

# A Longitudinal Examination of SI-PASS: Participation, Perception, and Performance at ULiège

International Forum for Peer Learning and Support

Ninon Puttaert 25th March 2024



# SI-PASS at ULiège

- Implemented in 2019: 5 years already
  - Longitudinal data
- 4 Faculties: Applied Sciences, Bioengineering, Psychology, and Sciences (Mathematics and Physics)
  - Cross-sectional data
  - Qualitative and quantitative data from various sources

# Research Questions

- Participation
  - How many students attended at least one meeting?
  - How many participants on average per meeting?
- Perception
  - What motivates students to participate?
  - Are there significant differences between faculties?
  - What elements stop students from participating?
  - What are students' suggestions to increase participation?
- Performance
  - Do students who participate obtain better grades than those who did not?
  - If so, how many meetings are required to see this difference?

# Methodology

- Academic years 2019-2020, 2020-2021, 2021-2022
- Faculties of Applied Sciences, Bioengineering, Psychology, and Sciences
- Data Sources
  - Participation data from leaders' reports (quantitative)
  - Perception data from students' online questionnaires (qualitative)
  - Performance data from final exam marks (quantitative)

# Participation

Faculty	Year & Semester	N Registration	N Participants	% Participation	N Participation	N Questionnaires	N Leaders	N Leader Listings	N Meetings	Average Minutes	N Theoretical Participation	% Actual Meetings	Average N Students per Meeting
Applied Sciences	19-20 S2	288	108	37.5	487	117	16	10	208	12480	3744	13	2.3
	20-21 S1	315	215	68.3	1146	63	15	12	195	11700	4095	28	5.9
	20-21 S2	358	164	45.8	825	90	10	7	130	7800	4654	17.7	6.3
	21-22 S1	222	208	93.7	1130	127	13	11	169	10140	2886	39.2	6.7
	21-22 S2	368	65	17.7	489	66	17	8	221	13260	4784	10.2	2.2
Bioengineering	19-20 S1	276	113	40.9	515	15	16	12	208	12480	3588	14.4	2.5
	20-21 S1	238	140	58.8	655	30	19	8	247	14820	3094	21.2	2.7
	20-21 S2	260	90	34.6	327	55	13	10	169	10140	3380	9.7	1.9
	21-22 S1	208	92	44.2	480	46	15	15	195	11700	2704	17.8	2.5
	21-22 S2	218	89	40.8	311	22	10	9	130	7800	2834	11	2.4
Psychology	20-21 S2	293	247	84.3	1777	161	36	29	468	28080	3809	45.7	3.8
	21-22 S1	303	253	83.5	1292	141	28	22	364	21840	3939	32.8	3.5
	21-22 S2	64	28	43.8	246	45	6	6	78	4680	832	29.6	3.2
Sciences	20-21 S1	45	15	33.3	102	16	3	3	39	2340	585	17.4	2.6
	21-22 S1	68	35	51.5	170	20	3	3	39	2340	884	19.2	4.4
	21-22 S2	171	64	37.4	408	31	9	9	117	7020	2223	18.4	3.5
<b>Total</b>	<b>6</b>	<b>3695</b>	<b>1926</b>	<b>52</b>	<b>10360</b>	<b>1045</b>	<b>229</b>	<b>174</b>	<b>2977</b>	<b>178620</b>	<b>48035</b>	<b>21.6</b>	<b>3.5</b>

# Status Report for European SI/PASS/PAL-Programmes

Tuesday, 12 April 2022

Based on the estimate that 75 HEIs have active SI/PASS/PAL programmes:

- Approximately 7 250 SI/PASS/PAL-leaders are employed each year
- On average the leaders hold about **15 sessions** during an academic year being **0.5-3 hours** in length
- The number of students having access to SI/PASS/PAL per year is ~135 400
- The number of students attending at least one time per year is ~76 800 (**57 %** of those having access)
- The average attendance on SI/PASS/PAL sessions is ~**31 %**
- The average number of students at a session is ~**10**
- The number of contact hours is ~780 000 during an academic year (contact hours are the total number of hours students visit sessions during a year)

# Perception

## Motivation

	Applied Sciences	Bioengineering	Psychology	Sciences	<b>Total</b>
Learn, Understand, Ask Questions	359	186	220	82	<b>847</b>
Socializing	73	21	91	4	<b>189</b>
Ambiance	27	19	27	11	<b>84</b>
Student Leaders	27	17	20	13	<b>77</b>
Forced Study	22	16	26	0	<b>64</b>
Other Approach	34	12	9	4	<b>59</b>
Emotional Support	5	5	22	1	<b>33</b>
Curiosity	6	4	7	0	<b>17</b>

# Perception

## Motivation

$$\chi^2(21) = 97.65, p < .001, V_{Cramer} = 0.15$$

- Applied Sciences: "Other Approach"
- Bioengineering: "Learn, Understand, Ask Questions"
- Psychology: "Emotional Support", "Socializing" and "Forced Study"
- Sciences: "Learn, Understand, Ask Questions", "Student Leaders", and "Ambiance"

# Perception

## Withdrawal

	Applied Sciences	Bioengineering	Psychology	Sciences	<b>Total</b>
Lack of Time	23	15	13	4	<b>55</b>
Useless	12	14	11	3	<b>40</b>
Didn't know	4	1	22	1	<b>28</b>
No Interest	2	6	1	0	<b>9</b>
Already tried	3	2	0	0	<b>5</b>
Absent Leader	0	1	3	0	<b>4</b>
Stress or Timidity	3	0	0	0	<b>3</b>

# Perception

## Suggestions

	Applied Sciences	Bioengineering	Psychology	Sciences	<b>Total</b>
Better Schedule	30	24	25	7	<b>86</b>
Better Organization	36	19	15	1	<b>71</b>
No Virtual Meetings	9	6	10	2	<b>27</b>
More Participants	9	2	2	2	<b>15</b>
More Meetings	0	2	1	0	<b>3</b>
More Information	2	0	1	0	<b>3</b>

# Performance Improvement

Faculty	Academic Year & Semester	SI-PASS			Non-SI-PASS			t	p	Cohen's d
		N	M	SD	N	M	SD			
Applied Sciences	19-20 S2	108	8.97	.45	318	7.9	.23	2.39	<b>.02</b>	0.23
	20-21 S1	192	7.07	.32	391	7.03	.20	1.85	.60	0.13
	20-21 S2	164	7.76	.50	386	6.66	.26	0.82	.41	0.06
	21-22 S1	199	7.86	.34	368	6.49	.20	4.07	<b>&lt;.001</b>	0.29
	21-22 S2	63	11.86	.64	456	6.8	.24	7.86	<b>&lt;.001</b>	0.99
Bioengineering	19-20 S1	111	8.62	.37	343	7.23	.19	2.53	<b>.01</b>	0.24
	20-21 S1	127	9.77	.41	251	6.54	.24	7.91	<b>&lt;.001</b>	0.70
	20-21 S2	82	8.99	.45	300	6.75	.26	4.96	<b>&lt;.001</b>	0.55
	21-22 S1	88	8.52	.45	244	4.79	.25	8.35	<b>&lt;.001</b>	0.89
	21-22 S2	86	6.56	.49	272	3.73	.22	5.8	<b>&lt;.001</b>	0.63
Psychology	20-21 S2	185	11.81	.24	836	10.53	.14	5.32	<b>&lt;.001</b>	0.39
	21-22 S1	230	7.73	.41	1785	3.66	.12	10.01	<b>&lt;.001</b>	0.66
	21-22 S2	25	11.81	.24	665	10.45	.30	5.32	<b>&lt;.001</b>	0.39
Sciences	20-21 S1	14	6.64	1.88	70	4.9	.60	0.93	.37	0.25
	21-22 S1	34	5.59	.75	80	4.53	.43	1.4	.17	0.24
	21-22 S2	64	5.56	.69	186	2.73	.31	4.09	<b>&lt;.001</b>	0.51

# Performance

## Threshold

Faculty	Academic Year & Semester	No. Meetings	Estimate	STD	t	p
Applied Sciences	19-20 S2	<b>6</b>	4.98	2.1	2.38	.02
	20-21 S1	.	.	.	.	.
	20-21 S2	.	.	.	.	.
	21-22 S1	<b>6</b>	3.22	1.17	2.74	.006
	21-22 S2	<b>8</b>	4.62	2.28	2.02	.04
Bioengineering	19-20 S1	<b>5</b>	3.62	1.31	2.76	.006
	20-21 S1	<b>5</b>	3.32	1.05	3.15	.002
	20-21 S2	<b>5</b>	4.18	2.43	2.72	.04
	21-22 S1	<b>5</b>	4.27	2.07	2.06	.04
	21-22 S2	<b>5</b>	4.99	1.26	3.98	<.001
Psychology	20-21 S2	<b>8</b>	3.04	1.22	2.85	.04
	21-22 S1	<b>7</b>	4.61	2.05	2.25	.03
	21-22 S2	<b>6</b>	14.36	4.8	2.99	.006
Sciences	20-21 S1	.	.	.	.	.
	21-22 S1	.	.	.	.	.
	21-22 S2	<b>8</b>	8.88	1.89	4.71	<.001

# Conclusions

- Participation
  - 52% of unique participants (57% for SRE)
  - 21.6% of actual participation (31% for SRE)
  - 3.5 students/meeting (10 for SRE)
- Perception
  - Motivation: better understanding of course material and socialisation
  - Withdrawal: lack of time and perceived uselessness
  - Suggestions: need for better schedule and organisation
- Performance
  - Significant increase in academic performance ( $\pm 6$  meetings)
  - Voluntary participation?
  - Generalisation to other Universities?

# Thank you!

ninon.puttaert@uliege.be

