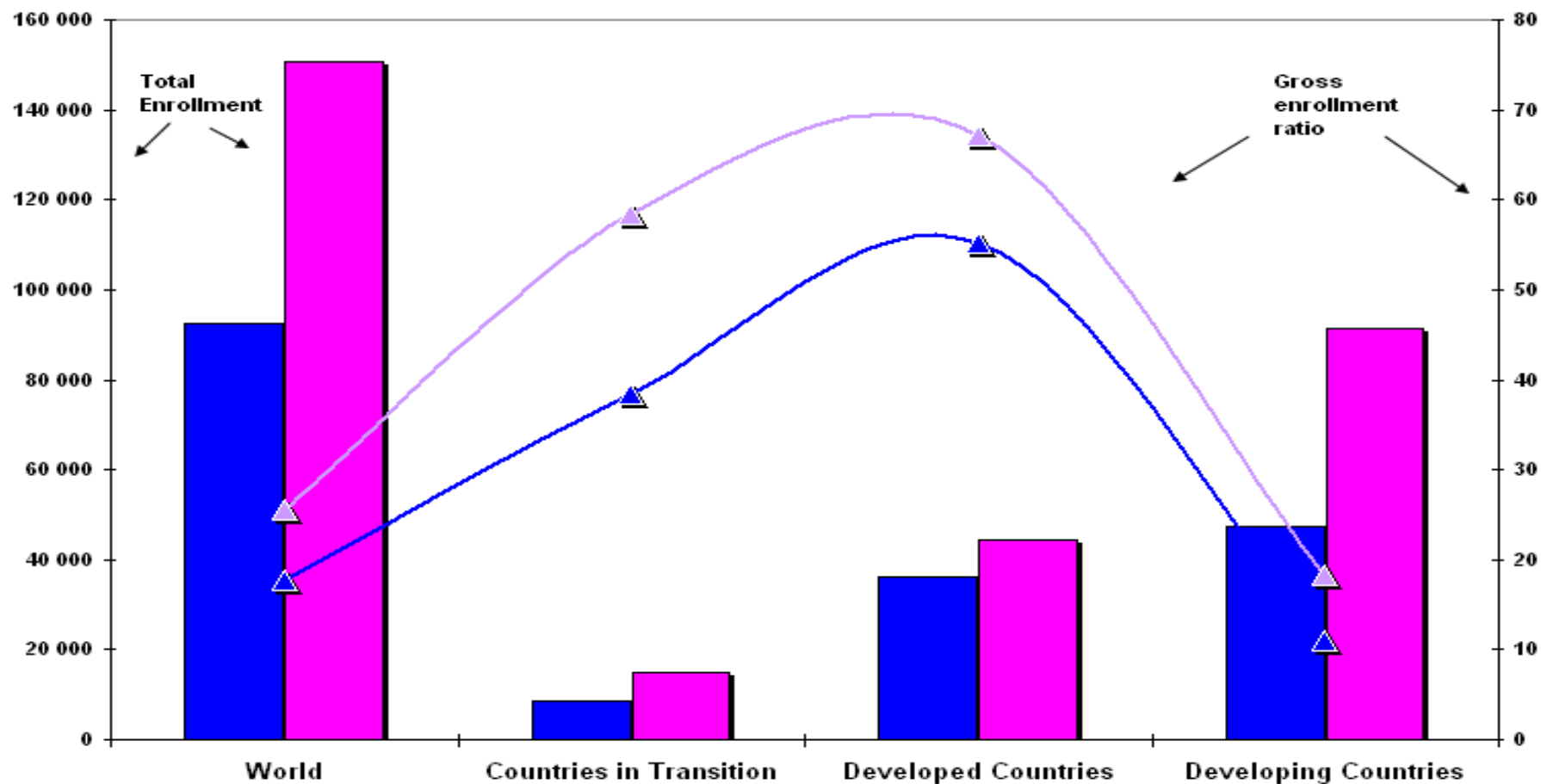
Innovation and Development in the Mediterranean Countries

DUBOIS Thomas

Institut National d'Études Démographiques (INED)

**With the scientific collaboration of Aomar Ibourk (Cadi Ayyad University, Morocco)
and Amine Chamkhi (EHESS, France)**

Demand for Higher Education is growing



Data from the survey



• Analyze the formation of the mobility project

- ➔ What is the role of International Mobility in the students trajectories (Department, Achievement) ?
- ➔ Why Science Students are more likely to go ?

• Methodology

- ➔ Survey at the University 'Cadi Ayyad' of Marrakech (stratified by department and level : sampling rate 50%)
- ➔ Bilingual Electronic Questionnaire (approximately 2000 questionnaires, subsample of 1317 individuals – complete responses ~ dropout problem)
- ➔ 5 themes (350 variables-including trajectories for each education level) :
 - ➔ Student characteristics,
 - ➔ Academic path,
 - ➔ Intentions,
 - ➔ Entourage,
 - ➔ Evaluation of the Context of Higher Education



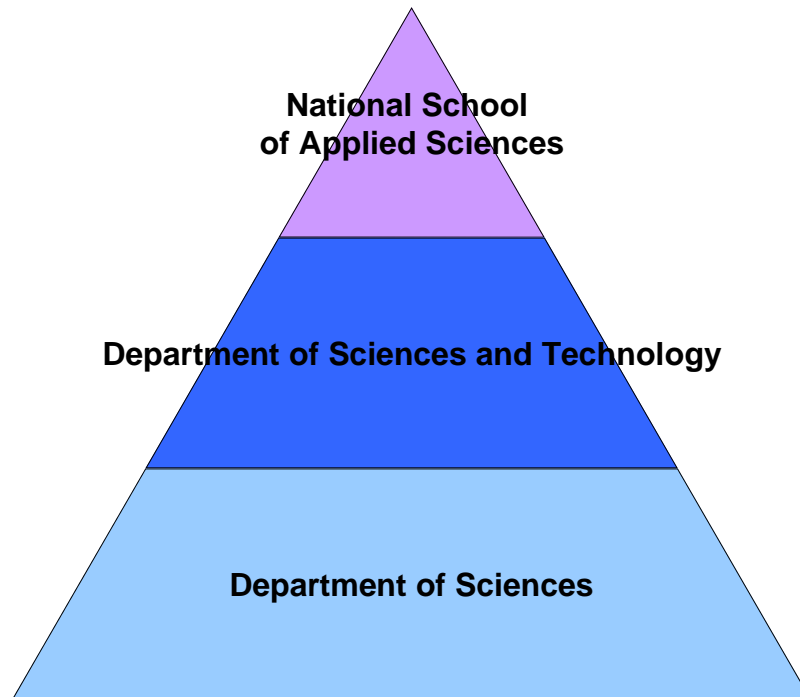
Measuring Intentions : from the macro to micro scale

- Contextual factors in the process of migration decision :
 - Push & Pull Factors
 - Stay or move decision

- With an increased mobility it becomes more difficult to predict migration flows
 - Theory of Planned Behavior
 - Intentions are a good predictor of migration, as opportunities arise or not ...

Relative position of Trainings within the System Stratification

Selection



2 National Schools

Science and Technology

Medecine and Pharmacy

Art and Humanities

Laws and economics

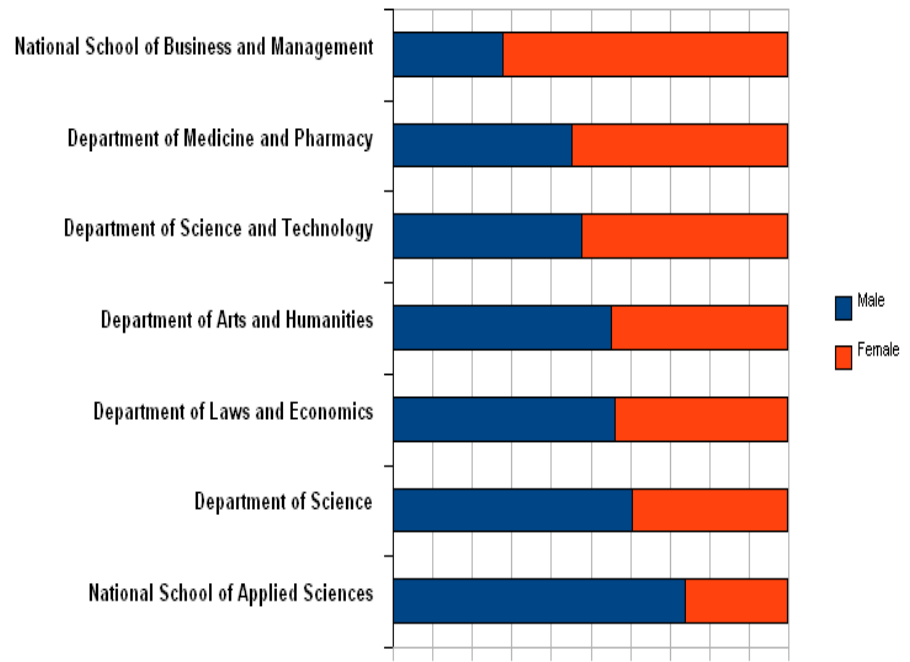
Sciences

No Selection

Stratification of Higher Education System of Morocco

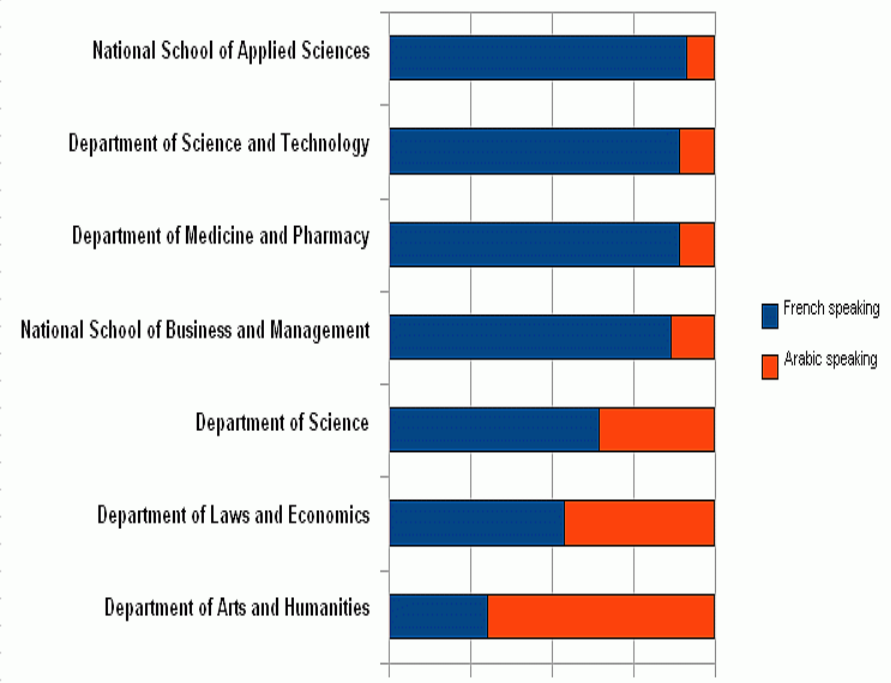
Sex by Department of current enrollment

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



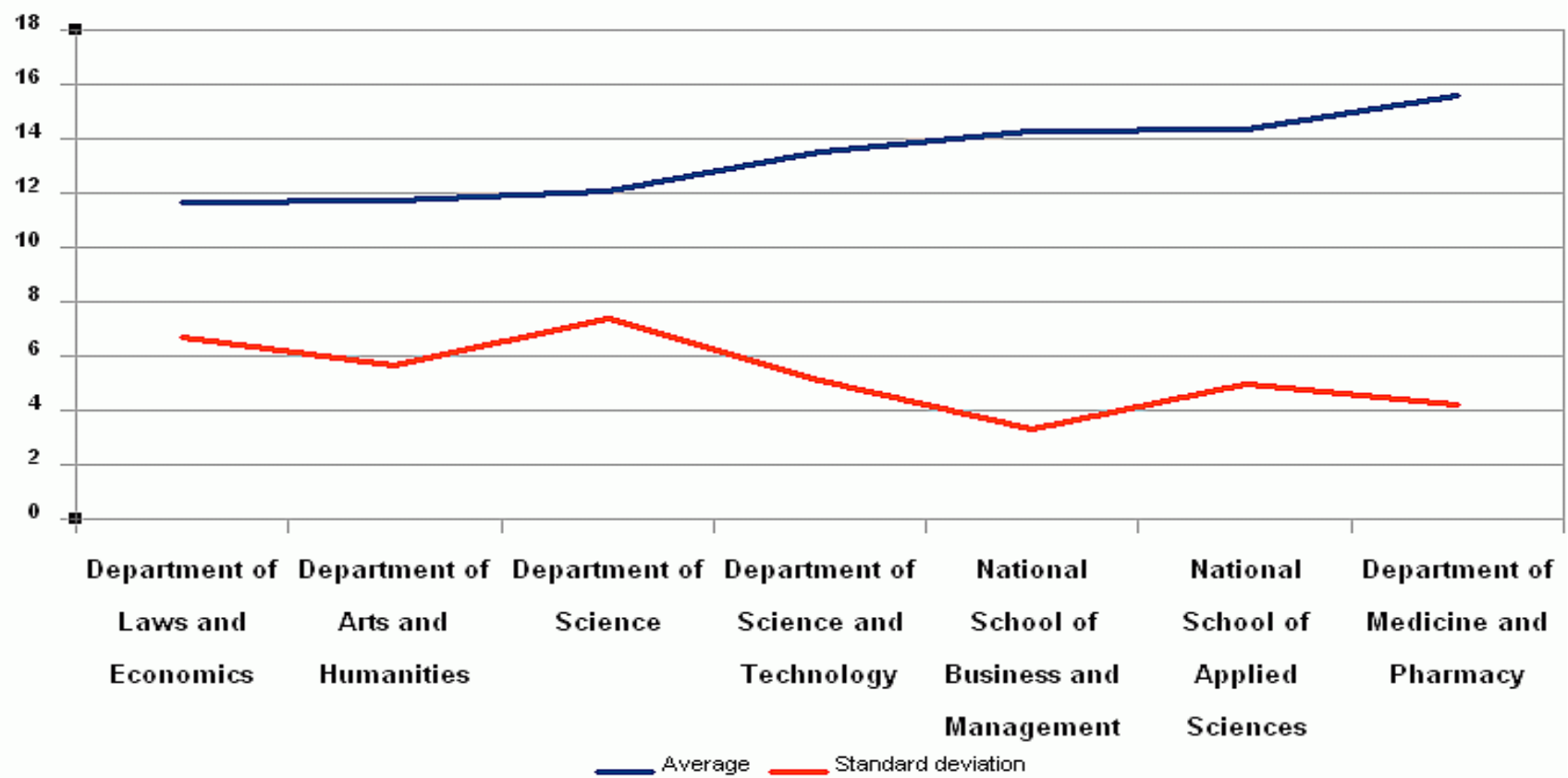
Language by Department of current enrollment

0% 25% 50% 75% 100%



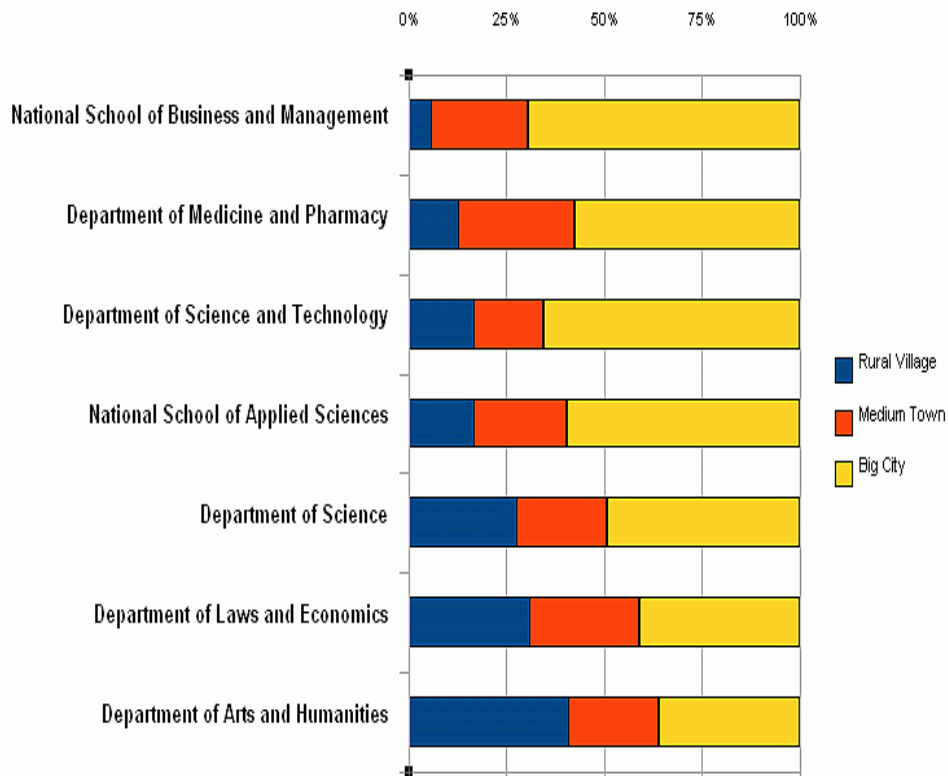
Stratification of Higher Education System of Morocco

Final Average Baccalauréat by Department of current enrollment

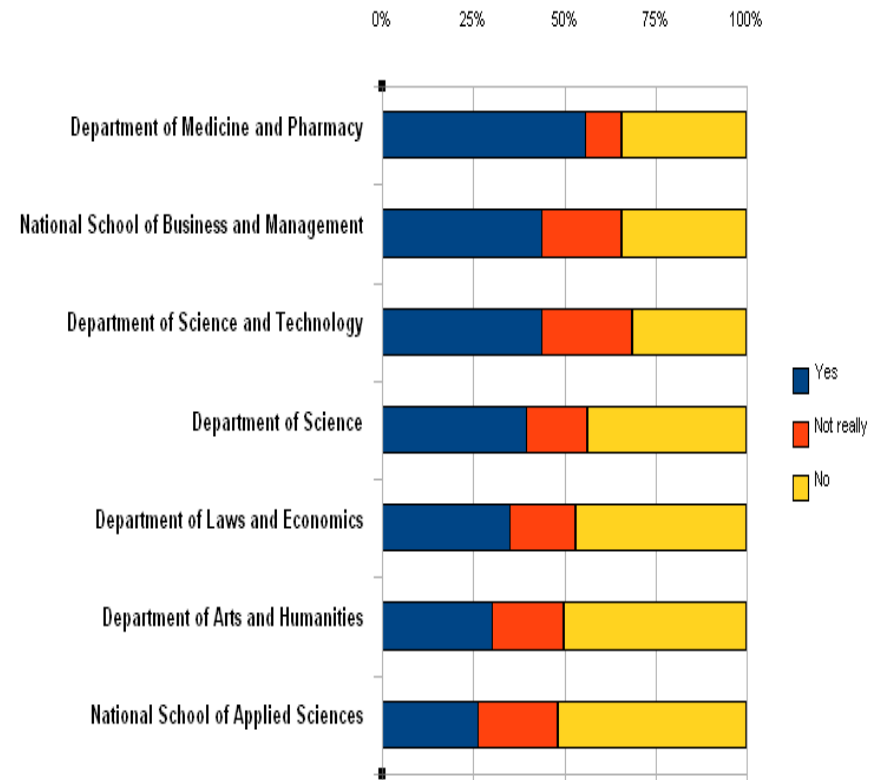


Social and Educational characteristics

Area of Birth by Department of current enrollment

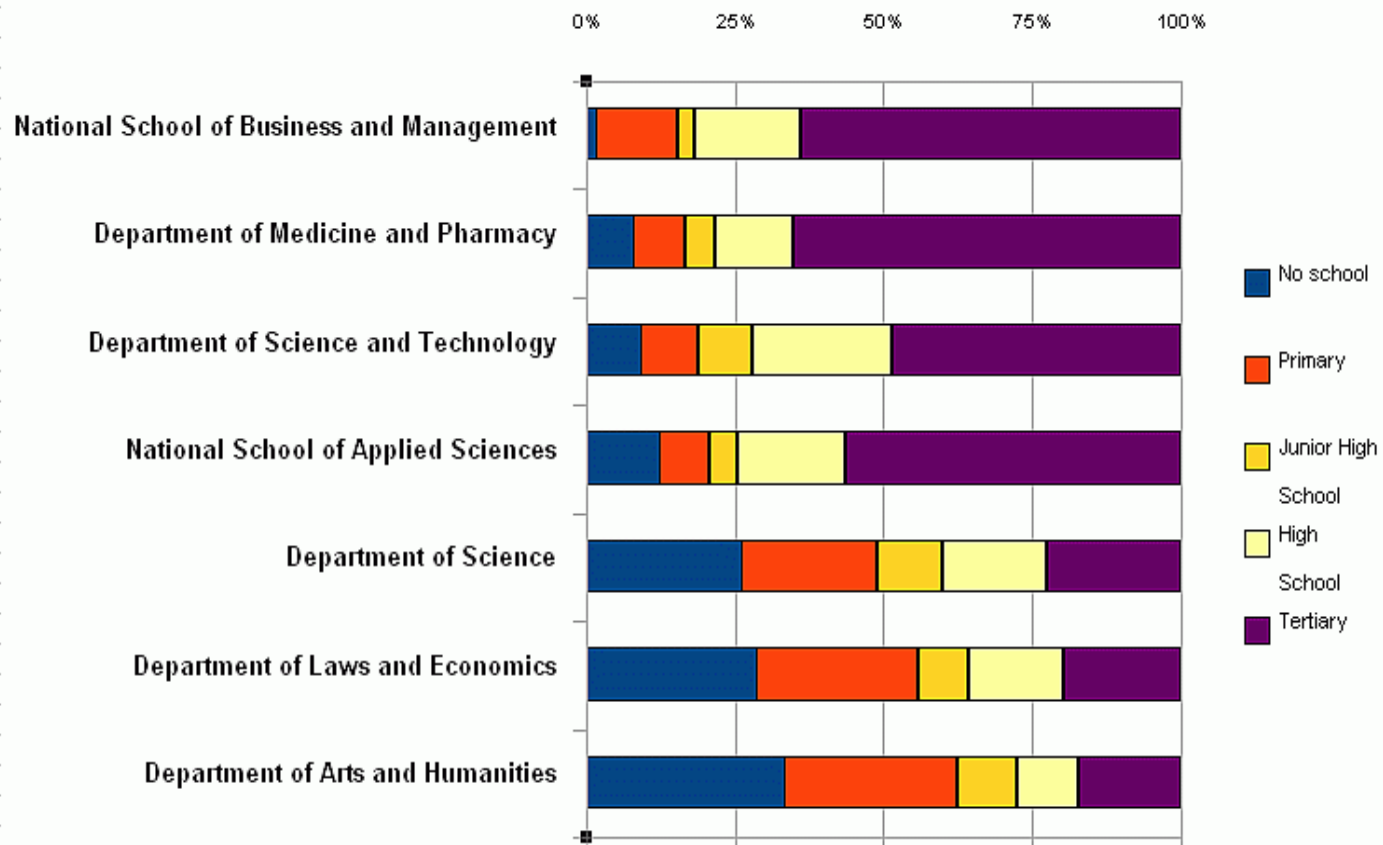


Mother's Litteracy Level by Department of current enrollment



Social and Educational characteristics

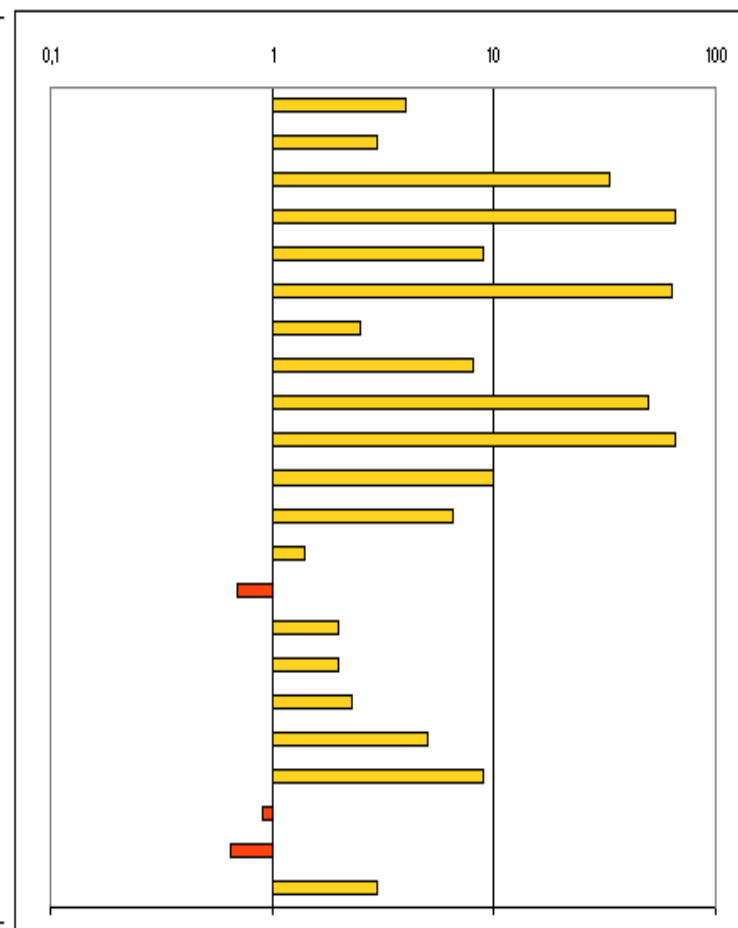
Father's Educational Level by Department of current enrollment



Be enrolled in a Selective Department

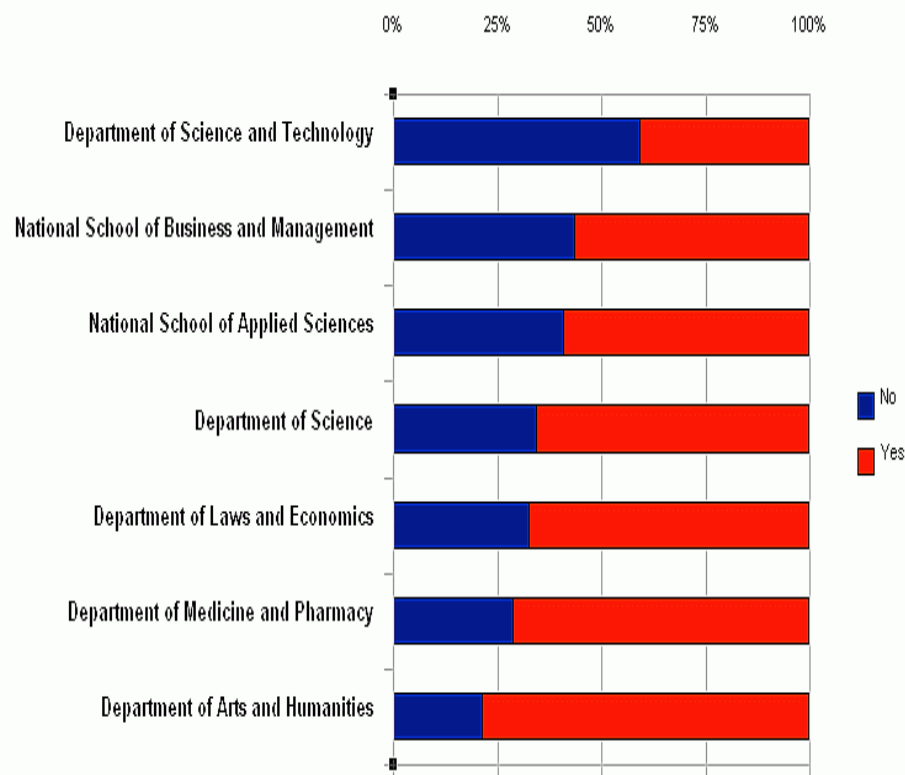
Model 1

PARAMETER	REFERENCE	EFFECT	COEFF	PR>KHI2	odd RATIO
Intercept			-12	***	
Language	Arabic	French	1,1	**	4
Region of origin	Marrakech	Other	0,7	**	3
Type of Baccalauréat	Litterature	Experimental Sciences	3,2	***	33
		Mathematical Sciences	3,9	***	66
		Economics	2,3	**	9
		Technical and Vocational	3,9	***	64
Change Training	No	Yes	0,4		2,5
Final average Baccalauréat	Medium	Pretty Good	1,9	***	8
		Good	3,5	***	50
		Very Good	3,9	***	66
Interruption Graduate	Yes	No	2,3	**	10
Currently holds a professional Activity	Yes	No	1,6	**	6,5
Parental Financing	No	Yes	0,3		1,4
Mother's Activity	Unemployed	Employer or Self-employed	-0,6		0,7
		Employee	0,5	*	2
Father's Education level	None	Primary	0,5		2
		Secondary-1st Level	1,0	*	2,3
		Secondary-2nd Level	1,2	*	5
		Tertiary	2,0	***	9
Number of Siblings			-0,1	**	0,9
Current Training is the 1st choice	Yes	No	-0,8	**	0,65
Better Training that the current	Yes	No	0,8	**	3

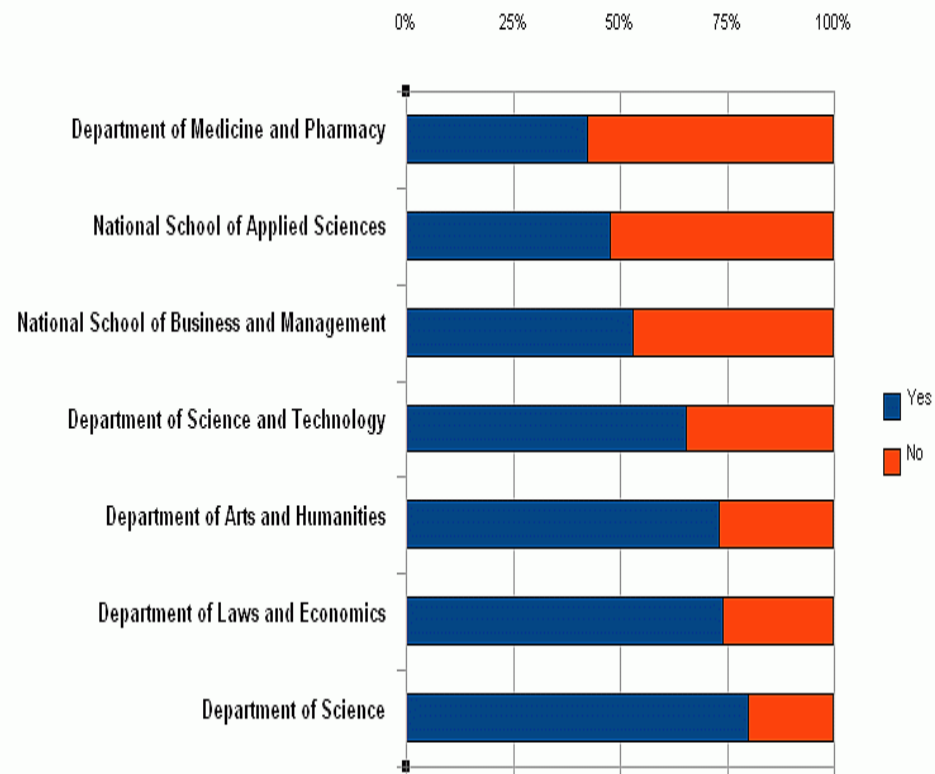


The Trajectories & Opportunities Dialectic : A Supply Assessment

Current Training is the first Choice by Department of current enrollment

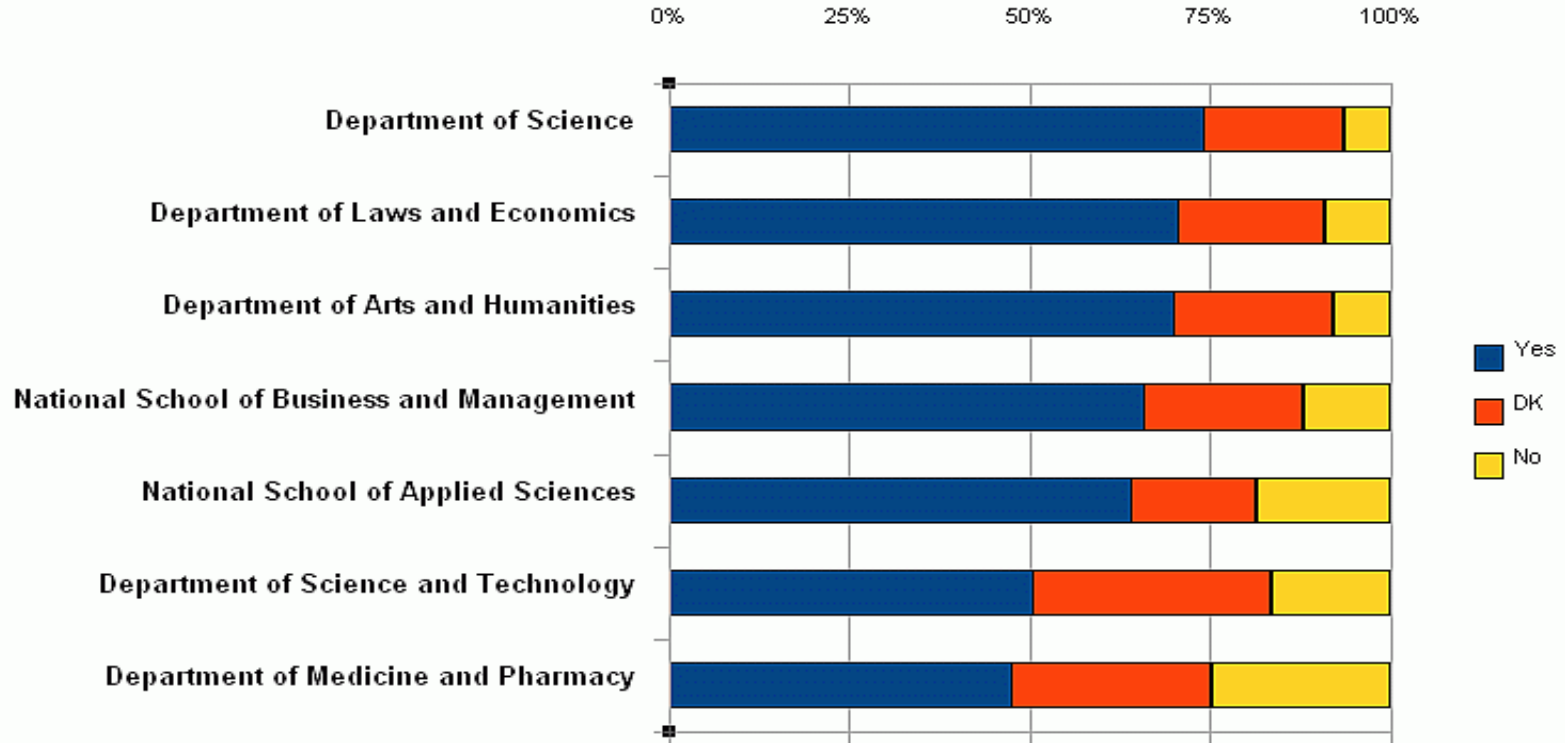


Better Career Opportunities within another Institution of Tertiary Education by Department of current enrollment



The Trajectories & Opportunities Dialectic : A Supply Assessment

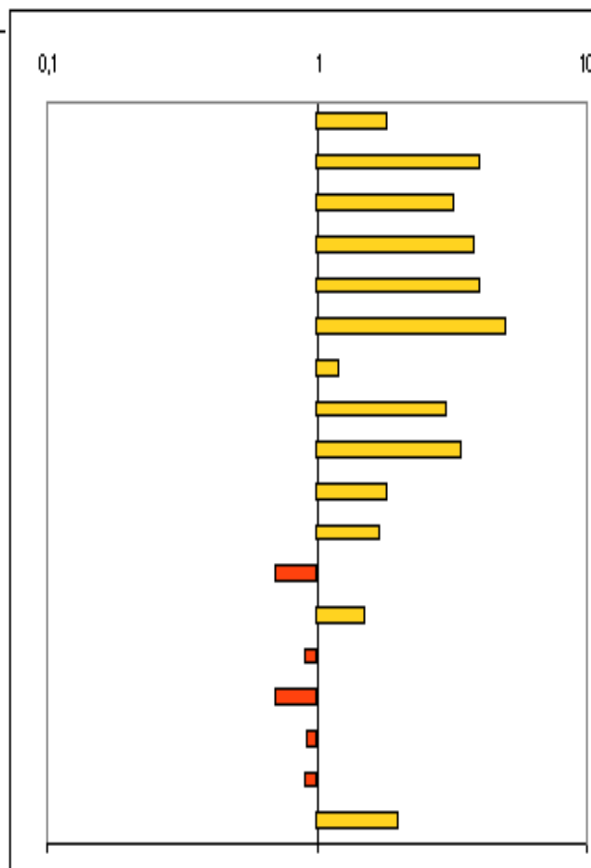
Current Intention to Study Abroad by Department of current enrollment



The selection effect in the intention to Study Abroad

Model 2

PARAMETER	REFERENCE	EFFECT	COEFF	PR>KHI ODD RATIO
Intercept			-1,4 ***	
Language	Arabic	French	0,5 ***	1,8
Departement of current enrollement	Department of Medicine and Pharmacy	National School of Business and Management	1 **	4
		National School of Applied Sciences	0,8 *	3,2
		Department of Arts and Humanities	0,9 **	3,8
		Department of Laws and Economics	1 ***	4
		Department of Science	1,3 ***	5
		Department of Science and Technology	0,1 n.s.	1,2
Sex	Female	Male	0,6 ***	3
Type of Baccalauréat	Mathematical Sciences	Litterature	0,9 **	3,4
		Experimental Sciences	0,4 *	1,8
		Economics	0,4 n.s.	1,7
Application for registration (Other institution or Department)	No	Yes	0,3 **	1,5
		Technical and Vocational	-0,4 n.s.	0,7
Parental Financing	No	Yes	-0,3 **	0,9
		ISCED 6	-0,4 **	0,7
		ISCED 5A	-0,1 n.s.	0,92
Level of Education Expected	ISCED 6	ISCED 5B	-0,1 n.s.	0,92
		DK	-0,3 *	0,9
Better Training than current	Yes	No	0,5 ***	2



The composition effect in the intention to Study Abroad

PARAMETER	REFERENCE EFFECT		COEFF	PR>KH12
Intercept			-1,4	***
Language	Arabic	French	0,5	***
		National School of Business and Management	-1,9	**
		National School of Applied Sciences	0,6	-
		Department of Arts and Humanities	0,5	**
		Department of Laws and Economics	0,08	***
		Department of Science	1,9	***
		Department of Science and Technology	0,1	n.s.
Sex	Female	Male	0,6	***
		National School of Business and Management	0,44	n.s.
		National School of Applied Sciences	1,5	-
		Department of Arts and Humanities	0,7	**
		Department of Laws and Economics	0,6	**
		Department of Science	0,4	n.s.
		Department of Science and Technology	0,8	-
Final average Baccalauréat	Medium	Pretty Good	0,9	**
		National School of Business and Management	1,7	n.s.
		National School of Applied Sciences	-1,8	n.s.
		Department of Arts and Humanities	-0,2	n.s.
		Department of Laws and Economics	0,2	n.s.
		Department of Science	-0,7	n.s.
		Department of Science and Technology	-0,9	n.s.
		Good	0,4	-
		National School of Business and Management	1,6	n.s.
		National School of Applied Sciences	-1	n.s.
		Department of Arts and Humanities	0,3	n.s.
		Department of Laws and Economics	-0,1	n.s.
		Department of Science	1,7	**
		Department of Science and Technology	-1,3	-
		Very Good	0,4	n.s.
		National School of Business and Management	2,6	n.s.
		National School of Applied Sciences	-0,1	n.s.
		Department of Arts and Humanities	-0,1	n.s.
		Department of Laws and Economics	-0,5	n.s.
		Department of Science	0,1	n.s.
		Department of Science and Technology	-0,4	n.s.

The composition effect in the intention to Study Abroad

PARAMETER	REFEREN	EFFECT	COEFF	PR>KHI2
Application for registration (Other institution or Department)	No	Yes	0,3	**
		National School of Business and Managem	0,7	n.s.
		National School of Applied Sciences	-0,2	n.s.
		Department of Arts and Humanities	0,1	n.s.
		Department of Laws and Economics	0,6	**
		Department of Science	0,6	n.s.
Parental Financing	Yes	No	-0,3	**
		National School of Applied Sciences	-0,1	n.s.
		Department of Arts and Humanities	-0,5	n.s.
		Department of Laws and Economics	0,7	**
		Department of Science	0,8	***
		Department of Science and Technology	1,0	n.s.
Better Training than current	No	Yes	0,6	***
		National School of Applied Sciences	0,5	n.s.
		Department of Arts and Humanities	0,5	n.s.
		Department of Laws and Economics	-0,2	n.s.
		Department of Science	-0,4	**
		Department of Science and Technology	-0,5	n.s.
	Department of Science and Technology	0,1	n.s.	



Conclusion 1: Compensate for the lack of Supplies

- ❑ Over 60 % of students at the University of Marrakech declare an intention to study abroad
- ❑ 30% have taken steps for application
- ❑ A selection effect between the intent declaration and the migration (8.000 / year in France)
- ❑ The International Higher Education Supply addresses the lack of local provision



**Conclusion 2:
A Brain Circulation with a Brain Gain ?**

- ❑ International Supply has always been a challenge for the development of Higher Education Systems
- ❑ ISM as an incentive to continue his studies