Do Higher Education syllabi and oral course introduction affect student's motivation to study?

Measuring the impact of syllabi from specifically trained Faculties on students' perceptions of controllability, course value and competency

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Question

The impressive number of Universities world-wide asking or urging their faculties to produce syllabi for each of their courses seems to indicate a consensus on the fact that this demanding - for both the Institutions and theirs teachers - activity make sense (or should at least). The belief of the potential usefulness of syllabi for both the students and their professors (or even for their Institutions) is shared by many authors emphasizing their various functions and purposes as *learning tool* [Parkes & Harris, 2002; Woolcock, 2003; Grunert, 1997...], *cognitive map* [Matejka & Kurke, 1994; Leeds, 1992; Nilson, 2007...], *communication tool* [Altman & Cashin, 1992; Rubin, 1985, Madson *et al.*, 2004...], *contract* [Johnson, 2006; Duffy & Jones, 1995; Hammons & Shock, 1994...], *planning tool* for faculty [Littlefield, 1999; Hess, 2007; Sinor & Kaplan..., or *permanent record* for promotions or program consistency [Parkes & Harris, 2002; Leibow, 2003; Johnson, 2006; Seldin, 1998...].

More specifically in the literature, when serving as such, the **syllabus** and its **oral presentation** during first meeting act upon students' first impressions and their attitude toward a course. Doing so, they are *likely* to impact several affective perceptions of the students, and amongst them, the ones leading to their **motivation** to study.

Indeed, if some assertions stress very globally the potential benefit of effective syllabi and oral presentations on students'motivation ("warm syllabi explain expectations in a clear and friendly fashion, encourage and motivate students" [Slattery & Carlson, 2005]), "we studied teachers who have enormous success in encouraging their students to achieve remarkable learning and found they usually produce a certain kind of syllabus" [Bain, 2004]), "a syllabus can be used as a teaching tool to motivate students and keep both the teacher and the students focused on course objectives [Albers, 2003]"), others point out more precisely its possible influence on particular perceptions appearing to correspond to the three determining factors of the *motivational dynamic*'s model from Roland **Viau** [1997].

For instance, the syllabus formula promoted by Ken Bain ("the promising syllabus fundamentally recognizes that people will learn best and most deeply when they have a strong sense of control over their own education" [quoted by Lang, 2006]) clearly seems to take into account the perception of controllability, as defined by Viau: "the perception of the control that a student has on the progress of an activity and on its consequences". By the way, considering the way Viau describes the perception of activities value ("the opinion that a student expresses on the interest and the usefulness of a pedagocical activity according to the goals he/she pursues"), several authors interested in the syllabus question obviously pay great attention to this dimension: "the syllabus conveys enthusiasm for the subject and sparks student interest and motivation" [Hammons & Shock, 1994]; "a syllabus offers an explanation of the course's promise to the students: what will they have gained, in terms of knowledge or skills, by the end of the semester? The focus moves away from what the teacher will cover to what the student will take away from the course" [Lang, 2006]. And finally, according to Viau's definition ("a perception that a student has about him(her)self and through which he/she assesses his/her ability to suitably accomplish an activity that he/she is not sure to carry off"), other theoreticians seems pretty convinced of the syllabus ability to positively affect the perception of competency: "by making the implicit explicit and communicating that we believe that students can and will succeed (through the syllabus), faculty begin to level the playing field and ensure that all students have equal opportunities in the classroom" [Slattery & Carlson, 2005].

But a question emerge from the reading of those thoughts: can the very early transmission of written and oral information (through the syllabus and the first class speech) really impact those three perceptions and thus the motivation of students to study at the university?

Method

A training seminar on syllabus design

At the University of Liège, professors also have to submit every year for each of their courses a one page (at least) standardized syllabus (called *engagement pédagogique*: literally "pedagogical commitment"). Of course, in addition, they usually start as well their first lesson with introductory speeches that plays the same role. In 2008, in the context of its new mandatory program of pedagogical training for new faculties, the IFRES (Institute for Training and Research in Higher Education) has created **a thematic seminar** and offered specific guidelines in order to promote motivating syllabi and oral presentation especially with the **freshmen and sophomores** audiences ("spelling out as comprehensively as possible what types of activities students will do in class, how they will be assessed, and how much each assignment counts toward a grade reduces the stress, she says, particularly for freshmen who aren't yet used to college protocol [Wasley, 2008]"). As the person in charge with that training, I notably linked Viau's model with the syllabus stakes, presenting examples of good practices and suggesting ideas and ways to take into account the three students' perceptions in the early delivery of information about courses.

Data collected from teachers

Ten new faculties teaching at least one course to freshmen and sophomores followed the seminar and accepted to join in the research project. At the beginning of the following academic year, their ten **syllabi** (meant to their First/Second-Year students) **were collected** in order to be analyzed regarding their motivational qualities. I also attended their first course with the corresponding classes in order to **record their introduction speech**, for the same purpose. The likelihood of the syllabi and oral speeches to impact the three students' perceptions was then rated according to criteria notably derived from Viau's theory and from related strong assumptions from the literature about syllabi.

Data collected from students

During the second class of the ten teachers (one week after the oral presentation of the syllabus), **questionnaires** were submitted to their 1300 First/Second-Year students in order to investigate the possible corollary impact of those information transmissions on learners' perceptions of their own *controllability*, *competency* and *activities value* inside the concerned course. In order to measure hypothetical gains due to syllabi and face-to-face course introduction, three couples of symmetrical *pre* and *post* items (with parallel wording, using Likert scales from "Totally agree" to "Totally disagree") focusing on each of those dimensions were included. And in order to study relations between these individual *post* levels of perceptions and the fact to have actually read the syllabi or attended to the presentation speech, two direct bimodal questions ("have you read the syllabus", "did you hear the speech") were used. Finally, since various authors insist on the impact that giving rationales for the pedagogical options taken in the course can have on students' perceptions [Slattery & Carlson, 2005; Collins, 1997; Birdsall, 1989; Von Harrison and Derr, 1977], questions were added allowing to rate its delivery level for the course as a whole.

First results

On table 1, the first two columns contain the ratings from the **analysis of contents** lead on each teacher's **syllabus** (col. 1) and recorded introduction **speech** (col. 2) regarding its likelihood to impact a particular perception. For columns 5 to 8 have been **crossed the data** collected from the students concerning their **post perceptions** (of *controllability*, *value* and *competency* successively on three lines) and their answers about their reading or not of their respective syllabi. The percentages of the students' declaring in the same time a good or a very good level of a certain perception ("I agree" + "I totally agree") and:

- have actually **read** the syllabus take place in column 5;
- have not read the syllabus take place on column 6.

On column 7, **chi squares** have been calculated to identify possible significant relationships between those data. **Correlations indexes** appear on column 8.

The same organization is reproduced from column 9 to 12 with the students' answers about their **hearing** or not of information given by the teacher during the introduction speech.

This table helps to observe possible **consistencies** between data of the teachers' performances and student's declared perceptions related to their motivation.

1	2	3	4	5	6	7	8	9	10	11	12
Syllabus	Speech	Prof.	Items	OK/ Read	OK/Not read	X2	C	OK/ Heard	OK/Not heard	X2	C
*	**(*)	1	Cont	76,9	70,2	/	0,07	76,4	64,5	S for 0,01	0,18
*	**		Valu	67,2	62,7	/	0,10	65,6	60,6	/	0,08
*	**		Comp	72,4	66,7	/	0,06	70,9	63,2	S for 0,05	0,14
**	**	3	Cont	88,0	81,8	/	0,22	84,8	(100,0)	/	0,16
			Valu	56,0	56,5	/	0,18	57,4	(66,7)	/	0,13
**	**		Comp	80,0	78,3	/	0,24	80,9	(66,7)	/	0,13
()	*		Cont	87,5	100,0	/	0,29	94,4	(100,0)	/	0,16
*	*(*)		Valu	87,5	92,3	S for 0,20	0,46	88,9	(100,0)	/	0,13
*	*		Comp	87,5	92,3	/	0,09	88,9	(100,0)	/	0,15
()	***		Cont	78,4	85,2	/	0,20	80,3	(100,0)	/	0,17
**	***	4	Valu	89,5	92,9	/	0,07	90,5	(100,0)	/	0,07
**	**		Comp	82,1	89,3	/	0,23	84,4	(100,0)	S for 0,10	0,25
**	***	5	Cont							S for	
			Valu	88,4	72,7	S for 0,02	0,18	78,2	69,8	0,001 S for	0,25
*	***		Comp	77,3	62,7	S for 0,10	0,16	69,2	53,3	0,0001	0,30
		6	Cont	80,2	72,2	/	0,11	75,3	61,9	/	0,11
dede	*(*)		Valu	74,1	81,5	/	0,14	83,0	73,3	,	0,16
**	**(*)		Comp	74,1	67,4	,	0,14	66,7	77,4	7	0,17
*	(*)		Cont	70,4	67,0	/	0,09	65,5	76,7	S for 0,05	0,30
**	(*)	7	Valu	76,9	64,3	/	0,19	69,8	72,7	7	0,08
()	**(*)		Comp	96,3	89,3	S for 0,20	0,29	93,2	90,9	S for 0,20	0,30
*	*(*)		Cont	81,5	78,6	/	0,16	81,8	72,7	/	0,25
*	**		Valu	100,0	75,0	S for 0,20	0,43	100,0	(66,7)	S for 0,20	0,49
()	**(*)		Comp	70,0	75,0	/	0,37	78,6	(33,3)	S for 0,20	0,50
*	**	9	Cont	80,0	62,5	/	0,36	78,6	(66,7)	S for 0,20	0,48
*	**(*)		Valu	85,7	73,9	S for 0,20	0,23	75,0	82,8	S for 0,20	0,19
()	**		Comp	82,1	91,2	S for 0,02	0,28	87,9	93,1	S for 0,20	0,22
*	*(*)		Cont	57,1	67,0	S for 0,20	0,21	65,6	63,3	S for 0,10	0,24
(*)	*(*)	10	Valu	77,8	66,7	/	0,17	68,8	(100,0)	/	0,17
*	**(*)		Comp	62,5	55,6	/	0,23	53,3	(100,0)	/	0,28
() Table 1	*(*)		_	80,0	87,5	/	0,09	81,3	(100,0)	/	0,17

Table 1

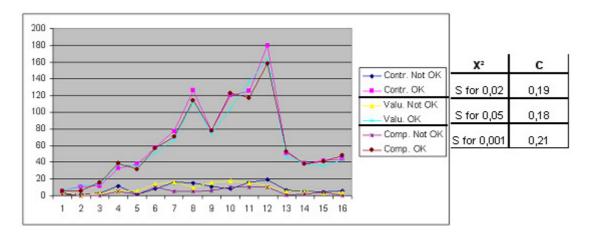
First, the table shows through the Chi square column that, for 39 of the 60 studied relations, the variables are clearly independent. Nevertheless, considering the cases where the calculated X^2 indicate links between the data, several consistencies can be observed between the ratings obtained from the content analysis of syllabi or speeches and the observed percentages of students declaring good perceptions. For teacher $n^\circ 1$, the good ratings of his speech are consistent with the good perceptions of *controllability* and *competencies* shared by the students who heard it comparing with those who didn't (11,9% and 7,7%). This kind of gain is even higher for teacher $n^\circ 5$: for instance 88,4 % of students perceiving good *controllability* in his course have read his well rated syllabus (against 72,7% who didn't) and 69,2% of students declaring a good perception of the course *value* had heard his very good oral introduction from this point of view (against a low 53,3% who didn't).

	Pe	rceptions	pre	Perceptions post			
Prof.	Contr.	Value	Compe.	Contr.	Value	Compe.	
1	64,6	69,9	61,0	69,6	62,3	66,5	
2	76,5	68,6	76,5	82,4	56,9	78,4	
3	68,2	86,4	86,4	90,9	86,4	86,4	
4	71,6	88,1	73,1	78,8	89,6	85,1	
5	75,3	79,3	72,7	73,5	65,3	72,5	
6	73,8	62,3	67,2	78,7	68,6	66,9	
7	67,3	94,6	76,8	67,9	91,1	78,6	
8	72,2	66,7	77,8	88,9	72,2	72,2	
9	63,6	80,2	60,7	74,6	89,3	64,8	
10	50,0	75,0	75,0	55,0	65,0	65,0	
All	63,7	69,0	62,1	67,5	63,6	64,7	

Gain/loss					
Contr.	Value.	Compe.			
5,0	-7,6	5,5			
5,9	-11,8	2,0			
22,7	0,0	0,0			
7,1	1,5	11,9			
-1,7	-14,1	-0,2			
4,9	6,3	-0,3			
0,6	-3,6	1,8			
16,7	5,6	-5,6			
11,0	9,1	4,1			
5,0	-10,0	-10,0			
3,8	-5,4	2,6			

Table 2

Examining the consistency of those last results with the comparison in table 2 of the percentages of students declaring good perceptions before and after having received syllabi and speeches from their teachers, disappointing results appear this time for teacher n°5. Indeed, his very good ratings and results for *controllability* and *value* from table 1 are inconsistent with the negative *pre-post* impact of his communication on those students' perceptions observed here (especially for *value*: - 14,1%). His case may be an exception since his colleagues seem to obtain more logical results here regarding the "stars" their syllabi and speeches received during the content analysis (see for instance teachers 1 and 9). But anyway, the results obtained by the entire group indicates a bothering global loss in the *value* domain (again, inconsistent for example for teachers 10 or 7).



Talking about global results, here is finally a graphic and six measures apparently showing - at very first sight that the good **perceptions** of *controllability*, *value* and *competency* by the 1300 students could be partly related to their perception of a high number of **rationales** given to them by their teacher (with a strange triple peak at 12 rationales among the list of 16 presented with the questionnaire).