



MOOC PILOT

A YEAR ON – STILL SAILING !

<https://bit.ly/2Te110n>

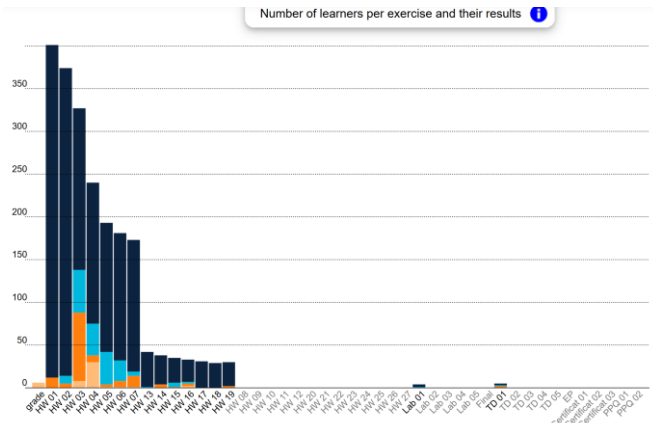
Laurent David

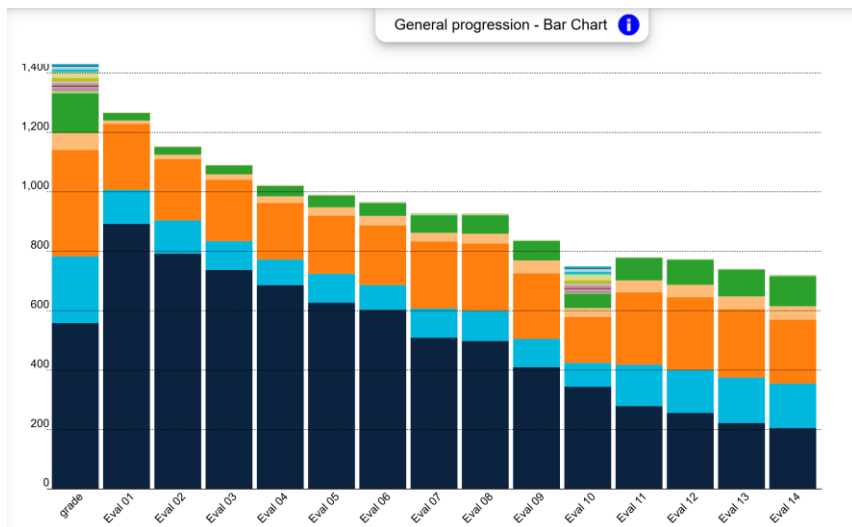




Learning analytics and reporting: how define its usages ?

- ▶ Hard to pinpoint in a generic way
 - ▶ Opening the Pandora box ?
 - ▶ Top down approach never really works
 - ▶ Off-the-shelf solutions are too often restrictive.
-
- ▶ MOOC Pilot, a teacher-centered approach:
 - How to handle a huge quantity of grades.
 - How to visualize grades in a meaningful way.
 - How to visualize students' progression





How ?

- ▶ Through graphs, getting sense of progression throughout the course
- ▶ Keep it simple
- ▶ Based on reports a teacher/staff can get from edX
- ▶ **Useful (not fancy)** visual representation
- ▶ **General to specific: Dig down** and compare

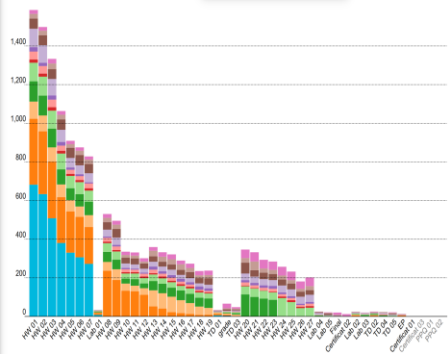
What ?

- ▶ A tool to follow the progression of all my students, either globally or by cohort
- ▶ Simple graphs
- ▶ Time progression based on grades report
- ▶ Forum monitoring
- ▶ More than **nine** graphs/tools based on grade report from edX

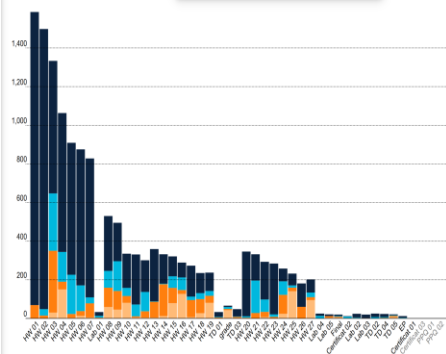
Spread progressions

Data collection		Total	2018-10-20	2018-10-27	2018-11-10	2018-11-12	2018-11-14	2018-11-17	2018-11-24	2018-12-01	2018-12-08	2018-12-15	2018-12-22	2019-01-02	2019-01-05	2019-01-17		
Exercices			C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
Grade	grade	1431	558	225	358	57	134	8	2	3	3	4	6	5	2	0	1	5
S1	Eval 01	107	73	10	22	0	2	0	0	0	0	0	0	0	0	0	0	0
	Eval 02	59	36	10	12	0	1	0	0	0	0	0	0	0	0	0	0	0
	Eval 03	51	28	6	16	0	1	0	0	0	0	0	0	0	0	0	0	0
	Eval 04	73	49	5	14	1	4	0	0	0	0	0	0	0	0	0	0	0
	Eval 05	24	13	6	4	0	1	0	0	0	0	0	0	0	0	0	0	0
	Eval 06	60	50	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0

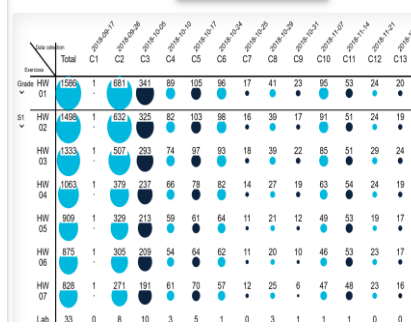
General progression - Bar Chart 1



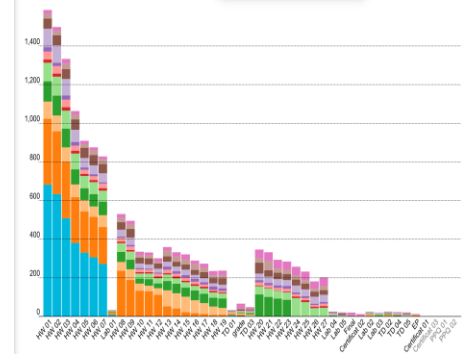
Number of learners per exercise and their results 1



General progression - Bubble Chart 1



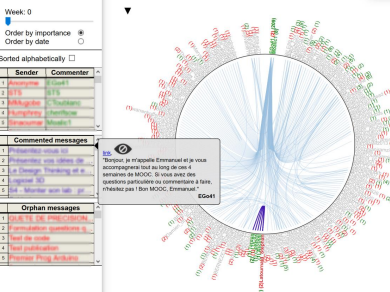
General progression - Bar Chart 1



Exit points 1

Exercise	Total	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13
Grade HW 01	130	0	45	27	6	12	8	3	5	6	9	5	1	3
HW 02	160	0	52	46	12	8	0	7	2	11	6	1	8	3
HW 03	247	0	73	80	19	20	22	4	8	5	19	11	9	7
HW 04	144	0	30	37	10	16	9	3	5	5	15	9	2	3
HW 05	44	0	9	11	4	2	3	1	2	1	6	2	0	3
HW 06	49	0	11	13	3	5	4	0	3	1	2	4	1	2
HW 07	256	0	68	65	22	24	20	4	10	3	9	14	11	6
Lab	7	0	3	3	0	0	1	0	0	0	0	0	0	0

Forum (tab) 1

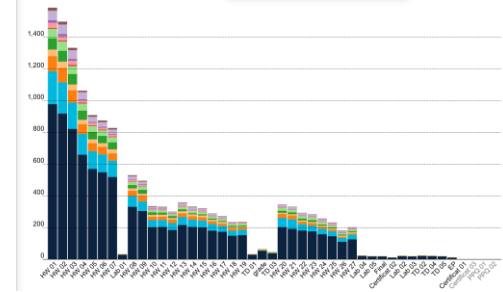


Forum (tab) 1

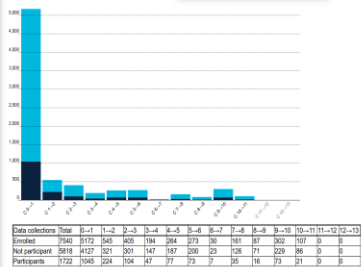
La Design Thinking et ses 15

Forum interface for 'La Design Thinking et ses 15'. It shows a list of messages and a section for 'Answers to messages' with a comment from 'Latoumald_Stephan'.

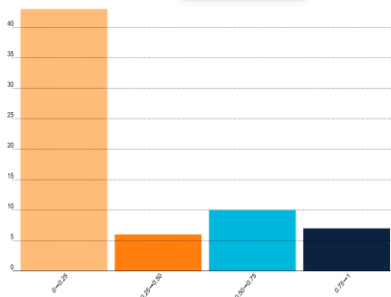
Number of learners by enrolment date 1



Number of learners per data collection 1



Learner's results per exercise 1



Statistics (MinesTelecom_04003_session07_grade_report_2016-12-05-2001.csv)

Number of learners	7211
Course completers	104 (0.25%)
Course starters (number of learners having completed the first graded exercise week 1)	PPQ 01: 8 (0.07%)
	TD 01: 38 (0.44%)
Keen learners (number of learners having completed the first graded exercise week 1 and the first graded exercise week 2)	PPQ 02: 8 (0.07%)
	TD 02: 24 (0.33%)
Number of learners having completed the first graded exercise week 1 and eligible for a certification	PPQ 01: 17 (0.24%)
	TD 01: 18 (0.25%)
Number of learners having completed the first graded exercise week 1 and the first graded exercise week 2 and eligible for a certification	PPQ 02: 8 (0.07%)
	TD 02: 17 (0.24%)

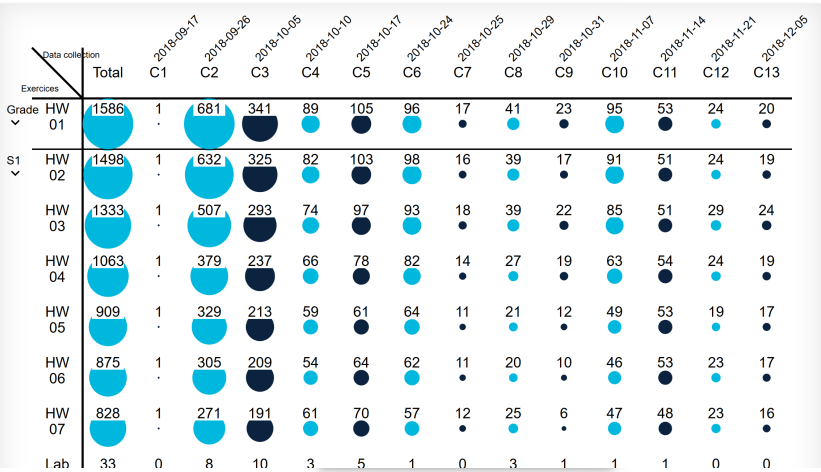
Learner's results, timestamped 1

Name of learner: [redacted]

Learner's results, timestamped

Exercise	Total	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13
Grade HW 01	686	1	681	341	89	105	96	17	41	23	95	53	24	20
HW 02	632	1	632	325	82	103	98	16	39	17	91	51	24	19
HW 03	507	1	507	293	74	97	93	18	39	22	85	51	29	24
HW 04	379	1	379	237	66	78	82	14	27	19	63	54	24	19
HW 05	329	1	329	213	59	61	64	11	21	12	49	53	19	17
HW 06	305	1	305	209	54	64	62	11	20	10	46	53	23	17

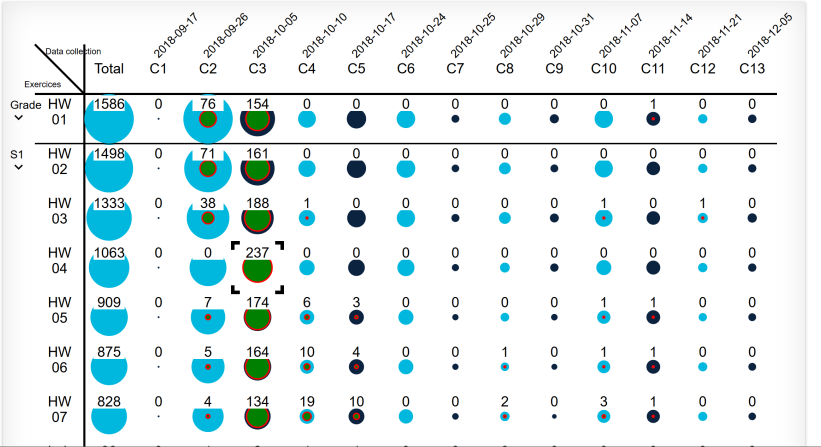
General progression - Bubble Chart



So what can I get ?

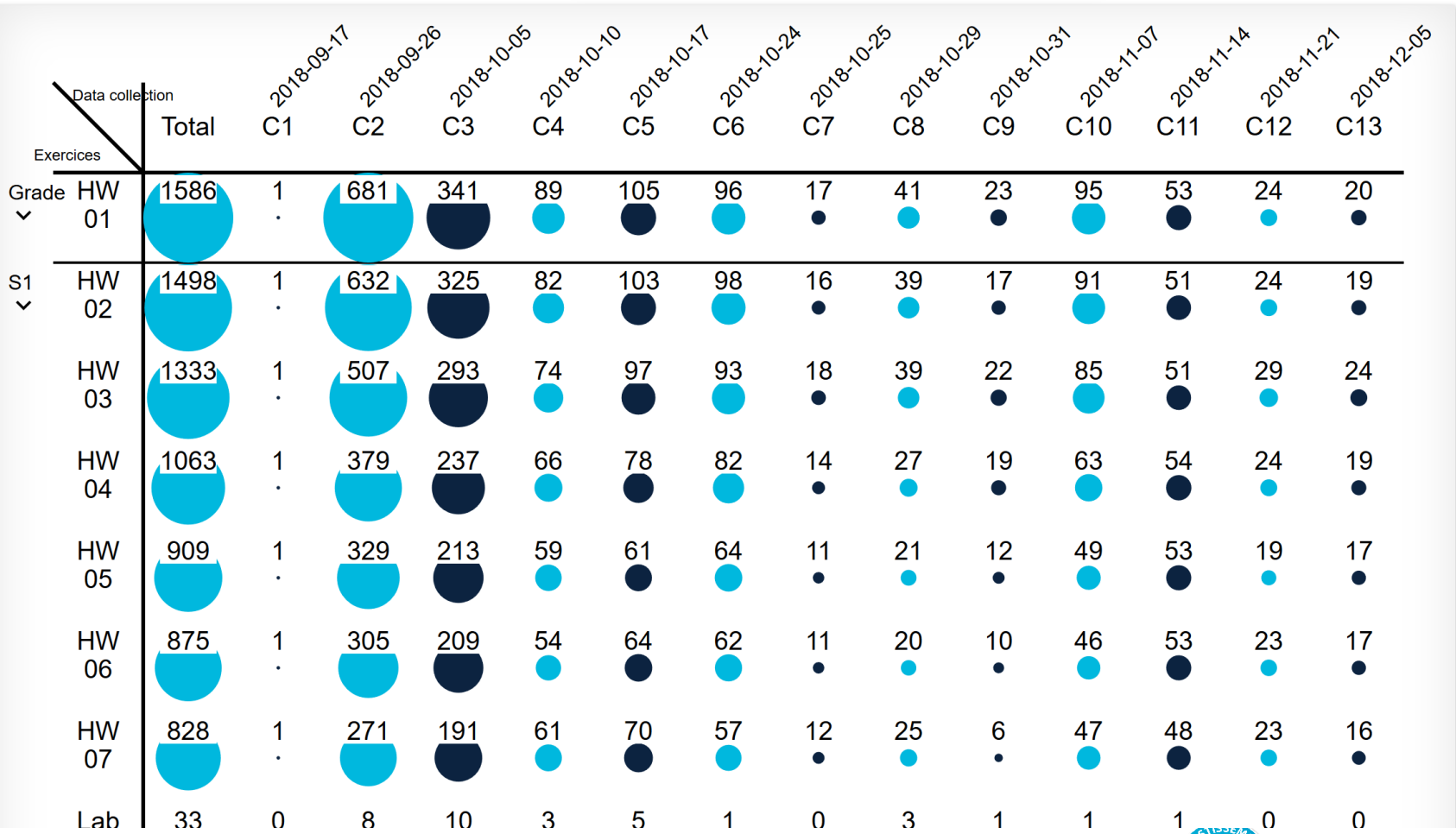
MOOC Pilot is a tool designed to present in a friendly way the students' results and achievement over a period of time.

- ▶ Student's progression, group's progression

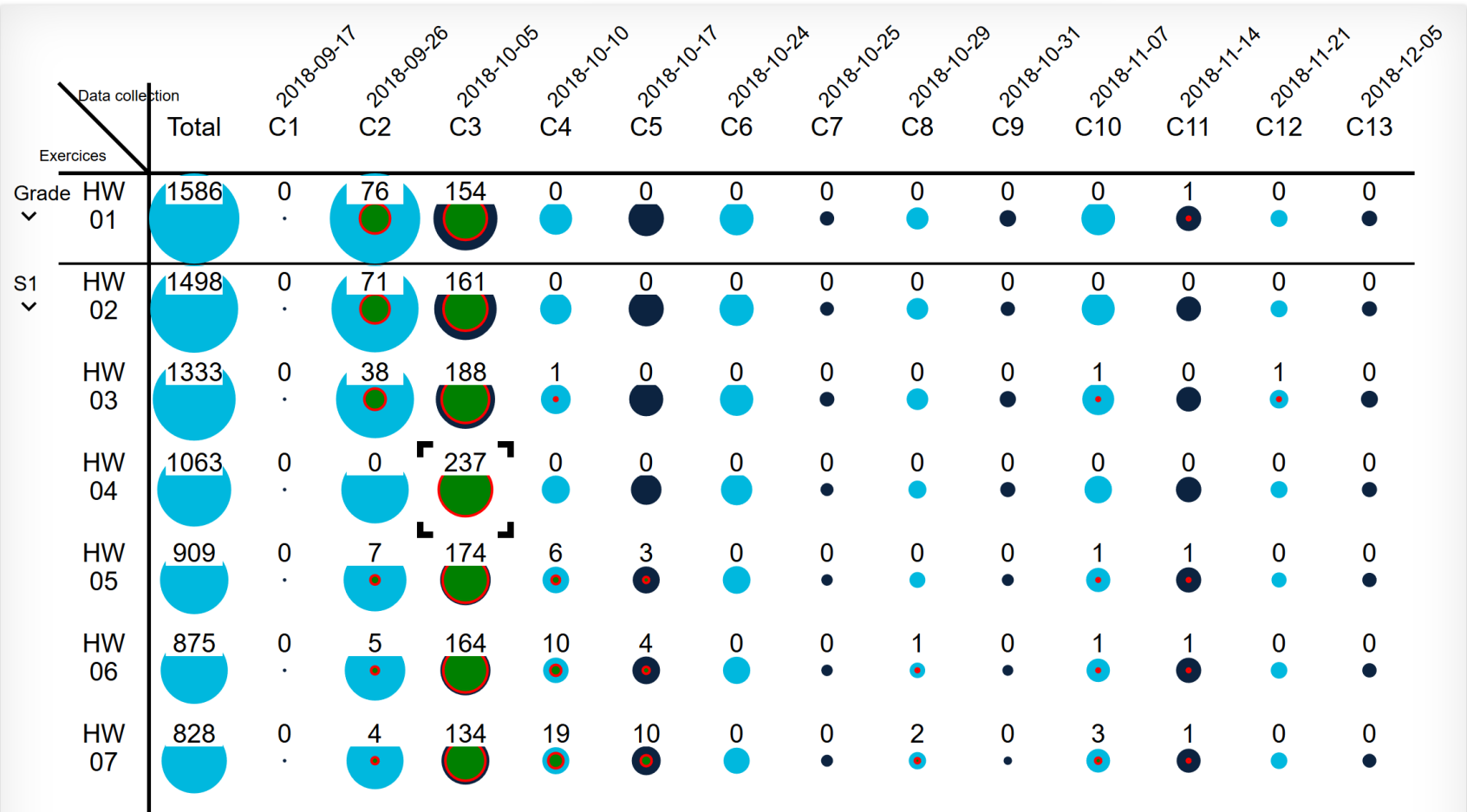


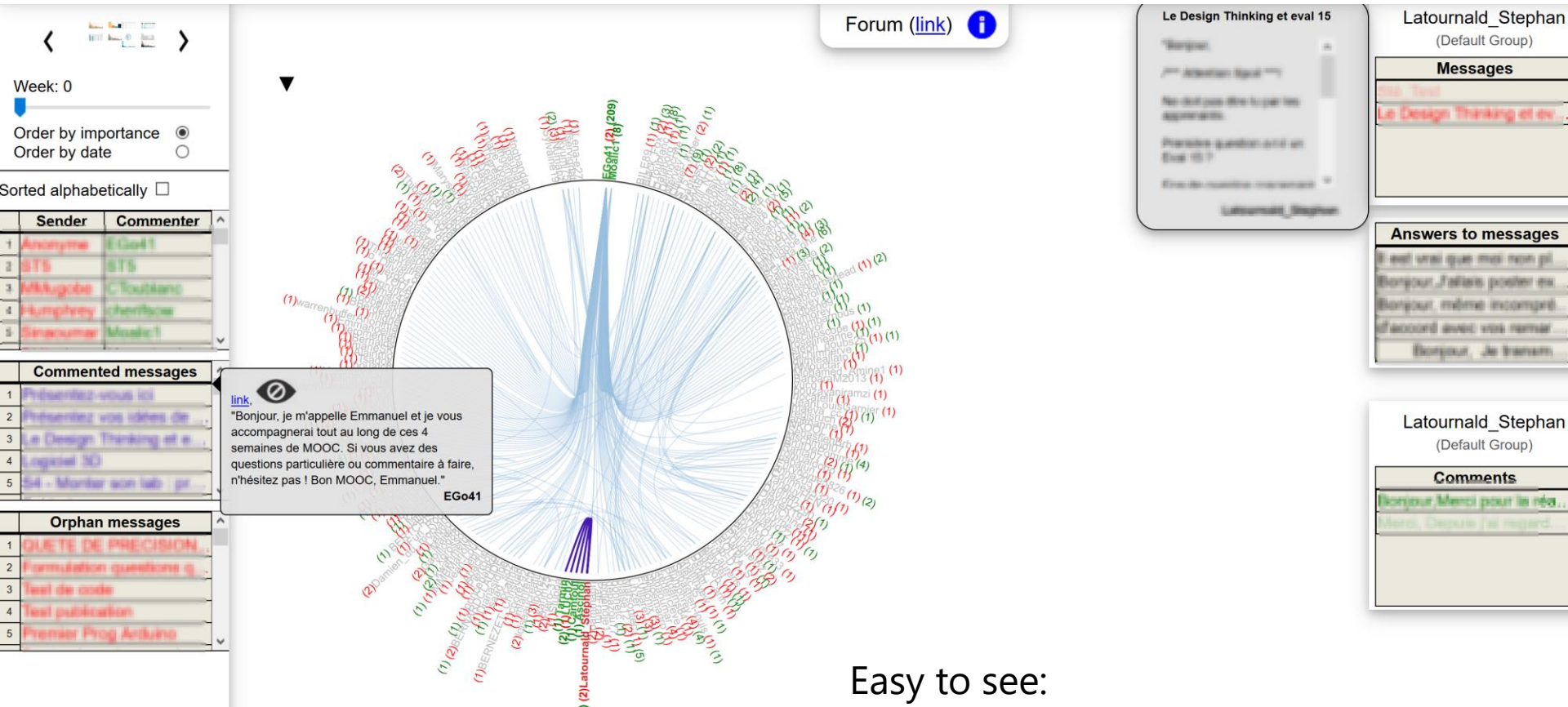
MOOC Pilot: The overall data around students' engagement

General progression - Bubble Chart



General progression - Bubble Chart





Easy to see:

- unanswered threads.
- most active learners

MOOC Pilot will soon be 3 years old :

- ▶ **Hungry Toddler!** Swallowed around 70+ MOOC on edX and France Université Numérique.
- ▶ A demonstrated usage, a community of enthusiasts, lots of useful feedback !
- ▶ **Need more toys !** More needs and use cases expressed to be answered.
 - Better integration: direct access from edX instructor's dashboard
 - Aggregating information for other use (and users)
 - End of MOOC recap data
 - One level Up: comparison between different courses, learners who are enrolled on several MOOC
 - Act on data: Select all students within a grade range and send a mail to them (for students who are failing, or overachieving students)



Our plans, your plans ?

Our plans:

- ▶ **Rewrite** with some technologies more familiar with edX community (Django/Python/ReactJS)
- ▶ **Better integration** within edX
- ▶ **More graphs**, more output (see previous slide)

Need Help!

- ▶ How to integrate this easily in edX? Integrate or link it through edX dashboard - other initiatives ?
- ▶ Need: More Guidance and maybe a framework/blueprint directed toward integrating dashboard.
- ▶ Contribute ! We need you ! **See you for the Developer submit (project “O”)**.



Institut Mines-Télécom



THANK YOU

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