

Online teacher professional development: A research synthesis on effectiveness and evaluation; (Technology, Knowledge and Learning) *Sample information (N=115)*

First Author	Sample Size	Participants	Notes
Al-Balushi (2015)	19	In-service teachers	
An (2018)	21	In-service teachers	
Arifani (2020)	1120	In-service teachers and students	120 teachers, 1000 students
Arifani (2019)	1021	In-service teachers and students	120 teachers, 901 students
Aykan (2022)	24	In-service teachers	
Barquero (2018)	18	In-service teachers and others in education	no information on the (percentage) distribution of participants
Boltz (2021)	288	In-service teachers and others in education	no information on the (percentage) distribution of participants; majority of survey respondents in-service was teachers
Bosch (2019)	12	In-service teachers	
Boulay (2013)	29	In-service teachers	
Boumadan (2020)	7501	In-service teachers	
Brennan (2018)	15	In-service teachers	
Brodahl (2016)	14	In-service teachers	
Budiastra (2020)	468	In-service teachers and students	36 teachers, 432 students
Bustamante (2013)	5	In-service teachers and instructors	4 teachers, one instructor
Chaipidech (2022)	161	In-service teachers	
Chien (2022)	19	In-service teachers	
Ching (2014)	69	In-service teachers and others in education	23 learners in first year, 13 in second year, 33 in third year; no information on the (percentage) distribution of participants
Choi (2014)	33	In-service teachers	
Clary (2017)	81	In-service teachers	
Compen (2021)	1126	In-service teachers and students	24 teachers, 1102 students
Correnti (2021)	31	In-service teachers	
Dahri (2022)	309	In-service teachers	159 in experimental group, 150 in control group
Dahri (2021)	472	In-service teachers	
De Santo (2016)	35	In-service teachers	

Diac (2014)	159	In-service teachers and others in education	37.7% Kindergarten teachers
Ding (2015)	110	In-service teachers	
Engeness (2020)	310	In-service teachers and others in education	20.6% pre-service teachers
Francis-Poscente (2013)	13	In-service teachers	10 teachers, 3 instructors
Gamrat (2014)	36	In-service teachers	
Giberti (2022)	292	In-service teachers	
Golding (2018)	60	In-service teachers and instructors	21 in f2f mode, 39 in online mode; no information on instructor sample size
Gunawan (2021)	29	In-service teachers	
Gunter (2017)	91	In-service teachers and others in education	no information on the (percentage) distribution of participants
Gynther (2016)	X	In-service teachers and instructors	
Hafour (2022)	X	In-service teachers and others in education	
Hall (2013)	25	In-service teachers and others in education	no information on the (percentage) distribution of participants
Hanline (2013)	24	In-service teachers	
Herbert (2016)	14	In-service teachers and others in education	12 teachers, 2 participants from university staff
Hinostroza (2021)	421	In-service teachers and students	21 teachers, 387 students; 10 teachers for observation at the beginning, 7 teachers for observation at the end; group interview with 10 teachers
Ho (2016)	177	In-service teachers and others in education	117 in BL mode, 60 in f2f mode; including staff of Departments of Education and Training; no information on the (percentage) distribution of participants
Hrytsenchuk (2021)	244	In-service teachers and others in education	122 in experimental group, 129 in control group; including school principals and methodologists; no information on the (percentage) distribution of participants
Huilecapi-Collantes (2020)	51	In-service teachers	
Irfannuddin (2021)	177	In-service teachers	147 for survey analysis
Jen (2022)	52	In-service teachers and others in education	22 international scholars, 30 teachers
Jimoyiannis (2013)	86	In-service teachers	
Jocius (2022)	151	In-service teachers	115 for pre-survey analysis, 119 for post-survey analysis, 57 for interviews, 105 for follow-up survey analysis
Joubert (2020)	52	In-service teachers and instructors	33 for survey analysis, no information on number of instructors

Kandlhofer (2021)	450	In-service teachers and instructors	16 teachers for pilot testing, 52 for survey analysis, 22 for pre-/post-test analysis; 57% trainers (=instructors), 43% trainees (=in-service teachers)
Kao (2014)	214	In-service teachers	214 for questionnaire analysis, 8 for interview
Kaul (2018)	78	In-service teachers	
Kennedy (2019)	904	In-service teachers and others in education	904 for survey analysis, 20 for interviews, 46 for in-course impact survey analysis; 57 for answering RQ 2; including teacher educators and community researchers; no information on distribution; no information on number of participants for activity pattern analysis
Kim (2020)	1437	In-service teachers	
Knie (2022)	104	In-service teachers	104 for pre-survey analysis, 82 for post-survey analysis
Krasnova (2019)	89	In-service teachers	
Laurillard (2016)	1150	In-service teachers and others in education	1150 for pre-survey analysis, 174 for post-survey analysis; including policymakers in primary education and academics from further and higher education; no information on the (percentage) distribution of participants
Lazarinis (2019)	559	In-service teachers	
Lee (2020)	412	In-service teachers	
Lee (2014)	29	In-service teachers	
Lee (2016)	149	In-service teachers	5 for interviews
Luebeck (2017)	266	In-service teachers	58 for test analysis, 208 for survey analysis
Lynch (2021)	359	In-service teachers	
Mailizar (2021)	210	In-service teachers	
Marchak (2021)	50	In-service teachers	48 for survey analysis, 23 for follow-up questionnaire analysis
Marocco (2019)	589	In-service teachers	589 for survey analysis, 69 for focus group analysis
Martínez (2020)	1564	In-service teachers	1000 in the first stage (61% answering questionnaire), 564 in the second stage (72% answering questionnaire)
Mavroudi (2018)	367	In-service teachers	
McConnell (2013)	56	In-service teachers and instructors	no information on number of instructors
Michos (2020)	242	In-service teachers	33 in BL mode, 209 in online mode; 14 for whole inquiry cycle, 23 for survey analysis (BL); >100 learning designs for analysis, 7 for interviews, 29 for survey analysis (online)

Milewski (2018)	2	In-service teachers	
Moen (2018)	11	In-service teachers	
Mswazie (2019)	2	In-service teachers	
Murai (2020)	2	In-service teachers and instructors	no information on number of instructors
Mystakidis (2021)	14	In-service teachers	
Ndlovu (2014)	76	In-service teachers	
Onguko (2014)	12	In-service teachers and instructors	8 teachers and 2 instructors for interviews
Papadakis (2012)	46	In-service teachers	
Pombo (2016)	13	In-service teachers and students	5 student classes for observation
Power (2016)	104	In-service teachers	104 for pre-survey analysis, 37 for post-survey analysis
Ramírez-Montoya (2016)	868	In-service teachers and instructors	863 teachers, 5 instructors; instructors' reports for content analysis
Ravitz (2017)	258	In-service teachers	258 for pre-survey analysis, 129 for post-survey analysis
Reeves (2017)	11397	In-service teachers	
Riel (2012)	331	In-service teachers and students	16 teachers, 315 students
Russel (2021)	126	In-service teachers and students	no information on number of students
Sahin-Topalcengiz (2020)	12	In-service teachers	
Saiful (2020)	89	In-service teachers	89 for survey analysis, 8 for interviews
Sánchez-Narváez (2017)	6	In-service teachers	
Schreiber (2020)	71	In-service teachers and instructors	71 teachers, no information on number of instructors
Şenel (2021)	50	In-service teachers	
Simpson (2016)	2	In-service teachers	
Situmorang (2022)	2577	In-service teachers	
Siyamta (2020)	68	In-service teachers	34 in each mode
Sompong (2016a)	48	In-service teachers and others in education	40 teachers, 8 educational experts
Sompong (2016b)	30	In-service teachers and others in education	no information on the (percentage) distribution of participants
Stevenson (2019)	27	In-service teachers	27 for survey analysis, 25 in focus groups
Syamsuri (2020)	58	In-service teachers	27 in BL mode, 31 in f2f mode
Tahiri (2019)	429	In-service teachers	20 for interviews
Tamani (2021)	44	In-service teachers and instructors	38 teachers, 6 instructors

Terrazas-Arellanes (2019)	490	In-service teachers and students	13 teachers, 477 students (357 students for pre/post-test analysis)
Tinoca (2013)	630	In-service teachers	494 for survey analysis
Topuzov (2021)	225	In-service teachers	
Ulmene-Ozolins (2019)	29	In-service teachers	
Ung (2022)	369	In-service teachers	
Urban-Woldron (2013)	14	In-service teachers	
Vezetiu (2020)	89	In-service teachers	
Vinagre (2017)	9	In-service teachers	
Vu (2014)	525	In-service teachers	142 for survey analysis
Walkington (2021)	9	In-service teachers	
Wathne (2017)	14	In-service teachers	
Weinhandl (2020)	12	In-service teachers	
Wuryaningsih (2019)	427189	In-service teachers	62986 in online mode, 208235 in f2f mode, 154968 in BL mode
Xie (2017)	109	In-service teachers	
Zacharias (2017)	205	In-service teachers	
Zhang (2019)	520	In-service teachers	
Zhou (2020)	51	In-service teachers	48 for pre-test analysis/51 for post-test analysis
Zimmer (2022)	11	In-service teachers	6 in focus groups

Sample size refers to the absolute number of study participants, which may differ from the absolute number of training participants.

In the case of pre/post analyses and unequal numbers of participants in the pre- and post-tests or surveys, the highest number of participants (pre or post) is given.

X = not stated