

SUPPLEMENTARY MATERIAL

Analysis of different digital alternatives as teaching tools to improve the teaching-learning process

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Table S1. Marks obtained for face-to-face lectures by each student. M: male; F: female; ME: Materials Engineering degree; PME: Physics and Materials Engineering degree; CME: Chemistry and Materials Engineering degree.

Student	Gender	Degree	Mark
1	M	ME	6.0
2	M	ME	6.0
3	M	ME	7.0
4	F	ME	8.5
5	M	ME	5.0
6	M	ME	7.5
7	M	ME	8.0
8	M	ME	6.0
9	M	ME	7.0
10	M	ME	8.0
11	M	ME	8.0
12	M	ME	6.0
13	M	ME	8.0
14	F	ME	7.5
15	M	ME	5.0
16	M	ME	8.0
17	M	ME	6.0
18	M	ME	6.0
19	M	ME	7.0
20	M	ME	5.0
21	M	ME	8.0
22	M	ME	6.0
23	F	ME	7.5
24	F	ME	8.0
25	F	CME	8.5
26	M	CME	8.0
27	M	CME	9.0
28	M	CME	8.5
29	M	CME	8.0

30	F	CME	9.0
31	M	CME	9.0
32	F	CME	8.0
33	M	CME	7.0
34	M	CME	7.0
35	M	CME	8.0
36	F	CME	8.5
37	M	CME	8.5
38	M	CME	8.0
39	M	CME	7.0
40	M	CME	8.5
41	M	PME	8.5
42	F	PME	9.5
43	F	PME	8.0
44	M	PME	8.5
45	M	PME	9.5
46	M	PME	9.5
47	F	PME	8.5
48	F	PME	8.0
49	M	PME	8.5
50	M	PME	8.5
51	M	PME	8.0
52	M	PME	8.0
53	M	PME	8.0
54	M	PME	8.0
55	M	PME	8.0
56	M	PME	8.5

Table S2: Marks obtained for educational videos by each student. M: male; F: female; ME: Materials Engineering degree; PME: Physics and Materials Engineering degree; CME: Chemistry and Materials Engineering degree.

Student	Gender	Degree	Mark
1	F	ME	4.0
2	M	ME	9.0
3	F	ME	9.5
4	M	ME	8.0
5	M	ME	9.5
6	M	ME	6.5
7	M	ME	8.0
8	M	ME	9.5
9	M	ME	9.0
10	M	ME	6.0
11	M	ME	9.0
12	F	ME	8.0
13	M	ME	5.0
14	F	ME	8.0
15	M	ME	6.5
16	M	ME	4.0
17	M	ME	8.0
18	M	ME	6.0
19	M	ME	6.5
20	M	ME	4.0
21	M	ME	8.0
22	M	ME	9.5
23	M	ME	5.0
24	M	ME	5.0
25	M	CME	7.5
26	M	CME	7.5
27	F	CME	9.0
28	M	CME	7.5
29	M	CME	7.5
30	M	CME	9.0
31	M	CME	8.5
32	M	CME	9.0
33	F	CME	8.5
34	M	CME	9.0
35	F	CME	9.0
36	F	CME	7.5
37	F	CME	7.5
38	M	CME	7.5
39	M	CME	9.0
40	M	CME	7.5
41	M	CME	8.5
42	M	PME	8.0
43	M	PME	8.0

44	M	PME	8.0
45	F	PME	9.5
46	M	PME	7.5
47	F	PME	7.5
48	M	PME	9.5
49	F	PME	9.5
50	F	PME	7.5

Table S3: Marks obtained for virtual lab by each student. M: male; F: female; ME: Materials Engineering degree; PME: Physics and Materials Engineering degree; CME: Chemistry and Materials Engineering degree.

Student	Gender	Degree	Mark
1	M	ME	6.2
2	M	ME	6.7
3	M	ME	5.3
4	F	ME	8.9
5	M	ME	5.3
6	M	ME	6.2
7	F	ME	7.3
8	F	ME	7.8
9	M	ME	6.1
10	M	ME	10.0
11	M	ME	7.3
12	F	ME	7.5
13	M	ME	6.2
14	F	ME	8.9
15	F	ME	6.6
16	M	ME	7.5
17	F	ME	9.4
18	M	ME	6.8
19	M	ME	8.9
20	F	ME	6.5
21	F	CME	9.5
22	M	CME	9.2
23	M	CME	9.2
24	M	CME	9.2
25	M	CME	7.7
26	M	CME	10.0
27	M	CME	9.2
28	M	CME	8.7
29	M	CME	8.7
30	F	CME	9.7
31	F	CME	10.0
32	F	CME	9.7
33	M	PME	8.6
34	F	PME	10.0
35	F	PME	9.0
36	F	PME	8.9
37	M	PME	10.0
38	M	PME	9.0
39	M	PME	10.0
40	M	PME	9.3
41	M	PME	8.9