

Table 3. Analysis Table of Online Learning Topics Sentiments & Emotions.

Month	Topic	ANGER	ANTI CIPA TION	DISGUST	FEAR	JOY	SADN ESS	SUR PRI SE	TRUST	NEGAT IVE	POS TIV E
Apr-20	student engagement, online learning, and education challenges during the COVID-19 pandemic	28	213	0	28	220	26	95	344	54	393
	online education, teacher support, and the use of EdTech tools	23	183	0	23	155	13	67	244	36	292
May-20	online courses, EdTech, and remote learning	0	193	0	0	185	19	88	272	19	334
	student engagement, teacher support, and remote education during the pandemic	0	184	0	0	169	20	86	272	20	319
Jun-20	online courses, skill development, and career progression	13	99	0	13	93	16	55	151	29	180
	student experiences, digital learning, and challenges during remote education	11	91	0	11	83	15	53	127	26	166
	education technology (EdTech), virtual classrooms, and the impact of COVID-19 on education	14	88	0	14	88	17	48	130	31	168
	webinars, educator support, and online resources	6	69	0	6	60	16	35	91	22	118
Jul-20	online education, courses, and digital learning	0	167	0	0	154	55	82	257	55	273
	student and teacher support, remote learning, and classroom resources	0	199	0	0	155	47	79	276	47	273
Aug-20	tools, video sessions, and support during remote learning	0	89	0	0	92	13	51	159	13	166
	student engagement, teacher support, and community during remote learning	0	81	0	0	74	11	45	127	11	129
	school reopening, classroom activities, and distance learning challenges	0	72	0	0	63	10	50	105	11	105
	online education, courses, webinars, and career development	0	47	0	0	53	15	28	89	15	94
	education technology (EdTech), digital strategies, and remote teaching	0	69	0	0	65	13	32	103	13	104
Sep-20	online education, edtech, and digital learning environments	0	236	0	0	198	33	113	324	33	353
	student engagement, teacher support, and resources for remote learning	0	164	0	0	150	24	90	258	24	306
Oct-20	online courses, training, and digital tools	21	189	0	21	172	30	93	264	51	298
	student education, teacher support, and remote learning	23	173	0	23	161	43	83	262	66	281
Nov-20	Educational Tools and Online Learning Engagement	0	121	0	0	116	29	68	187	29	239
	Educational Technology and Student Support	0	97	0	0	71	18	48	144	18	162
	Professional Development, Motivation and Remote learning technology	0	82	0	0	83	22	58	147	22	166
Dec-20	Remote Learning Adaptation and Skill Development	15	110	0	15	124	40	60	171	55	207

	Educational Technology and Remote Educational Engagement	14	102	0	14	99	24	52	144	38	168
	STEM Education & Professional Development	13	83	0	13	81	11	43	126	24	131
Jan-21	Online Education Engagement, Positive Educational Experiences and Challenges in Learning	0	165	0	0	145	12	80	242	12	239
	Online Learning and Educational Technology	0	94	0	0	100	9	59	150	9	151
	Challenges and Opportunities of Remote Education and Student Support	0	86	0	0	77	6	50	135	6	125
	Remote Learning Innovation and Skill Development	0	63	0	0	61	5	28	82	5	88
	Online Learning Platforms and Resources	0	72	0	0	61	6	40	102	6	91
Feb-21	Remote Learning Experience and Students Support	14	110	0	14	130	29	56	162	43	196
	Online Education Innovation and Educational Resource	7	85	0	7	92	12	40	133	19	167
	Remote Working and Online Learning	10	78	0	10	91	12	37	118	22	137
	Educational Resources and Skill Development	7	59	0	7	73	9	27	92	16	108
Mar-21	Educational Resources, Engagement and Skill Development	0	136	0	0	138	0	71	185	0	299
	Online Education Innovation and Challenges	0	107	0	0	101	0	54	140	0	208
	Remote Learning Innovation and Students Support	0	93	0	0	84	0	42	125	0	195
Apr-21	eLearning and Educational Strategies	0	112	0	0	101	12	70	152	12	164
	Impact of COVID-19 on Work and Learning	0	81	0	0	76	13	40	105	13	119
	Practice and Optimization of E-learning	0	75	0	0	94	14	60	139	14	148
May-21	Webinars and Educational Events	0	60	0	0	63	14	46	76	14	136
	Online Education Technology and Personal Career Development	0	62	0	0	58	15	39	82	15	116
	Remote Work and Virtual Learning	0	59	0	0	58	14	41	89	14	118
	Innovation, Challenges, and Internationalization of Remote Learning	0	45	0	0	49	14	39	73	14	84
Jun-21	online courses, training, and skills development	0	126	0	0	119	29	86	180	29	274
	educational technology (EdTech), student support, and virtual learning environments	0	80	0	0	65	24	55	105	24	157
Jul-21	student support and education during the COVID-19 pandemic	0	151	0	0	142	24	78	198	24	314
	online training, webinars, and professional development	0	94	0	0	85	18	48	116	18	201
	educational technology (EdTech), online courses, and skills development	0	93	0	0	85	6	53	112	6	201
Aug-21	general education and online learning trends	0	122	0	0	104	31	78	194	31	271
	EdTech integration in traditional education systems and the challenges during the pandemic	0	107	0	0	104	20	73	185	20	250
Sep-21	online education, skill development, and career-oriented courses	0	176	0	0	144	26	86	220	26	282

	educational technology (EdTech) and its integration into traditional education systems	0	125	0	0	127	22	81	194	22	245
Oct-21	online education and skill development, particularly in programming and technology courses	0	140	0	0	143	26	96	195	26	300
	educational technology (EdTech) and traditional education settings	0	116	0	0	117	25	71	159	25	258
Nov-21	online learning and digital courses, especially in programming and development	0	109	0	0	128	39	70	183	39	295
	education technology (EdTech) and traditional education challenges	0	107	0	0	141	34	92	179	34	308
Dec-21	online learning, programming, and web development	0	81	0	0	68	32	45	109	32	153
	online education and remote learning	0	83	0	0	76	19	52	102	19	151
	education technology (EdTech) and its impact on traditional education systems	0	91	0	0	62	12	53	125	12	157