A Survey of Extrinsic Means for Increased Audience Attention - Demographics and Statistics

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We have conducted a survey among university lecturers about their teaching style and means for increasing student's attention. In this article, we present some details on the participants' answers that we collected in 2016. In total, we had 73 participants.

For more details about the survey, please see the following publication: "How to throw Chocolate at Students: A Survey of Extrinsic Means for Increased Audience Attention". M. Cieliebak, A. Magid, and B. Pradarelli. EDUCON 2017.

Geographic Distribution

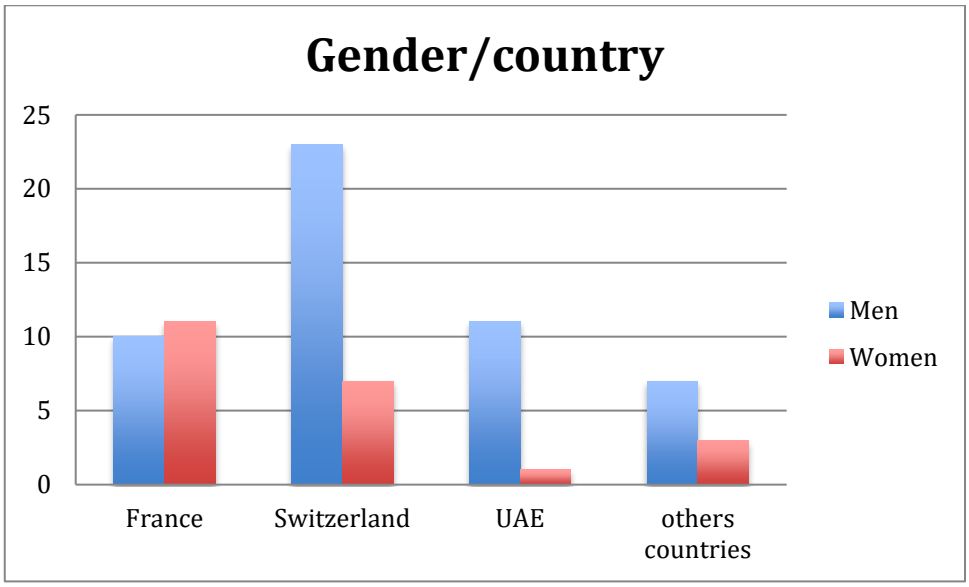
The graph below represents the distribution of participation per country with a ratio of 70%-30% men's versus women's answers.

Country	Participation
France	21
Switzerland	30
AUE	11
Canada	2
Germany	2
Greece	1
Serbia	2
Spain	1
Tunisia	1
Uruguay	1

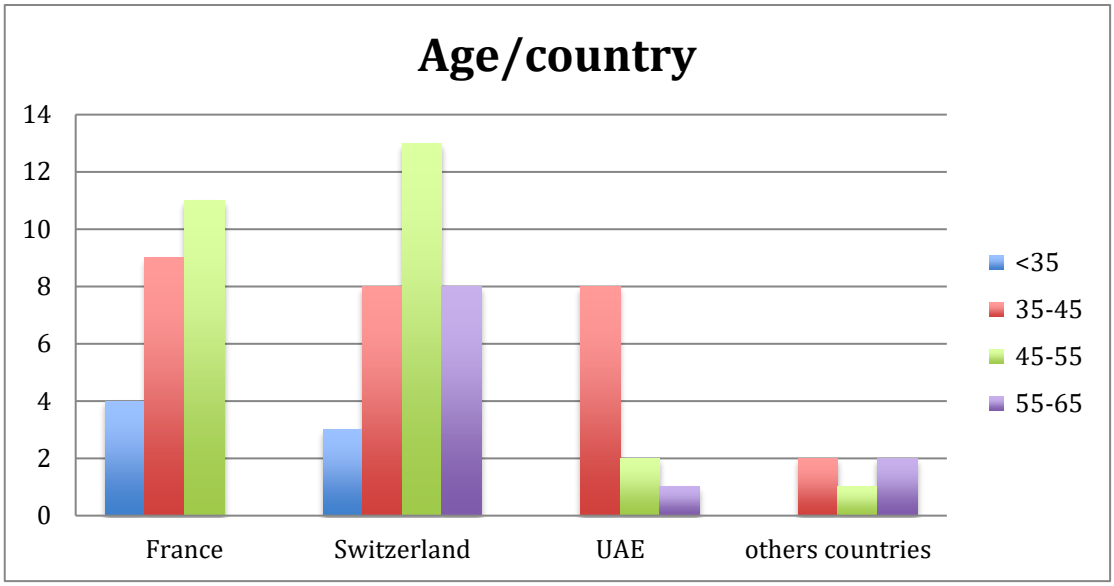
Demographics

We studied the gender, age of the participants, their teaching experience and the classroom size and reported the summary per country as represented in the following tables/graphs *(to choose between one or the other representation):*

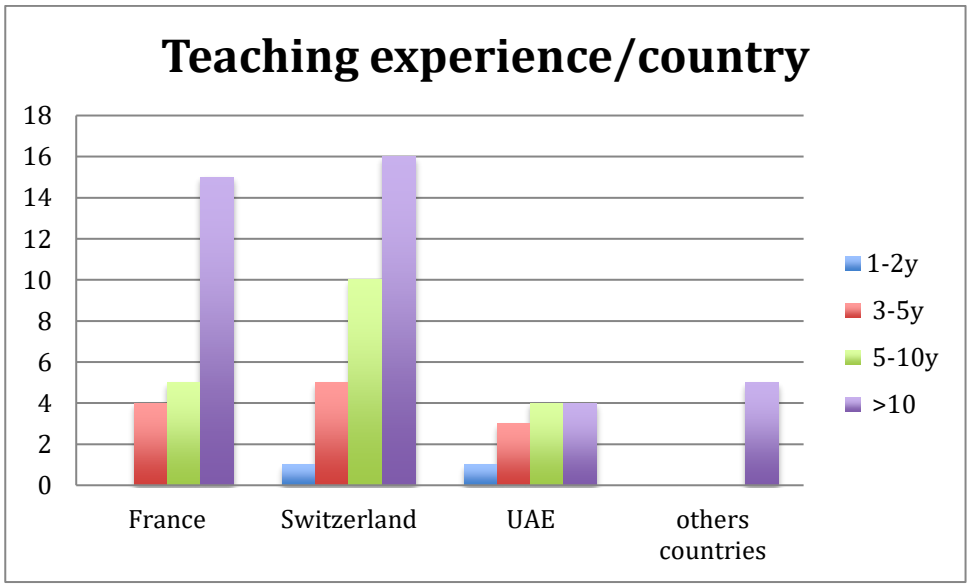
Gender vs Country	Total	France	Switzerland	UAE	Others Countries
Men	51	10	23	11	7
Women	22	11	7	1	3



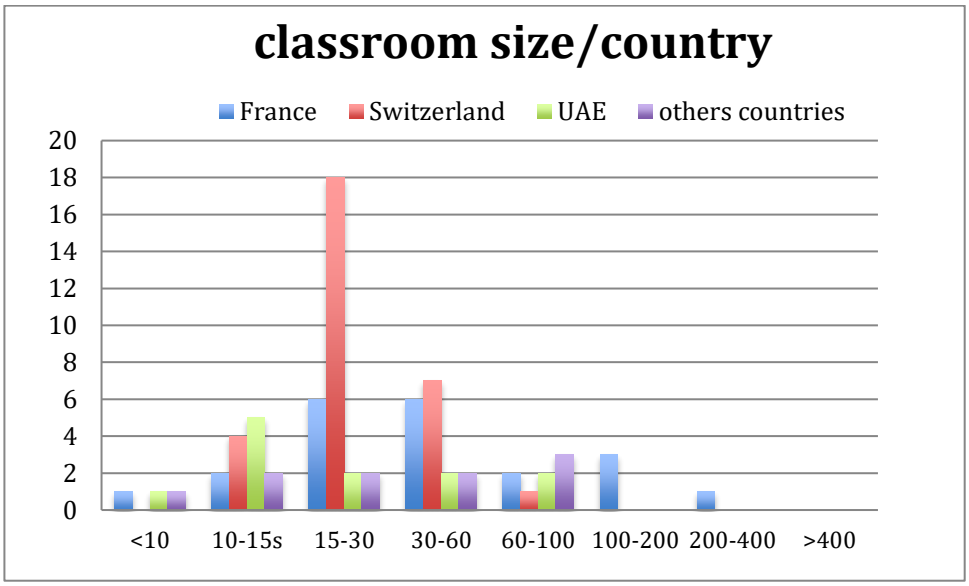
Age vs Country	Total	France	Switzerland	UAE	Other Countries
<35	7	4	3	0	0
35-45	20	9	8	8	2
45-55	25	11	13	2	1
55-65	10	0	8	1	2



Teaching Experience vs Country	Total	France	Switzerland	UAE	Other Countries
1-2y	1	0	1	1	0
3-5y	9	4	5	3	0
5-10y	16	5	10	4	0
>10	36	15	16	4	5

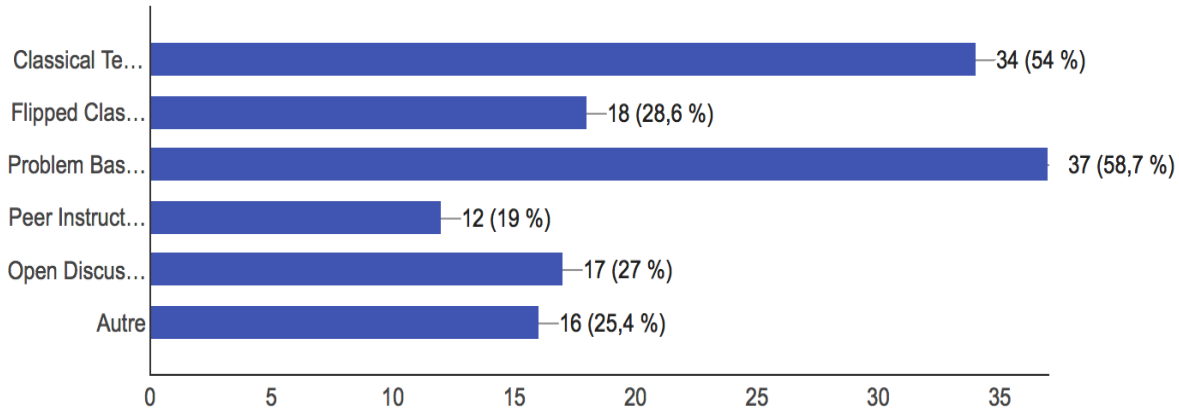


Classroom size vs Country	Total	France	Switzerland	UAE	others C
<10	2	1	0	UAE	1
10-15s	8	2	4	1	2
15-30	27	6	18	5	2
30-60	15	6	7	2	2
60-100	6	2	1	2	3
100-200	3	3	0	2	0
200-400	1	1	0	0	0
>400	0	0	0	0	0



Teaching Approaches

The study of the teaching approaches (refer to the graph below) revealed almost 59% of the teachers/lecturers use “Problem Based Learning approach” which is number one but this percentage is closely followed by 54% which is the amount of teachers/lecturers who still practise a “classic teaching” approach, basically lecture. Even if promising, “flipped classroom” approach is number 3 only with 29% usage while “open discussion” is number 4 with 28%. “Peer teaching” approach seems not very developed among our participants as only 19% apply this teaching method.



Students' Attention

Looking for some correlation between student's attention during a lecture and the teaching experience, the size of the classroom, the teaching field or the educational approach, we studied all these parameters and summarized all data in the following tables. Nothing obvious came out, but it seems that the best attention rate is obtained with small classroom (15-30 students) and more than 10 years experience of the teacher.

Attention	Teaching Method (TM)	Field	Study level
40'-45'	Mix of innovative teaching methods[1]: 100%	75% Sciences[2]	**Bachelor: 40%** **Master: 40%** Cont. Education: 20%
30'-40'	Mix innovative teaching method, no classic teaching alone	Various fields	**Bachelor: 54,5%** Master: 27,3% Cont. Education: 18,2%
20'-30'	Classic teaching mix of innovative teaching methods: 65% Classic teaching alone: 17% Innovative teaching methods alone: 28%	81% Sciences[2]	**Bachelor: 60,4%** Master: 22,6% PhD: 5,7% Cont. Education: 11,3%
10'-20'	Classic teaching mix of innovative teaching methods: 50% Classic teaching alone: 6,25%	68,75% Sciences[2]	**Bachelor: 43%** Master: 28,6% PhD: 10,7% Cont. Education: 18%
0'-10'	Innovative teaching methods alone: 67%	89% Sciences[2]	**Bachelor: 53,4%** Master: 33,4% PhD: 6,7% Cont. Education: 11,6%

[1] Innovative teaching methods : Problem based learning, Peers instruction

[2] Sciences: MATHS, PHYSICS, CHEMISTRY, BIO, ENG, COMPUTER SIENCES

	Classic teaching mix of innovative teaching methods: 22%		

Attention	# of Answers	Classroom size	Teaching experience	Age
40’-45’	3	10-15 students: 33% **15-30 students: 67%**	100% >: 10 years	35-45 years: 34% 45-55 years: 33% 55-65 year: 33%
30'-40'	7	10-15 students: 28,6**%** **15-30 students: 57,1%** 60-100 students: 14,3%	3-5 years: 28,6% 5-10 years: 14,3% **>10 years: 57,1%**	<35years: 14,1% 35-45 years: 28,6% **45-55 years: 57,1%**
20'-30'	36	<10 students: 8,3% 10-15 students: 19,4% **15-30 students: 30,6%** 30-60 students : 22,2% 60-100 students: 16,7% 200-400 students: 2,8%	1-2 years: 5,5% 3-5 years: 13,9% 5-10 years: 27,8% **>10 years: 52,8%**	<35 years: 5,7% **35-45 years: 40%** 45-55 years: 36,1% 55-65: 17,2%
10'-20'	16	10-15 students: 18,75% **15-30 sudents: 43,75%** 30-60 sudents: 25% 60-100: 6,25% 100-200: 6,25%	3-5 years: 18,75% 5-10 years: 31,25%: >**10 years: 50%:**	<35 years: 18,75% **35-45 years: 37,5%** 45-55 years: 25% 55-65 years: 18,75%
0'-10'	9	10-15 students: 22% **15-30 sudents: 33%** 30-60 sudents: 22% 100-200: 22%	1-2 years: 11% 3-5 years: 11% 5-10 years: 11% **>10 years: 66%**	**35-45 years: 44%** **45-55 years: 44%** 55-65 years: 11%

All intrinsic and extrinsic means and teaching approaches that were collected thanks to the participants’ answers can be found in the online paper.