INNODOCT 2018
Valencia, 14th-16th November 2018
DOI: http://dx.doi.org/10.4995/INN2018.2018.8775

The proximity of distance education

Giovanni Paolo Caruso, Lucia Ferlino
Institute for Educational Technologies (ITD), National Research Council (CNR), Genoa, Italy, caruso@itd.cnr.it, ferlino@itd.cnr.it

Abstract

The Institute for Educational Technologies (ITD) in Genoa, part of Italy's National Research Council (CNR) has long held high-quality on-site training and refresher courses for teachers that are recognized by Italy's Ministry of Education and Research (MIUR). In addition to participating in face-to-face initiatives, Italy's teachers are increasingly exploiting opportunities to participate in certified online training initiatives. These are especially popular as they permit teachers a high degree of autonomy and flexibility in managing their learning. Since September 2014, ITD-CNR has been testing and implementing innovative training methods (mostly on behalf of a large Italian public research organization). These include webinars, which make it possible to reach large numbers of participants. ITD-CNR has also designed and made available a series of open courses designed to help teachers develop the skills needed to enhance classroom integration of students with disabilities, specific learning disabilities, and other special educational needs. These courses also address the use of technologies and strategies for more effective school inclusion. To ensure these training proposals remain usable over time and continue to provide relevant content, in 2016 ITD-CNR created an online platform called Essediquadro Training (https://sd2.itd.cnr.it/corsiformazione). This aggregates and makes available five open courses that are free of charge, totalling 130 hours of high-quality, certified training.In the past two years, the platform has attracted over 9000 registered users (pre- and in-service teachers), and has become a focal point for similar training initiatives launched by schools and universities, who are integrating their own training courses with those on offer from Essediquadro Training. In this contribution, we illustrate the characteristics and contents of the Essediquadro Training platform, examine the use of webinars for teacher training, and offer some considerations based on results of satisfaction questionnaires compiled by platform users.

Keywords: *Distance education, Open education, E-learning & experiences*

1. Introduction

The Institute for Educational Technologies (ITD) in Genoa, part of Italy's National Research Council (CNR), has long held high-quality on-site training and refresher courses for teachers. ITD is a public research organization and its courses are recognized by Italy's Ministry of Education and Research (MIUR). In addition to participating in face-to-face initiatives, Italy's teachers are increasingly exploiting opportunities to participate in certified online training initiatives. These are especially popular as they permit teachers a high degree of autonomy and flexibility in managing their learning [Borg, 2015; Fitzpatrick, 2012; Johnson & Aragon, 2003; McCombs, 2015; Miyazoe & Anderson, 2015; Zoumenou et al., 2015]. Since September 2014, ITD-CNR has been testing the use of webinars as an innovative training tool capable of reaching large numbers of participants.

For several years now interest has been growing in the adoption of this social and interactive mode of communication within a wide range of educational contexts, including teacher training [Borg, 2015; Fitzpatrick, 2012; Johnson & Aragon, 2003; McCombs, 2015; Miyazoe & Anderson, 2015; Zoumenou et al., 2015]. Universities, publishing houses, research organizations, and recently even schools have begun to offer webinars addressing various topics. These may be one-off events or part of structured training paths, and may or may not involve payment of a registration fee. In some cases participants need to register or lodge a membership application in order to obtain a certificate of attendance.

The design of that initiative calls for inclusion of a test to validate participant learning. Evaluation of the webinar's efficacy can be achieved by submitting a questionnaire to participants and analysing their feedback [Gharis et al., 2014; Zoumenou et al., 2015].

To ensure these training proposals remain usable over time and continue to provide relevant content, in 2016 ITD-CNR, the webinar recordings and support materials have been made available on Essediquadro Training (https://sd2.itd.cnr.it/corsiformazione), an online platform, in the form of structured courses that teachers can follow in self-guided mode as a supplement to the regular training they receive from their school.

This paper presents an analysis and a comparison of questionnaire data collected from participants attending teacher training webinars and the courses in Essediquadro Training platform.

2. Teacher training webinars

Back in 2014, the authors faced the challenge of designing and deploying an innovative training initiative centred on adoption of what then (in Italy at least) a largely unknown tool, the webinar. The initiative sought to address the real training needs of teachers

regarding: digital technologies (of the low cost and open variety) and inclusion. These needs emerged from meetings with teachers in schools and from online forums. Meeting such training needs through face to face interventions often proves difficult for organisational and logistical reasons, placing severe limits on potential coverage. The steady increase in teachers' use of online resources and services like email, whether on computer or via mobile devices, is opening up new training scenarios that leverage the added value of e-learning.

Hence the primary aim was to reach out and engage potential users in sessions that, for most of them, represented a new and innovative way of participating in professional training. The secondary aim was to propose content presented by experts who combine solid know-how and expertise with communicative capacity and a passion for their work.

The first cycle of 25 webinars (50 hours, from September 2014 to March 2015) was entitled "Technologies and Inclusion". This constituted a substantial set of training opportunities on a variety of topics such as inclusion, special educational needs (SEN) and specific learning disabilities. These were well received in terms of coverage and quality (presenter expertise) but also in terms of access, given that geographical, temporal, economic and organisational constraints often prevent people from participating in professional training initiatives. Users expressed their appreciation of these online training experiences even before completing the questionnaire. This immediate positive response encouraged the launch other training initiatives organised in collaboration with ITD. Subsequently, four further webinar cycles were held from February 2015 to December 2017 on the following topics: (a) "If I do something, I understand, but if I understand, I can do even better" (16 hours); (b) "Formally, training the mind freely" (30 hours); (c) "Specific Learning Disabilities: you never stop learning" (14 hours); (d) "Inclusion: the value of difference" (20 hours).

These courses were designed to develop teacher competencies in supporting classroom integration of learners with disabilities and other SEN, in using digital technologies to optimize integration. For each webinar cycle, participant feedback was collected via an evaluation questionnaire.

3. Evaluation of teacher training webinars

As mentioned above an anonymous evaluation questionnaire was submitted to participants (3903 registered users; 938 users that completed the surveys) in an effort to gain insights into the potential and limitations of webinars as a training tool (for details, see Table 1).

More specifically, the questionnaire was designed to (a) survey approval levels and critical aspects of the proposals, and (b) collect suggestions for optimizing the training experience.

3.1 Tool and procedure

The questionnaire was created with Surveygizmo (https://app.surveygizmo.com/), a tool that had already been used by ITD and which was chosen for its accessibility characteristics. The questionnaire comprised 33 questions: some of these were included to gather socio-demographic data (gender, age range, geographical location, teacher category), while others were designed to obtain quantitative and qualitative evaluation data on the webinars themselves; others still had the purpose of collecting participants' opinions regarding the perceived quality of the webinars as a training tool.

Questions devoted to qualitative evaluation of the webinars posed a set of descriptors (e.g., understandable, easy to follow, stimulating, practical, theoretical, simple, applicable, useful, up-to-date contents) graded according to a four-point Likert scale (from "not at all" 1 point to "very much" 4 points). The questions formulated to collect opinions about the perceived quality of the deployed webinars focused on aspects like the communicative effectiveness and competence of the speaker and the quality of the support materials. Once again these were graded on a four-point Likert scale from "poor" (1 point) to "excellent" (4 points).

3.2 Analysis of results

Data analysis is reported in the following sub-sections: (a) socio-demographic data for participant profiling; (b) some data about the webinars followed by teachers; (c) qualitative evaluationof the webinars; (d) opinions about the webinar as a training tool.

3.2.1 Socio-demographic information

The first section of the questionnaire was devoted to socio-demographic information.

Samples of the five cycles of webinar participant populations reveal a majority of women attending (from 81.9% to 93.7%). This finding is in line with general profile of the Italy's teacher population (84.8%) figured by OECD [OECD, 2017]. The prevalent age range was between 50-59 years old, with a percentage ranging from 38% to 50%. OECD figures for Italy's teacher population aged 50+ are 57% for primary school, 73% for upper secondary school, and 51% for tertiary education). These are the highest percentages among OECD countries [OECD, 2017]. Regarding geographic location, a majority of participants reside in the north of the country, with percentages ranging from 56.6% to 86.4%. Data on education role covered reveal that, in the samples, mainstream teachers were in the majority (from 46.7% to 67.1%). This result is reassuring because the topics dealt with in the courses are often considered important only to special education teachers (for details, see Table 2).

3.2.2 Data on webinar participation

Questions in the second section of the survey were devoted to investigating why and how participants followed the webinars, as well as the efficacy of the tools used (complete data are reported in Table 3). Training/professional development was the chief reason given for all five samples (from 76.6% to 86.1%). Participants indicated that they found the slide presentation and the voice of the speaker to be the most effective tools.

3.2.3 Qualitative evaluation of the webinars

The questions in the third section were designed to obtain information for qualitative evaluation of the webinars.

Overall, results indicate that the webinars were evaluated positively: they were considered understandable (highly or fairly), while the vast majority found them easy to follow, with up-to-date contents, useful and simple (complete data are reported in Table 4) The majority of users found the webinars met or exceeded their general expectations (adequate expectations: from 63% to 71.9%; higher expectations: from 22.2% to 31.9%; for details, see Table 5). Users also evaluated the effectiveness of training. Knowledge/competence increased "fairly" for many, from 68.1% to 75%, and "highly" for others from 23.6% to 26% (for details, see Table 6). Other aspects of the webinars that were investigated include the communicative effectiveness of the speaker, competence regarding content area, and the quality of the materials offered (slides, videos, etc.). Participants rated all three aspects as "excellent" or "good", with speaker competence receiving particularly high scores.

The questionnaire also provided the opportunity to provide personal comments. The most frequently mentioned positive aspects were the clarity and competence of the speakers, their practical suggestions, the wide range of topics covered, the novel mode of interaction, being able to follow from home or wherever.

3.2.4 Webinar as training tool

The questions in the fourth section had the aim to collect opinions about the webinar as training tool, in particular evaluating its being effective, fun, engaging, flexible with a scale from "not at all" to "a lot". More relevant data referred to the efficacy (a lot and enough) and to the flexibility (a lot and enough), characteristics highlighted by over 95%.

4. From webinars to the platform

Since 2016, the webinar recordings and support materials have been made available on ITD's Essediquadro Training Moodle platform in the form of structured courses that teachers can follow in self-guided mode as a supplement to the regular training they receive from their school. The platform was created to provide an ongoing stream of training

initiatives, to gather related learning contents, and to track user activity. The webinar-based courses the site offers meet a variety of training needs, including those of teachers following training courses organized by their own schools or pursuing further studies on a personal basis.

4.1 The Essediquadro training platform

The online learning space is simple and essential in structure. A menu provides access to the range of courses on offer, which are available either on an open access basis or reserved to registered users.

4.1.1 The courses

As mentioned above, Essediquadro's courses bring together the contents of the webinar cycles run wholly or jointly by ITD. The webinar recordings and related learning materials were subsequently repurposed into online courses that could be accessed in always-on mode, thus providing training opportunities for a much broader cohort of teachers.

All the courses have the same structure. Each comprises a course presentation and a certain number of learning modules. The modules each contain: (a) a recorded webinar; (b) the slides and/or other materials distributed during the webinar; (c) a set of multiple choice comprehension quizzes based on the webinar contents. Trainees who successfully complete all of the module quizzes can download a course certificate specifying the number of training hours completed.

In addition to the courses developed by ITD, the platform also features a number of other ministry-approved courses run by individual schools under ITD supervision.

4.1.2 Supplementary spaces

The platform also has (a) a space for users to share views and information about the online training courses, congresses and seminars they've attended, and other events of interest, and (b) a FAQ section providing guidance on a number of course-related issues, such as how the content is delivered, how to follow the courses, and their validity status.

4.2 Platform use: some data

Since the platform was launched in January 2016, over 9300 users have registered (May 2018). Initially, knowledge about the Essediquadro Training courses spread largely through word of mouth. However, as of September 2017, they have been listed in Sofia, the Ministry of Education's online catalogue of officially accredited training initiatives run by schools and training providers. This has considerably amplified access to the courses, with

numbers tripling in just a few months. There is a general tendency for users to enrol in more than one course, with 2634 users enrolled in 2 courses, 738 in 3 courses, 793 in 4 courses, etc.

4.3 Evaluation of the training courses

Evaluation has been carried out to gain insight into the nature of the trainee population that uses the platform, the degree of user satisfaction, and perceived strengths and weaknesses. To this purpose, an anonymous evaluation survey has been proposed for each courses (for details, see Table 7).

4.3.1 Tool and procedure

The means chosen for conducting the evaluation was Moodle's native questionnaire tool. The questionnaire itself comprises 23 questions, some for gathering socio-demographic data (gender, age range, geographical location, teacher category) and others for obtaining quantitative and qualitative evaluation data specifically about the webinars.

Questions devoted to qualitative evaluation of the webinars posed a set of descriptors (e.g., understandable, easy to follow, stimulating, practical, theoretical, simple, applicable, useful, up-to-date contents) graded according to a five-point Likert scale (from "very little" 1 point to "very much" 5 points).

4.3.2 Analysis of results

Data analysis is reported in the following sub-sections: (a) socio-demographic data for participant profiling; (b) some data about the Essediquadro courses teachers followed; (c) qualitative evaluation of the Essediquadro courses.

4.3.2.1 Socio-demographic data

The first section of the questionnaire was devoted to socio-demographic information, namely gender, age, geographical location, role covered in school (for details, see Table 8). Samples of the five cycles of webinar participant populations reveal a majority of women attending (from 83% to 87%). This finding is in line with the general profile of Italy's teacher population (84.8%) as measured by the OECD [OECD, 2017]. The prevalent age range was between 50-59 years old, with a percentage ranging from 36% to 42%. This finding is also in line with OECD figures for Italy's teacher population [OECD, 2017] whereby teachers aged 50+ comprise 57% of the teaching workforce at primary school, 73% at upper secondary school, and 51% in tertiary education. These are the highest percentages for the 50+ age bracket among OECD countries [OECD, 2017]. Regarding geographic location, a majority of participants reside in the south of the country, with

percentages ranging from 50% to 65%. Data on teacher category reveal that, in the samples, mainstream curriculum teachers were in the majority.

4.3.2.2 Some data on the courses

A specific section of the survey was devoted to investigating the mode of participation, with questions designed to gauge where participants followed the courses and what devices they used to do so. Participants mainly followed the courses from home from 93% to 96%, using fixed devices from 70% to 72% (complete data are reported in Table 9).

4.3.2.3 Qualitative evaluation of the courses

Another set of questions was devoted to collecting information for qualitative evaluation of the courses. Results indicate that the courses are evaluated positively: asked whether the courses were understandable, easy to follow, with up-to-date contents, useful and simple, the majority of users (from 96% to 98%) rated them "fairly" to "highly" (for details, see Table 10) Evaluation of the course speakers/experts was also positive: participants rated their competence as high from 73% to 79% and acceptable from 21% to 27%, their communication as effective from 72% to 75% and involving from 24% to 27% (for details, see Table 11). For the majority of the participants: (a) the courses responded to their overall expectations (from 86% to 90%); (b) the established goals were achieved (from 84% to 88%); (c) the course will impact on their teaching practice (from 68% to 74%); (d) the courses can be recommended to colleagues, especially in the case of mainstream curriculum teachers (for details, see Table 12) Another section of the questionnaire investigated teachers' motives for following the courses. The collected data indicate that for the majority of participants the courses on offer: (a) dealt with topics not covered in their school's three-year training plan (from 66% to 71%); (b) are in line with the priorities established in their school's official policy and planning documents (from 51% to 53%); (c) were freely chosen (from 81% to 84%); (d) formed part of their additional training quote above the commitments envisaged by the school's Development Plan (from 74% to 77%); (e) became known through word of mouth (from 40% to 49%) (for details, see Table 13). In addition, participants were also asked to rate the usability of the platform. The majority (from 94% to 95%) considered it easy to use (for details, see Table 14).

The questionnaire also gave participants the opportunity to make personal comments and suggestions. As well as expressing their appreciation of the professionalism of the speakers, the quality of the contents, and the method of course delivery, the participants also stressed the perceived usefulness and applicability of what they had learned to the daily teaching practice.

5. Comparing data

Comparing the survey findings regarding the teacher training offered via webinar with that on the online platform, a number of general observations can be made.

In both cases, the predominate participant profile is that of a female mainstream curriculum teacher aged between 40 and 60 years old who followed the training from home. The online courses available in always-on mode were easy to access, making them particularly popular among female teachers, as they made it possible to reconcile family and work commitments. This was highlighted in the open comment made by a number of respondents ("I don't have to move from home", "Saving time and money", "I can't attend conferences and courses with the family", "I can also follow them while doing other things"). Motivation to engage in training seems to be greater in teachers who already have some experience. This may derive from the increasing variety and number of learner disorders, difficulties and disabilities in schools in recent years. In addition, teachers may recognize the need for professional growth by broadening and updating the (often scant) initial training they received long ago, especially in areas in which their knowledge and know-how is relatively weak.

While the two types of training proposal featured essentially the same contents (live and recorded webinars), they addressed two different cohorts of users. In both cases, a positive user evaluation emerged. The webinars were considered understandable, easy to follow and useful; the contents were held to be up to date, and the webinar speakers effective and competent. The courses met expectations, helping participants to reach the set goals; registered users tended to follow more than one course. The participants stated that the training would impact on their teaching practice and that they would advise colleagues to take part.

6. Conclusion and future prospects

This paper has reported the evaluation of an online teacher training programme proposed by CNR-ITD centred on webinars. The initiative was launched in 2014 when webinars were relatively uncommon in teacher training in Italy, and therefore represented an innovative approach for the majority of participants. It immediately became clear that they were a big success.

The participants expressed enthusiasm for the way that this readily accessible training mode allowed them to follow quality training from home, if need be via the always-on webinar recordings. These also represented valuable resources for use in school-based training activities involving colleagues. The innovative nature of this training initiative meant that it was somewhat risky proposition. Participant acceptance was by no means guaranteed but

the initial positive results are highly encouraging and bolster determination to continue the challenge. The analysis of the data confirms that teacher training can be performed in an innovative fashion through employment of effective and flexible digital tools. An added value of this initiative was that the materials produced during the training webinars (webinar recordings, slides, quizzes and certificates) could be repurposed into actual courses (described in the second part of the contribution). These were made available on the Essediquadro Training platform, thus enriching the range of CNR-ITD's teacher training proposals. The steady increase in the number of registered users and guests on the platform is testament to the quality of these open courses and to the credibility of CNR-ITD as a provider of training programmes that teachers can follow in their own time, with the possibility of obtaining officially recognized certification. Essediquadro Training has become a reference point for schools and universities, who have adopted the courses as part of the quota of online teacher training they offer. A decisive factor in promoting the growth of the service, beyond word of mouth, was the inclusion of the courses in Sofia, the Ministry of Education's online catalogue of officially recognised training initiatives. Finally, the platform's considerable ease of use (confirmed by almost all its registered users) is another element contributing to its success. It requires no specific technical skills and so can be used by a large number of users.

In the past two years, the platform has attracted over 9000 registered users (pre- and in-service teachers), and has become a focal point for similar training initiatives launched by schools and universities, who are integrating their own training courses with those on offer from Essediquadro Training.

So how can the service be improved going forward?

The webinars could be enhanced by introducing greater interactivity: the speakers sometimes complained about not being able to see their audience and some participants wished to have more time to ask questions. As to the Essediquadro Training platform in general, in addition to providing new courses, we would like to implement functions for creating personalized training paths capable of meeting the training needs of individual teachers and lending distance training a stronger sense of proximity.

Summing up, the road taken appear to be the right one and, with the necessary adjustments, is worth following in the future.

7. Acknowledgements

A special thanks to Sabrina Panesi and Jeffrey Earp for linguistic revision.

References

Borg S (2015). The benefits of attending ELT conferences. ELT Journal 69/1: 35–46.

Fitzpatrick, T. (2012) Key Success Factors of eLearning in Education: A Professional Development Model to Evaluate and Support eLearning, US-China Education Review A 9 (2012) 789-795.

Gharis L, Bardon RE, Hubbard W, Taylor E, Gonzalez-Jeuck G (2014). Using Survey Responses to Determine the Value-Added Features of a Webinar Portal System for Adoption by Natural Resource Professionals, Journal of Extension, v52 n6 Article 6RIB4 Dec 2014.

Johnson, S.D. & Aragon, S.R. (2003). An Instructional Strategy Framework for Online Learning Environments. New Directions for Adult and Continuing Education, 100, 31-43.

McCombs, B. (2015). Learner-Centered Online Instruction. New Directions for Teaching and Learning, 2015(144), 57-71.

Miyazoe, T., & Anderson, T. (2015). Interaction equivalency in an OER, MOOC and informal learning era. Best of Eden 2013 Issue – EURODL 2013 Issue.

OECD (2017) Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris.

Zoumenou V, Sigman-Grant M, Coleman G, Malekian F, Zee JMK, Fountain BJ, Marsh A (2015). Identifying Best Practices for an Interactive Webinar, Journal of Family and Consumer Sciences, v107 n2 p62-69 2015.

Table 1. Attendance of live and recorded webinars

	# Registered participants	Average live attendance	# YouTube channel followers	# YouTube channel views	# attendance certificates issued
Technologies and inclusion	508	78	463 (09/14-05/18)	55814 (09/14-05/18)	2318 (09/14-01/16)
If I do something, I understand …	580	185	654 (02/15-05/18)	71366 (02/15-05/18)	2379 (02/15-01/16)
Formally, training the mind freely	676	175			
Inclusion: the value of the difference	865	261			N/A
Specific Learning Disabilities: you never stop learning	1174	368	442 (10/15-05/18)	41134 (10/15-05/18)	N/A

Table 2. Number of registered users and of returned and completed questionnaires

	# registered users	# returned quest.	# completed quest.
Technologies and inclusion	508	199	138
If I do, I understand …	580	239	184
Formally, training the mind freely	676	193	158
Specific Learning Disabilities	1174	306	262
Inclusion: the value of difference	865	224	196

Table 3. Socio-demographic variables

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		#	%	#	%	#	%	#	%	#	%
Gender	Male	25	18.1	19	10.3	10	6.3	25	9.5	26	13.3
	Female	113	**81.9**	165	**89.7**	148	**93.7**	237	**90.5**	170	**86.7**
Age	20-29	2	1.4	7	3.8	3	1.9	4	1.5	4	2
	30-39	10	7.2	23	12.5	14	8.9	31	11.8	16	8.2
	40-49	50	36.2	75	**40.8**	57	36.1	98	37.4	61	31.1
	50-59	69	**50**	70	**38**	69	**43.7**	121	**46.2**	97	**49.5**
	+ 60	7	5.1	9	4.9	15	9.5	8	3.1	18	9.2
Geographic area	North	90	**65.2**	159	**86.4**	119	**75.3**	186	**71.0**	111	**56.6**
	Centre	26	18.8	11	6.0	23	14.6	54	20.6	22	11.2
	South	22	15.9	14	7.6	16	10.1	22	8.4	63	32.1
Role	Subject matter teacher	66	**47.8**	86	**46.7**	106	**67.1**	155	**59.2**	101	**51.5**
	Special educatio n teacher	51	37	79	42.9	43	27.2	66	25.2	85	43.4
	Other	21	15.2	19	10.3	9	5.7	41	15.7	10	5.1
CTS operator	YES	30	21.7	10	5.4	13	8.2	12	4.6	13	6.6
	NO	108	**78.3**	174	**94.6**	145	**91.8**	250	**95.4**	183	**93.4**

Table 4. Data on webinar participation

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		#	%	#	%	#	#	#	%	#	%
Reasons for participation	Personal deepening	7	9.6	43	23.4	22	13.9	57	21.8	34	17.3
	Training/ professional development	11	**0.4**	141	**76.6**	136	**86.1**	205	**78.2**	160	**81.6**
Usable	Live	4	**9.1**	112	**60.9**	75	**47.5**	183	**71.2**	103	**52.6**
	Deferred	9	8.8	33	17.9	39	24.7	26	10.1	26	13.3
	Live and deferred	5	2.6	39	21.2	44	27.9	48	18.7	67	34.2
Effectiveness tools	Slide presentation	15	**3.3**	150	**81.5**	124	**78.5**	203	**77.5**	157	**80.1**
	Chat	4	4.6	45	24.5	25	15.8	47	17.9	32	16.3
	Speaker voice	1	**5.9**	124	**67.4**	83	**52.5**	141	**53.8**	96	**49**
	Speaker video	1	7.0	33	17.9	44	27.9	75	28.6	59	30.1
	Connected video	5	7.1	72	39.1	86	54.4	126	48.1	94	48

Table 5 Evaluation of the webinars (H = highly, F = fairly, L = little, N = Not at all)

		Technologies and inclusion				If I do, I understand, but if I understand […]				Formally, training the mind freely				Specific Learning Disabilities: you never stop learning				Inclusion: the value of the difference			
		H	F	L	N	H	F	L	N	H	F	L	N	H	F	L	N	H	F	L	N
	#	97	41	0	0	133	51	0	0	101	57	0	0	204	58	0	0	151	45	0	0
Understandable	%	**70.3**	**29.7**	0.0	0.0	**72.3**	**27.7**	0.0	0.0	**63.9**	**36.1**	0.0	0.0	**77.9**	**22.1**	0.0	0.0	**77.0**	**23.0**	0.0	0.0
	#	89	49	0	0	116	67	1	0	83	74	1	0	170	91	1	0	138	57	1	0
Easy to follow	%	**64.5**	**35.5**	0.0	0.0	**63.0**	**36.4**	0.5	0.0	**52.5**	**46.8**	0.6	0.0	**64.9**	**34.7**	0.4	0.0	**70.4**	**29.1**	0.5	0.0
	#	42	90	6	0	66	114	3	1	43	106	9	0	99	149	12	2	81	112	3	0
Simple	%	**30.4**	**65.2**	4.3	0.0	**35.9**	**62.0**	1.6	0.5	**27.2**	**67.1**	5.7	0.0	**37.8**	**56.9**	4.6	0.8	**41.3**	**57.1**	1.5	0.0
	#	94	44	0	0	110	72	2	0	103	53	2	0	186	73	3	0	137	57	0	0
Useful	%	**68.1**	**31.9**	0.0	0.0	**59.8**	**39.1**	1.1	0.0	**65.2**	**33.5**	1.3	0.0	**71.0**	**27.9**	1.1	0.0	**70.6**	**29.4**	0.0	0.0
	#	99	37	2	0	123	57	4	0	101	56	1	0	189	69	4	0	140	55	0	0
Updated contents	%	**71.7**	**26.8**	1.4	0.0	**66.8**	**31.0**	2.2	0.0	**63.9**	**35.4**	0.6	0.0	**72.1**	**26.3**	1.5	0.0	**71.8**	**28.2**	0.0	0.0

Table 6 Expectations of webinars

	Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
	#	%	#	%	#	%	#	%	#	%
Very lower	1	0.7	2	1.1	0	0	0	0	0	0
Lower	0	0	7	3.8	4	2.5	3	1.2	0	0
Adequate	87	**63**	128	**69.6**	111	**70.3**	167	**63.7**	141	**71.9**
Higher	44	**31.9**	41	**22.3**	35	**22.2**	80	**30.5**	49	**25**
Much higher	6	4.4	6	3.3	8	5.1	12	4.6	6	3.1

Table 7 Knowledge/competence increase (H =highly, F = fairly, L = Little, N = Not at all)

	Technologies and inclusion	If I do, I understand, but if I understand […]				Formally, training the mind freely				Specific Learning Disabilities: you never stop learning				Inclusion: the value of the difference			
		H	F	L	N	H	F	L	N	H	F	L	N	H	F	L	N
#	Question not expected	43	124	15	0	40	112	6	0	68	179	15	0	48	147	1	0
%		23.6	**68.1**	8.2	0	25.3	**70.9**	3.8	0	26	**68.3**	5.7	0	24.5	**75**	0.5	0

Table 8 Users' number

	# Registered users
Technologies and inclusion	3401
If I do, I understand …	2820
Formally, training the mind freely	2289
Specific Learning Disabilities	2868
Inclusion: the value of difference	2960

Table 9. Number of registered users, number of questionnaires

	# Registered users	# Questionnaires
Technologies and inclusion	3401	666
If I do, I understand …	2820	572
Formally, training the mind freely	2289	530
Specific Learning Disabilities	2868	566
Inclusion: the value of difference	2960	747

Table 10. Socio-demographic variables

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		%	#	%	#	%	#	%	#	%	#
Gender	Male	17	110	13	74	15	79	14	79	14	104
	Female	83	554	87	496	85	449	86	484	85	638
	rather not answer	0	2	0	2	0	2	1	3	1	5
Age	20-29	2	11	4	22	2	8	5	29	3	20
	30-39	15	102	15	86	14	73	18	101	17	125
	40-49	35	232	32	182	33	174	32	182	34	257
	50-59	39	261	39	223	42	225	36	201	38	287
	+ 60	9	60	10	59	9	50	9	53	8	58
Geographic area	North	21	139	34	194	20	105	35	197	37	277
	Centre	14	94	15	84	16	85	14	79	13	100
	South	65	436	51	294	64	340	51	290	50	370
Role	Subject matter teacher	66	442	68	388	71	376	67	382	60	446
	Special education teacher	31	208	28	159	27	141	28	158	36	269
	Other	3	16	4	25	2	13	5	26	4	32

Table 11. Some data about mode of participation in the courses.

	Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
	%	#	%	#	%	#	%	#	%	#
from home	94	626	95	545	94	497	93	528	96	717
from school	4	25	3	15	4	23	4	25	2	16
public place-indoors	0	3	1	4	0	1	1	3	1	5
public place - outdoors	0	0	0	0	0	2	0	0	0	0
while travelling	0	2	0	2	0	2	1	3	0	2
Other	2	13	1	6	1	5	1	7	1	7
On a fixed device (computer)	70	465	70	400	69	365	72	406	72	536
On a mobile device (smartphone, tablet)	17	116	19	111	19	103	17	94	19	141
on fixed and mobile devices	13	88	11	61	12	62	12	66	9	70

Table 12 - Evaluation of the courses (VM = very much; M = much; F = fairly; L = little;VL = very little)

		Technologies and inclusion					If I do, I understand, but if I understand […]					Formally, training the mind freely					Specific Learning Disabilities: you never stop learning					Inclusion: the value of the difference				
		VL	L	F	M	VM	VL	L	F	M	VM	VL	L	F	M	VM	VL	L	F	M	VM	VL	L	F	M	VM
Understandable	#	13	12	47	165	432	6	6	50	121	389	4	4	35	137	350	7	10	33	128	388	5	7	34	162	539
	%	2	2	7	25	65	1	1	9	21	68	1	1	7	26	66	1	2	6	23	69	1	1	5	22	72
Easy to follow	#	13	9	40	162	445	7	7	49	126	383	4	5	34	135	352	6	7	40	130	383	6	8	41	149	543
	%	2	1	6	24	67	1	1	9	22	67	1	1	6	25	66	1	1	7	23	68	1	1	5	20	73
Exciting	#	13	12	74	194	376	7	5	63	154	343	6	5	49	153	317	5	9	53	169	330	9	8	61	206	463
	%	2	2	11	29	56	1	1	11	27	60	1	1	9	29	60	1	2	9	30	58	1	1	8	28	62
Practical	#	11	25	93	203	337	6	16	84	172	294	6	13	56	185	270	8	19	70	174	295	10	16	103	213	405
	%	2	4	14	30	50	1	3	15	30	51	1	2	11	35	51	1	3	12	31	52	1	2	14	29	54
Theorical	#	9	44	126	211	279	9	23	113	180	247	11	19	96	186	218	12	23	107	178	246	12	28	163	229	315
	%	1	7	19	32	42	2	4	20	31	43	2	4	18	35	41	2	4	19	31	43	2	4	22	31	42
Simple	#	8	16	80	196	369	7	10	61	143	351	5	11	46	174	294	4	16	63	151	332	6	14	74	214	439
	%	1	2	12	29	55	1	2	11	25	61	1	2	9	33	55	1	3	11	27	59	1	2	10	29	59
Applicable	#	10	20	83	200	356	6	9	74	167	316	3	8	74	171	274	5	8	62	176	315	5	13	92	232	405
	%	1	3	12	30	53	1	2	13	29	55	1	2	14	32	52	1	1	11	31	56	1	2	12	31	54
Useful	#	13	9	59	163	425	6	3	44	139	380	2	6	33	154	335	7	4	43	134	378	7	6	44	165	525
	%	2	1	9	24	64	1	2	8	24	66	0	1	6	29	63	1	1	8	24	67	1	1	6	22	70
With updated contents	#	14	14	46	167	428	5	7	43	149	368	3	3	28	157	339	6	5	43	147	365	6	7	40	172	522
	%	2	2	7	25	64	1	2	8	26	64	1	1	5	30	64	1	1	8	26	64	1	1	5	23	70

Table 13 - Evaluation of the speakers/experts

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		%	#	%	#	%	#	%	#	%	#
Competence	High quality	73	490	76	435	74	390	77	433	79	589
	acceptable	27	178	24	135	26	138	23	130	21	158
	Not adequate	0	1	0	2	0	2	1	3	0	0
Communication skills	Effective	72	485	75	430	74	390	72	408	72	540
	Involving	27	178	24	136	26	136	27	150	27	202
	Little effective	1	6	1	6	1	4	1	8	1	5

Table 14. Expectations, achievement of the prefixed purposes, consequences in the teaching practice, advisable of courses

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		%	#	%	#	%	#	%	#	%	#
Responded to the expectations	Yes	86	576	90	512	88	469	89	502	88	658
	No	0	0	0	1	0	2	0	1	0	0
	partially	14	93	10	59	11	59	11	63	12	89
Achievement of the prefixed purposes	Yes	85	571	87	500	84	445	88	497	87	651
	No	0	2	0	2	0	1	0	2	0	1
	partially	14	96	12	70	16	84	12	67	13	95
Consequences in the teaching practice	Yes	68	453	74	426	70	369	73	415	71	529
	No	2	11	3	16	1	5	3	17	1	10
	partially	31	205	23	130	29	156	24	134	28	208
Advisable	Subject matter colleagues	32	586	31	473	33	465	32	498	30	643
	Special education colleagues	25	447	25	378	23	331	24	376	25	529
	New hire colleagues	15	272	15	229	17	240	16	251	15	320
	Not-specialized on special education colleagues	11	201	13	197	11	155	12	186	13	281
	Specialized on special education colleagues	11	201	11	162	10	135	9	144	11	238
	School coordinators	6	116	5	8	6	92	6	88	6	137

Table 15. Teachers' motives for following the courses

		Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
		%	#	%	#	%	#	%	#	%	#
Inclusion in the three-year training plan of the school institution	Yes	34	229	29	165	30	159	32	183	29	219
	No	66	440	71	407	70	371	68	383	71	528
Coherence with the prioriy identified in PTOF/RAV/PDM	Yes	53	354	51	290	52	277	51	287	51	383
	No	17	116	19	106	19	101	18	103	19	139
	partially	30	199	31	176	29	152	31	176	30	225
Choice of the topic and discussion during the meeting with the school leader	yes,during faculty committee with teachers	11	71	12	71	13	67	11	61	9	70
	Yes, with school leader and training coordinator	6	37	5	30	6	32	7	37	7	54
	no, I choose the course independently	84	561	82	471	81	431	83	468	83	623
Choice with free training and additional to the commitments set forth in the Institution Plan	Yes, I choose the course independently but it is inserted in the Institutional Plan	22	147	20	116	20	106	20	112	19	142
	Yes, I choose the course independently	74	494	74	421	75	395	77	433	75	558
	No, I am oriented by school leader and training coordinator	4	28	6	35	5	29	4	21	6	47
Knowledge mode	My colleagues told me about the course	49	359	43	274	48	284	40	248	43	368
	has been approved in the faculty committee	1	9	2	15	1	8	3	19	2	19
	I found it in SOFIA	20	150	21	135	21	125	18	109	14	118
	I knew the Essediquadro platform	20	146	21	132	21	124	23	144	25	209
	I followed webinars linked to the course	3	22	4	28	3	17	6	35	7	55
	Other	7	50	9	55	7	39	11	66	9	77

Table 16 Easy use of the platform

	Technologies and inclusion		If I do, I understand, but if I understand […]		Formally, training the mind freely		Specific Learning Disabilities: you never stop learning		Inclusion: the value of the difference	
	%	#	%	#	%	#	%	#	%	#
Yes	94	628	94	536	95	502	94	534	95	713
No	0	3	0	2	1	4	0	2	0	3
partially	6	38	6	34	5	24	5	30	4	31