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The Open Networked Learning course and educators perceptions on digital competences and community inquiry, during the course

Santos, D. ; Åbjörnsson, L.; Creelman, A.; Pareigis, J.; Lars Uhlin, Cleveland-Innes, M.; Theilmeier, G.; Kvarnström, M.

Who we are

Alastair Creelman - ONL organizer
e-learning specialist at Linnaeus University

Danielle Santos
Scientist at University of Oldenburg

Gregor Theilmeier
Professor at University of Oldenburg

Jörg Pareigis - ONL organizer
Head of the Centre for Teaching and Learning at Karlstad University

Lars Uhlin - ONL organizer
Educational developer at Linköping University

Lotta Åbjörnsson - ONL organizer
Educational developer at Lund University

Maria Kvarnström - ONL organizer
Senior Lecturer at Linköping University

Marti Cleveland-Innes
Program Director of Education Athabasca University

AGENDA

- Open Networked Learning course
- Methods
- Results
- Discussion

ONL - Open Networked Learning

Developed as a response to a growing need for courses dealing with the use of digital tools for teaching and learning

Started in 2014 and was intended to take international and cross-institutional collaboration

Learning environment

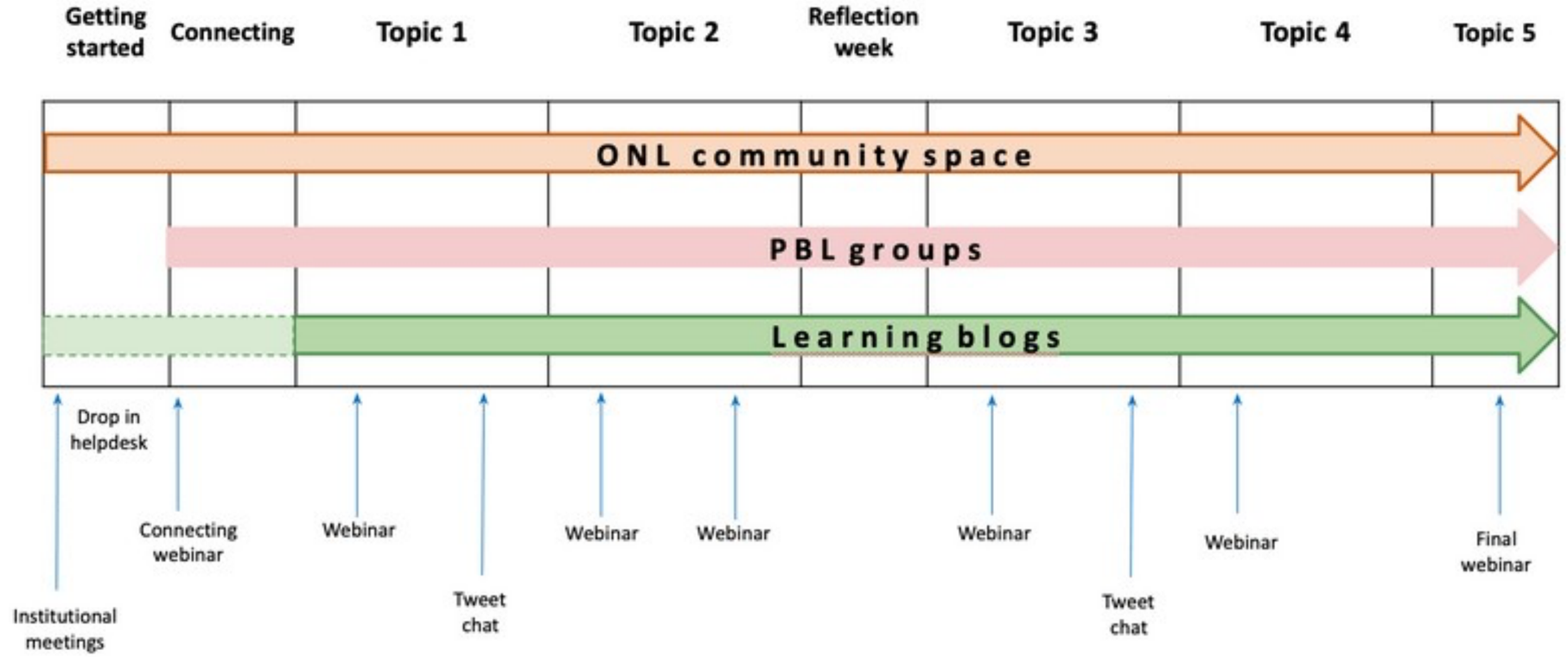


Image from ONL group

An intention in designing the course is to develop a community of practice that can enhance understanding of what personal learning networks and environments can mean and how these can be built

ONL organizers

Course overview

Getting started

1 week

Connecting

1 week

Online participation & digital literacies

2 weeks

Open learning, sharing & openness

2 weeks

Reflection week

1 week

Learning in communities - networked collaborative learning

2 weeks

Design for online & blended learning

2 weeks

Lessons learnt - future practice

1 week

Equivalent to two weeks of full time studies (80 hours)

Image from ONL group

Target group: university teachers, educational technologists, educational developers and courses designs.

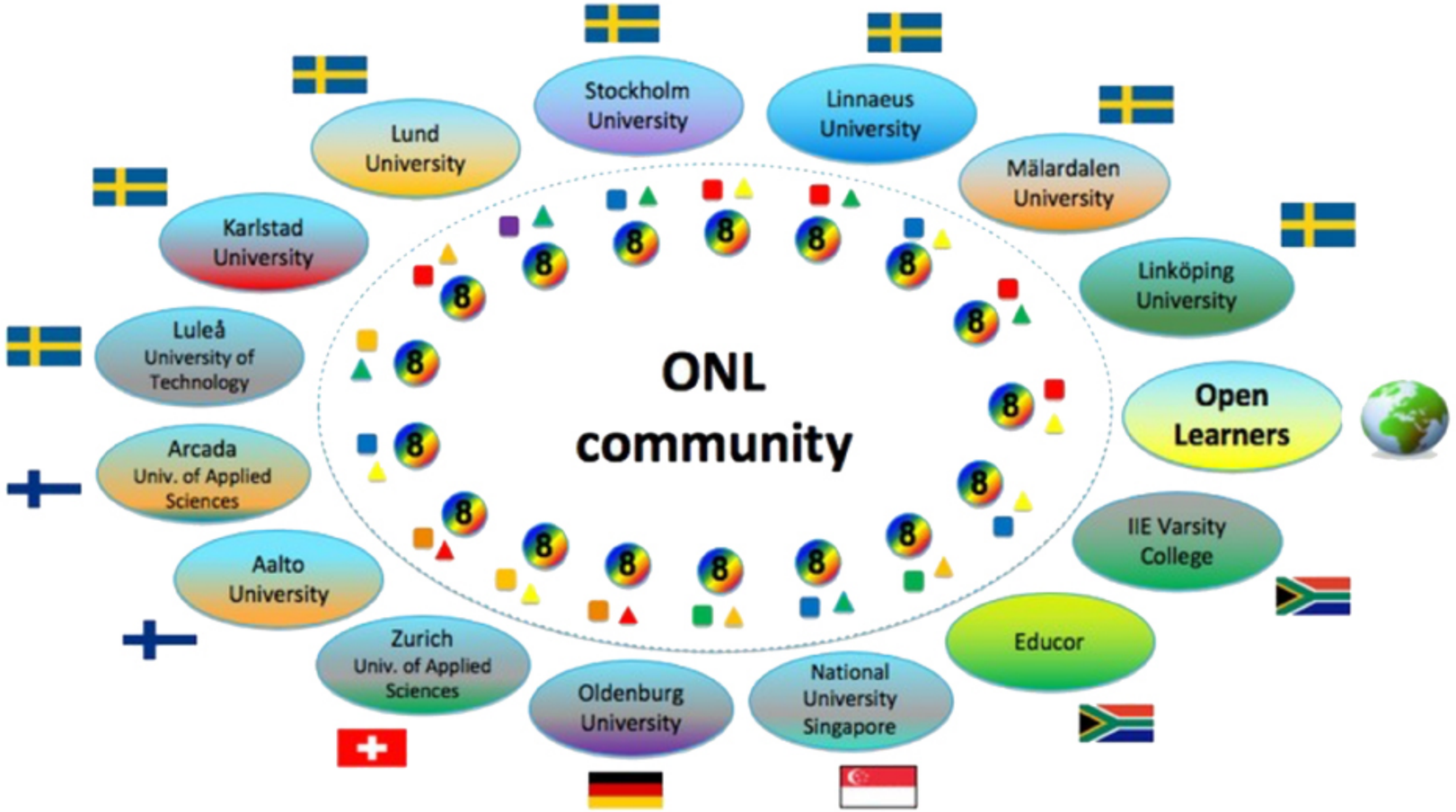


Image from ONL group

Research questions

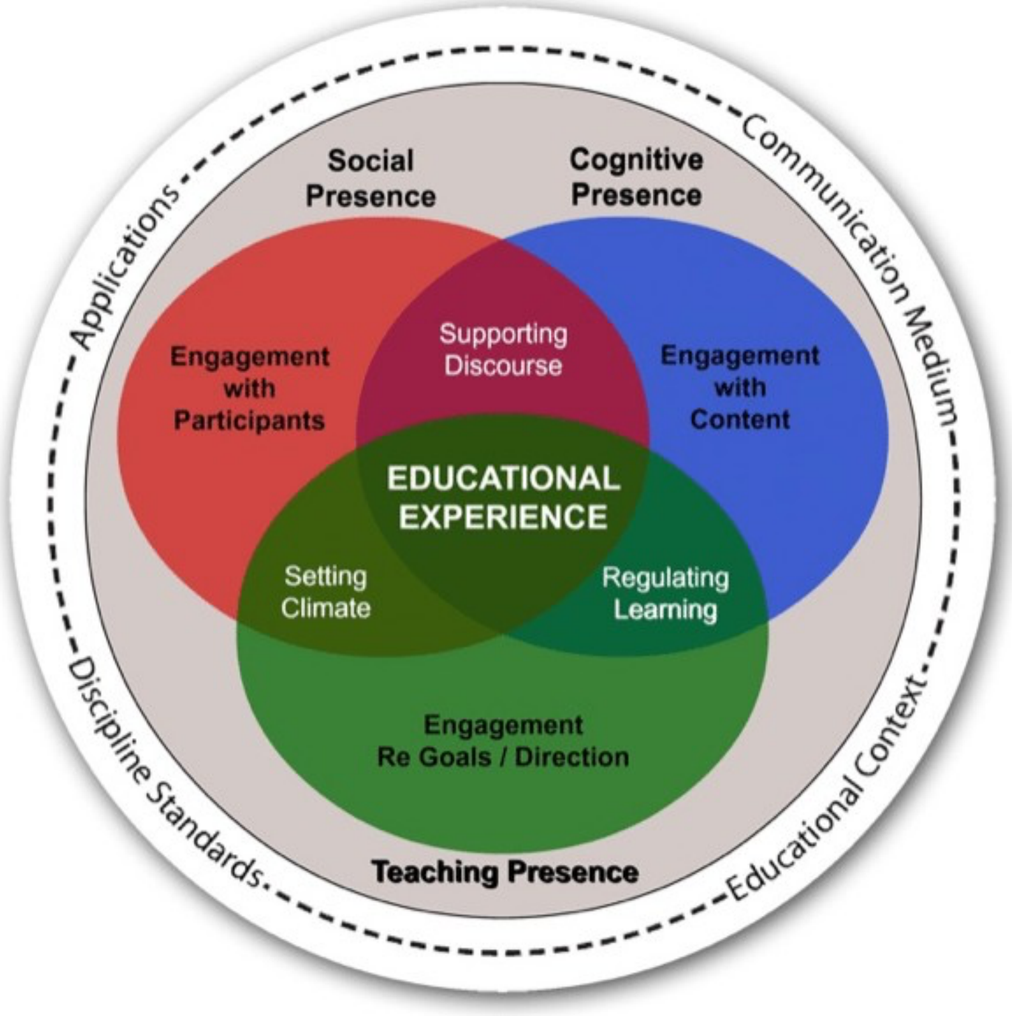
1. Do the educators who joined the course change their perception related to digital competences and community building after the course?

2. Which area they could improve most (digital competences or community building)?

METHODS

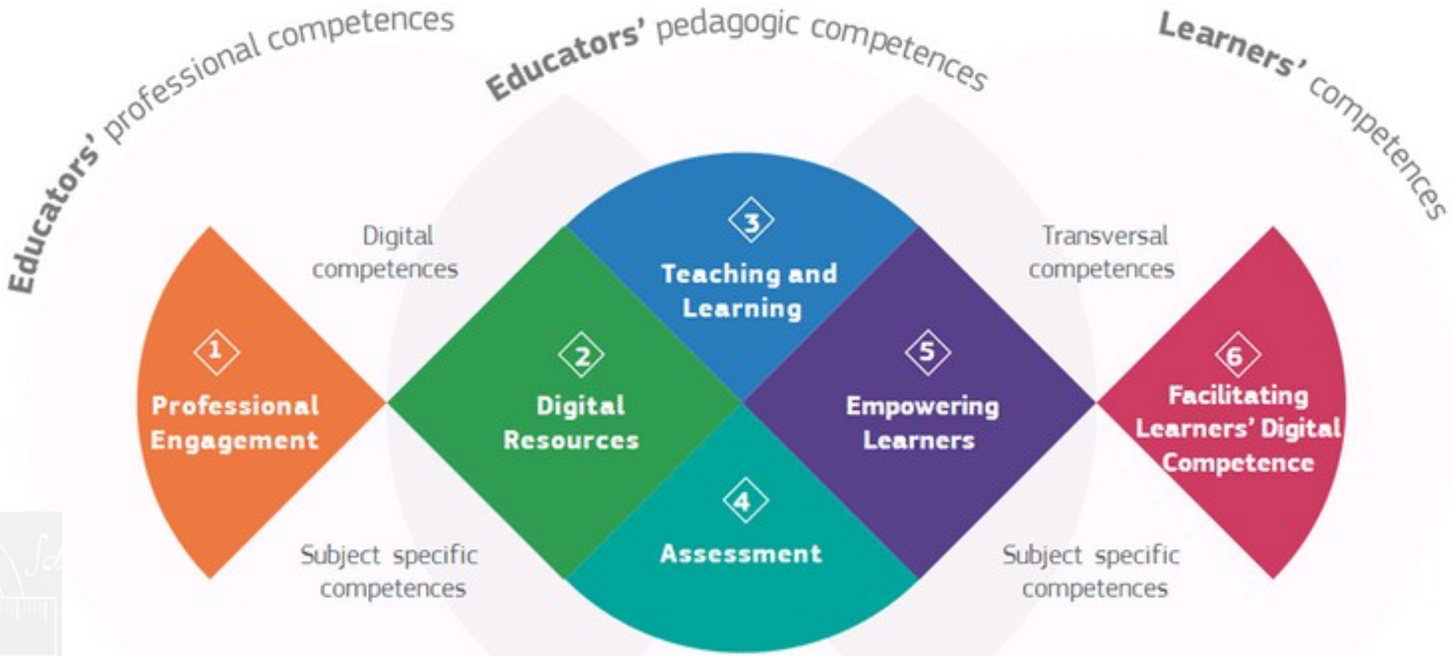
2 instruments to access changes

COI - EDUCATOR VERSION

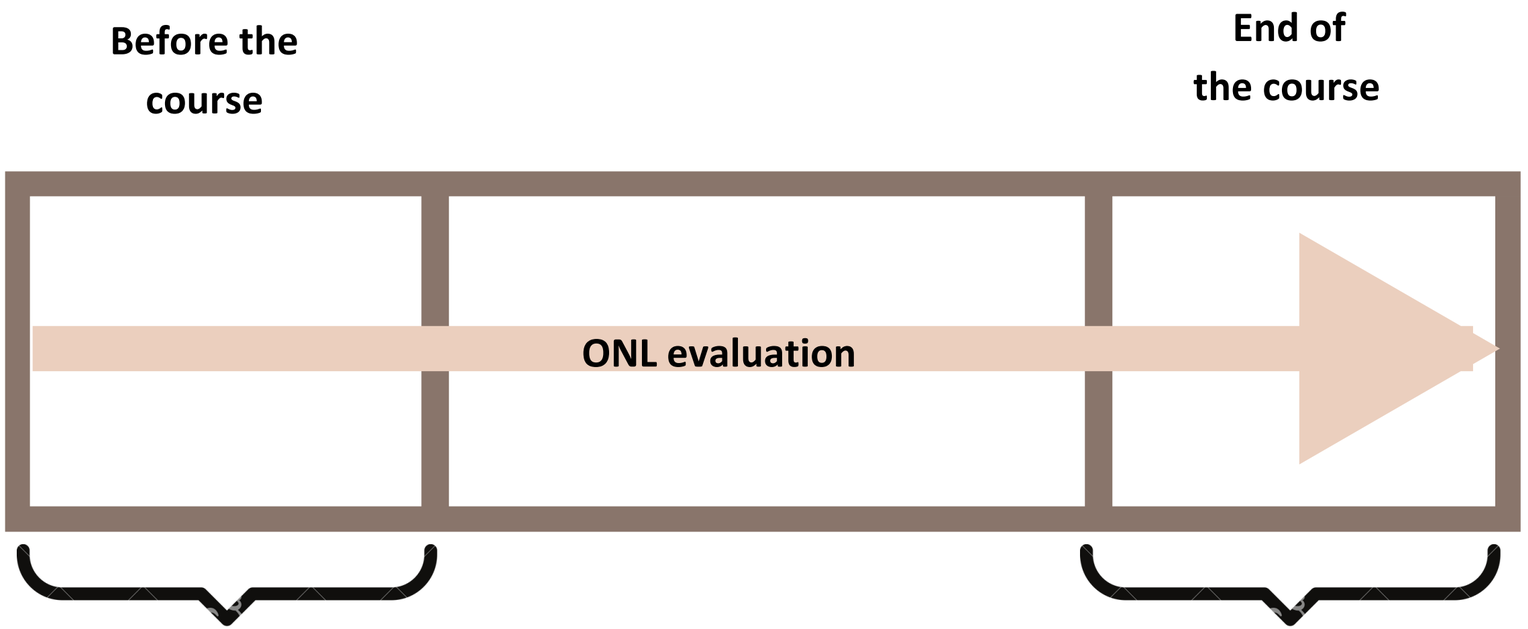


Presence	Subcategories
Cognitive presence	Triggering event
	Exploration
	Integration
	Resolution
Social presence	Open communication
	Group cohesion
	Personal expression
Teaching presence	Direct instruction
	Facilitation
	Design and organisation
Emotional presence	Teaching presence
	Social presence
	Cognitive presence

DIGCOMPEDU

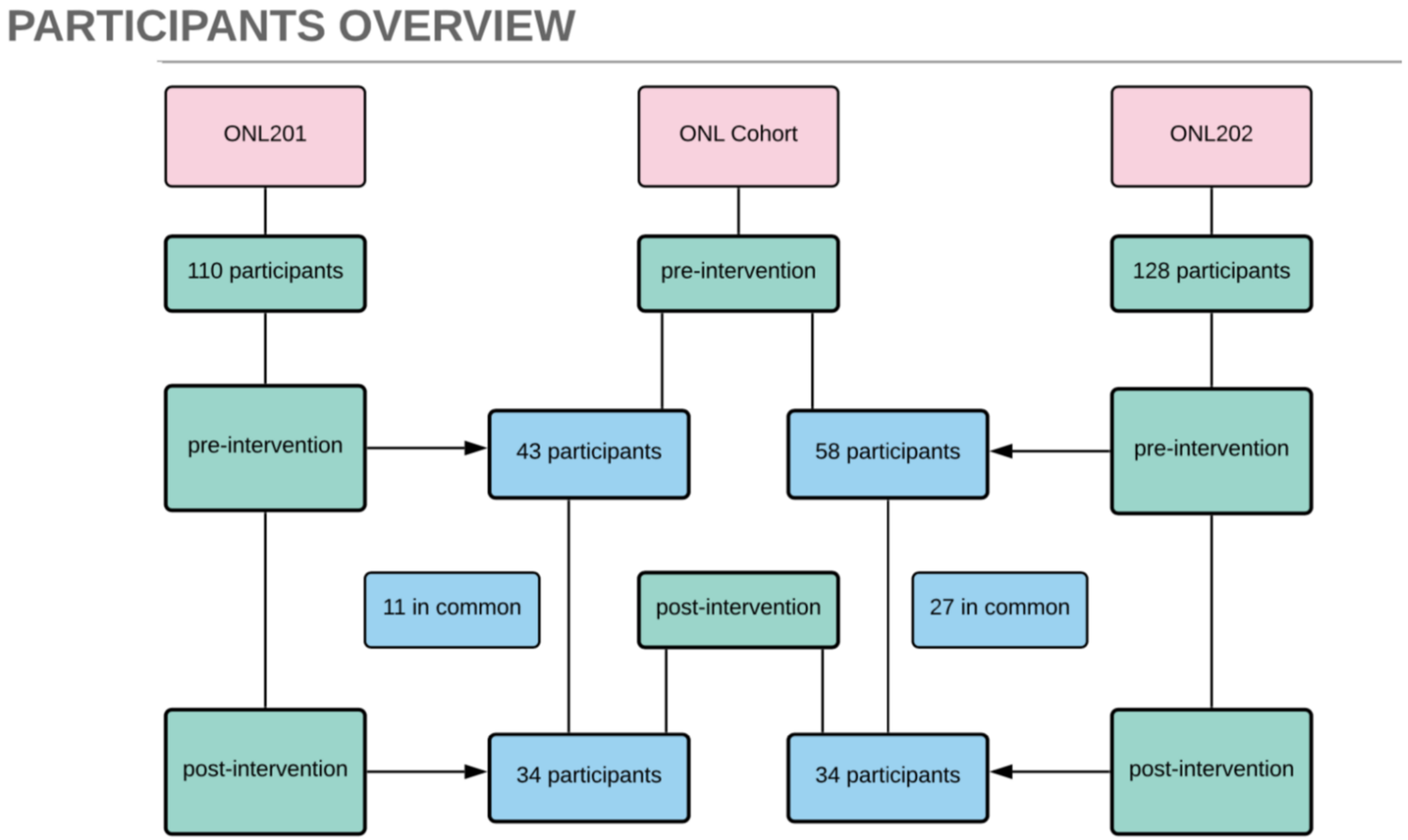

Educators' professional competences
Educators' pedagogic competences
Learners' competences
Digital competences
Transversal competences
1 Professional Engagement
2 Digital Resources
3 Teaching and Learning
4 Assessment
5 Empowering Learners
6 Facilitating Learners' Digital Competence
Subject specific competences
Subject specific competences

Time frame



Iterations: ONL201 and ONL202.

PARTICIPANTS OVERVIEW

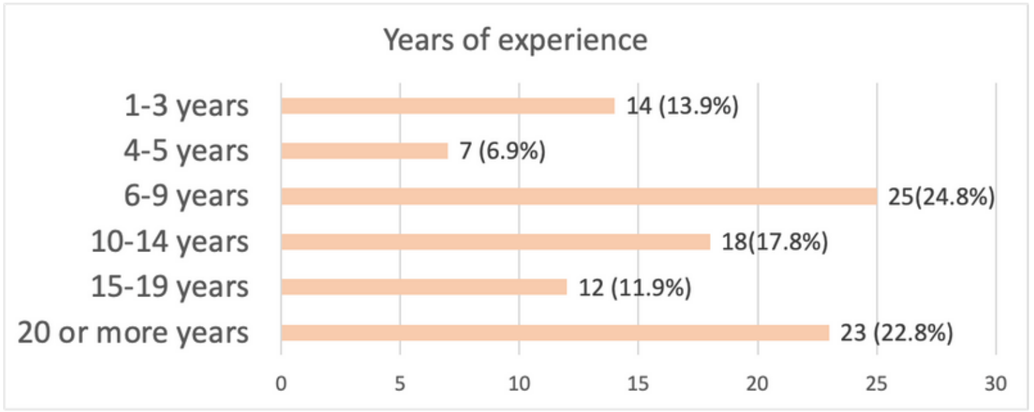


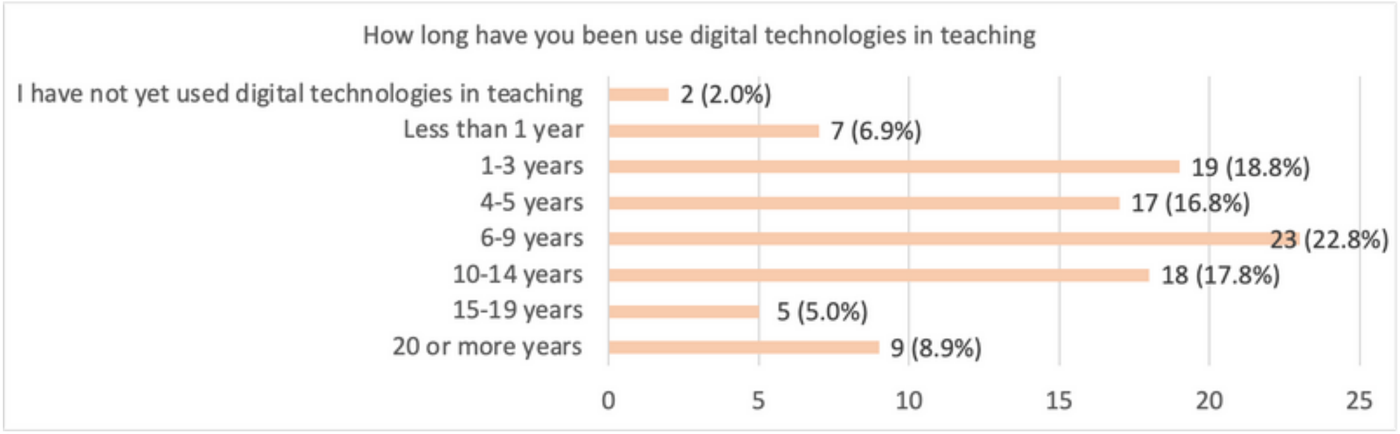
DigCompEdu	Mean/SD – pre-intervention ONL201 (n=43)	Mean/SD – pre-intervention ONL202 (n=58)	p
DigCompEdu global value	43.35/17.19	46.59/14.07	0.30
Area 1- Professional engagement	9.02/3.57	9.29/2.71	0.67
Area 2 - Digital resources	6.23/3.15	6.19/2.39	0.94
Area 3 – Teaching and Learning	8.51/3.80	9.16/2.95	0.36
Area 4 – Assessment	5.19/2.70	5.76/2.79	0.30
Area 5 – Empowering learners	5.02/2.73	5.93/2.63	0.09
Area 6 – Facilitating learners digital competence	9.37/3.84	10.26/3.81	0.25
Community of inquiry			
Social presence	33.95/4.85	34.29/5.41	0.74
Open communication	11.41/1.92	11.34/2.24	0.82
Personal expression	11.09/1.98	11.29/1.93	0.61
Group cohesion	11.42/1.67	11.66/2.00	0.53
Cognitive presence	46.66/6.37	47.33/6.37	0.60
Triggering event	11.56/1.99	11.83/1.96	0.50
Exploration	11.26/1.84	11.48/1.99	0.56
Integration	12.37/1.79	12.19/1.87	0.62
Resolution	11.41/2.14	11.83/1.91	0.37
Teaching presence	51.51/6.81	52.17/7.60	0.65
Direct instruction	12.00/1.88	12.03/1.88	0.93
Facilitation	22.33/3.40	23.00/3.90	0.37
Design & organization	17.19/2.68	17.14/2.74	0.93
Emotional presence	21.88/3.06	22.72/3.69	0.22
With social presence	7.02/1.37	7.00/1.44	0.94
With cognitive presence	7.28/1.24	7.69/1.40	0.13
With teaching presence	7.58/1.31	8.03/1.57	0.13

Results

PARTICIPANTS CHARACTERISTICS

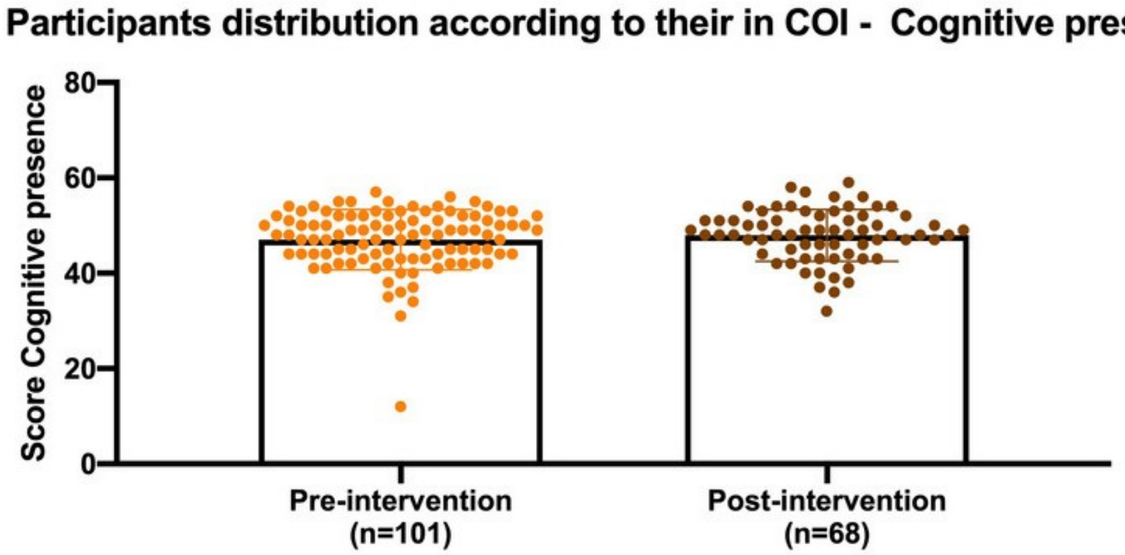
Area of expertise	n
Health sciences	22
Humanities	18
Engineering	13
Economics	11
Mathematics or computer science	11
Language/literature	10
Natural sciences	7
Arts	4
Law	2
Other	22





COI - COGNITIVE PRESENCE

Results

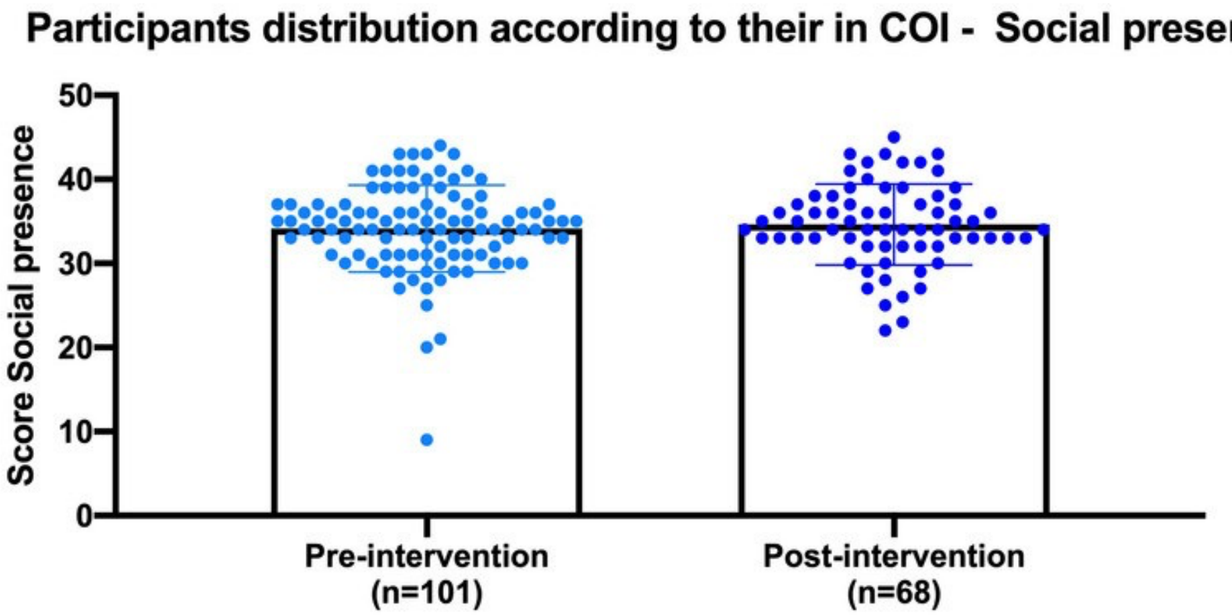


T test to dependent sample (n=38)

Community of Inquiry	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Cognitive presence	47.84/5.25	48.87/5.76	0.115

COI - SOCIAL PRESENCE

Results

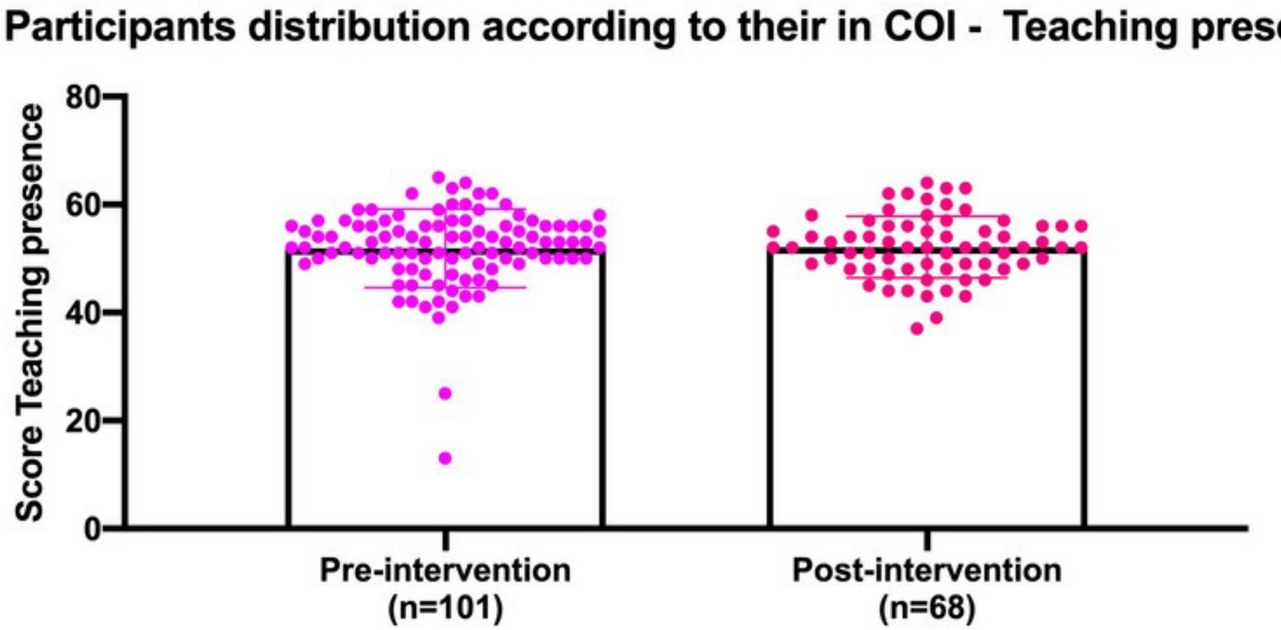


T test to dependent sample (n=38)

Community of Inquiry	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Social presence	34.26/4.95	34.76/4.96	0.420

COI - TEACHING PRESENCE

Results

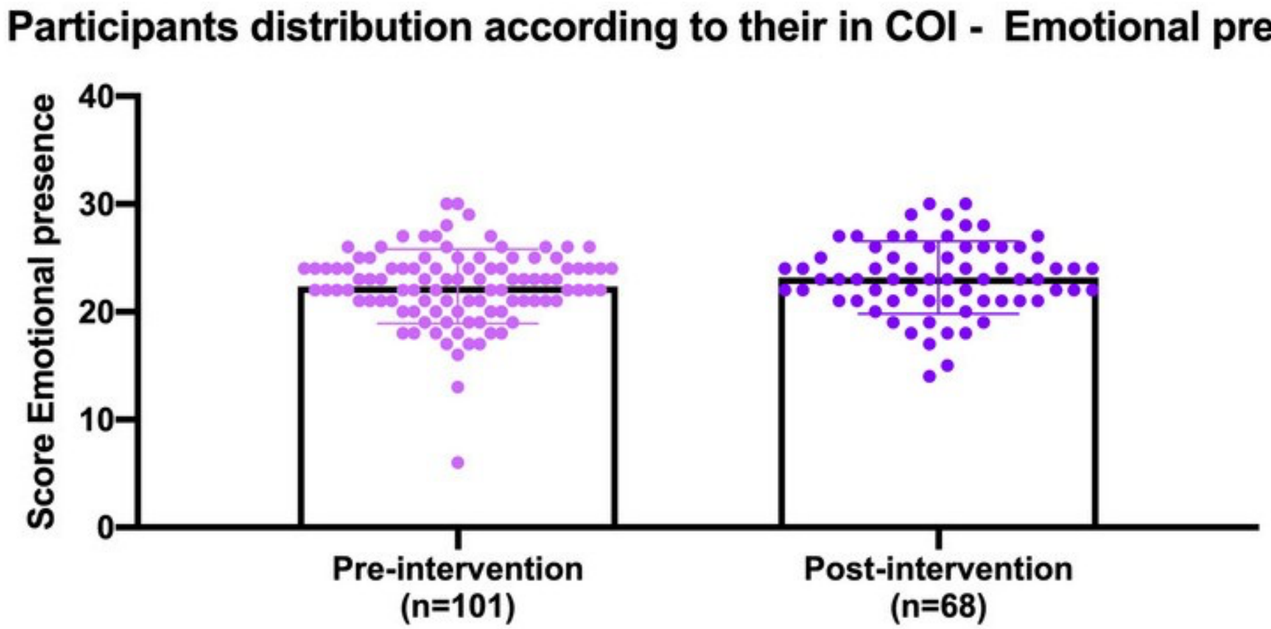


T test to dependent sample (n=38)

Community of Inquiry	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Teaching presence	51.87/6.58	52.87/5.85	0.156

COI - EMOTIONAL PRESENCE

Results



T test to dependent sample (n=38)

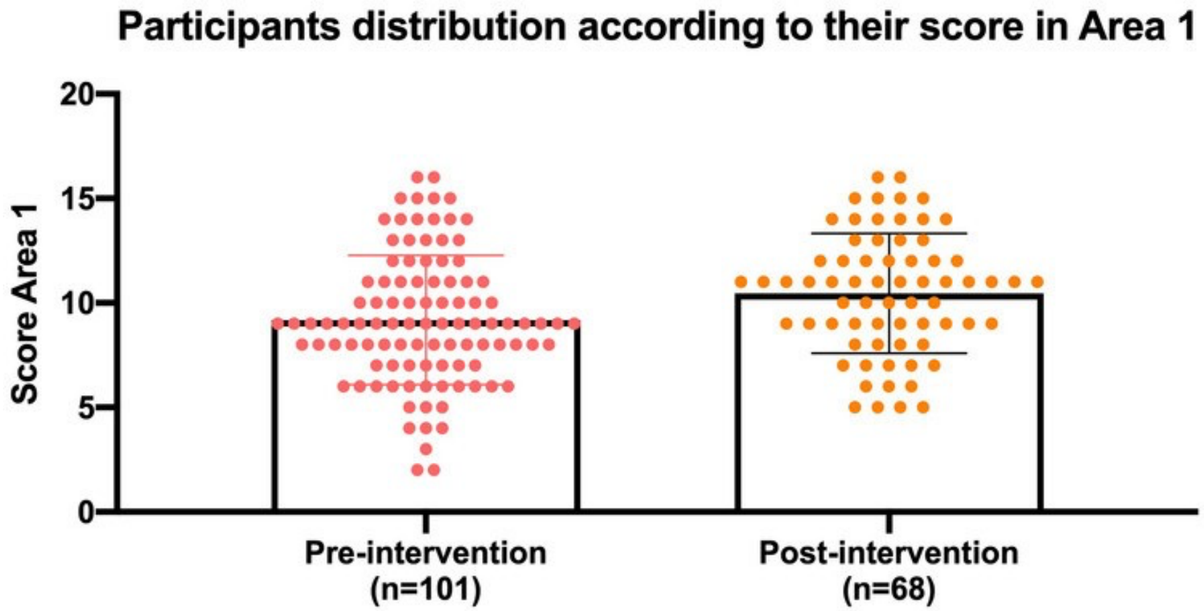
Community of Inquiry	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Emotional presence	22.39/3.44	23.58/2.92	0.017*

DIGCOMPEDU - AREA 1

Results

Area 1- Professional Engagement

1. Organisational communication
2. Professional collaboration
3. Reflective practice
4. Digital CPD



T test to dependent sample (n=38)

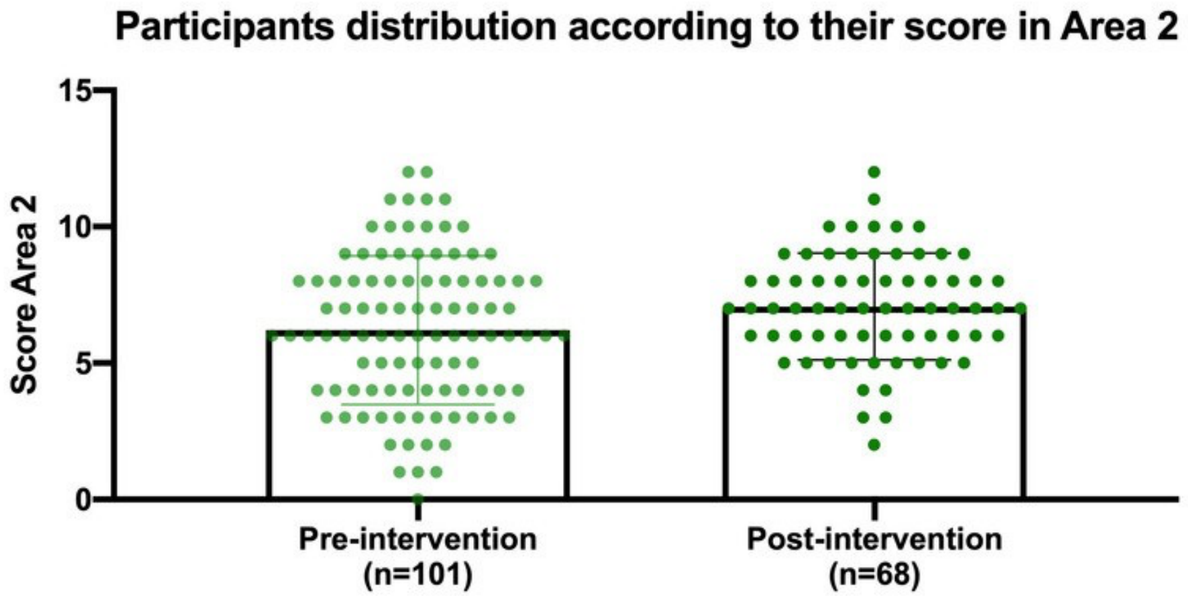
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 1- Professional engagement	8.92/3.43	10.63/3.06	0.000*

DIGCOMPEDU - AREA 2

Results

Area 2 – Digital Resources

1. Selecting
2. Creating & modifying
3. Managing, protecting, sharing



T test to dependent sample (n=38)

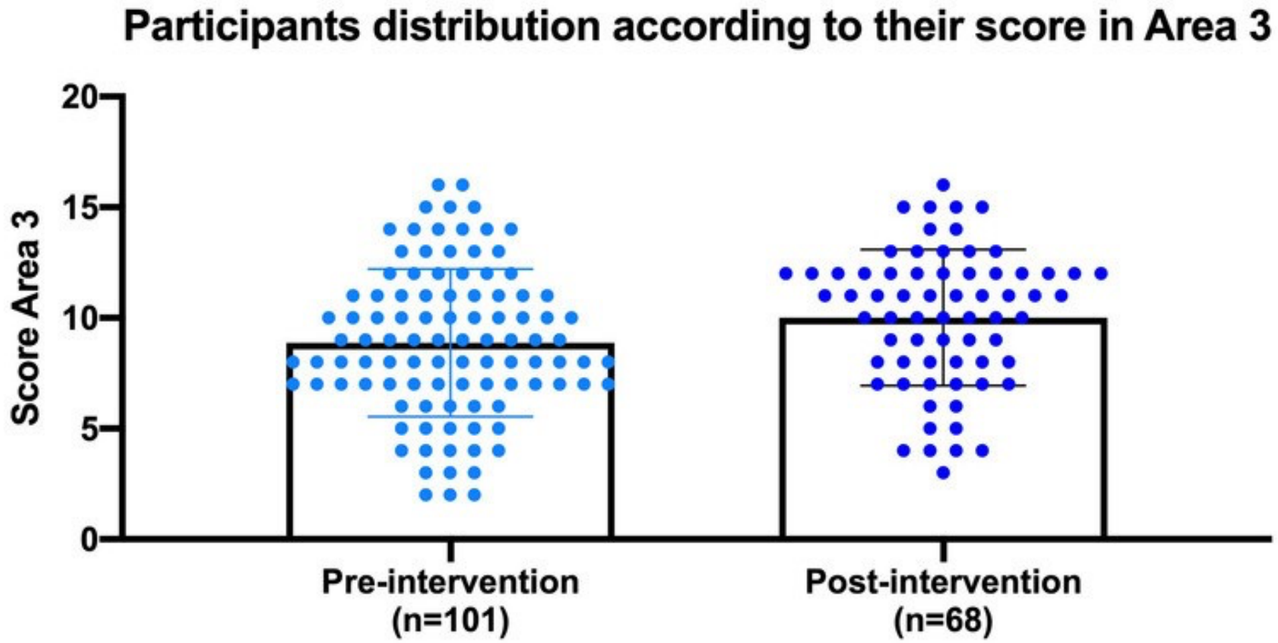
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 2 - Digital resources	5.29/2.43	7.08/1.93	0.000*

DIGCOMPEDU - AREA 3

Results

Area 3 – Teaching and learning

1. Teaching
2. Guidance
3. Collaborative learning
4. Self-regulated learning



T test to dependent sample (n=38)

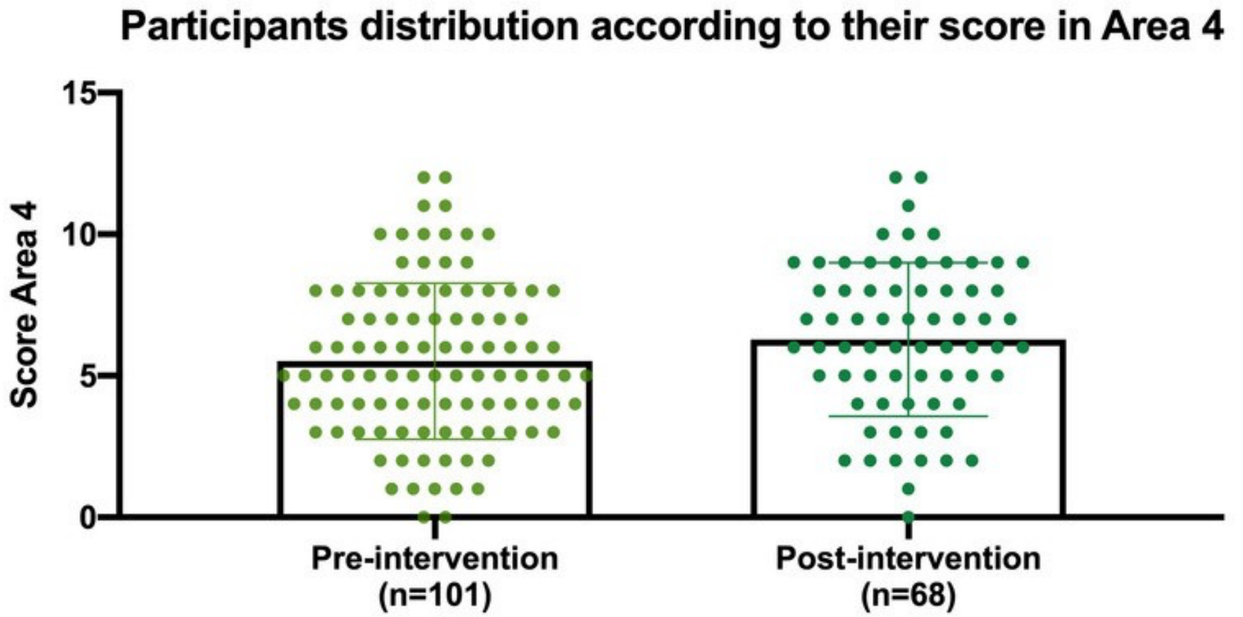
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 3 – Teaching and Learning	8.87/3.10	10.63/2.88	0.000*

DIGCOMPEDU - AREA 4

Results

Area 4 – Assessment

1. Assessment strategies
2. Analysing evidence
3. Feedback & planning



T test to dependent sample (n=38)

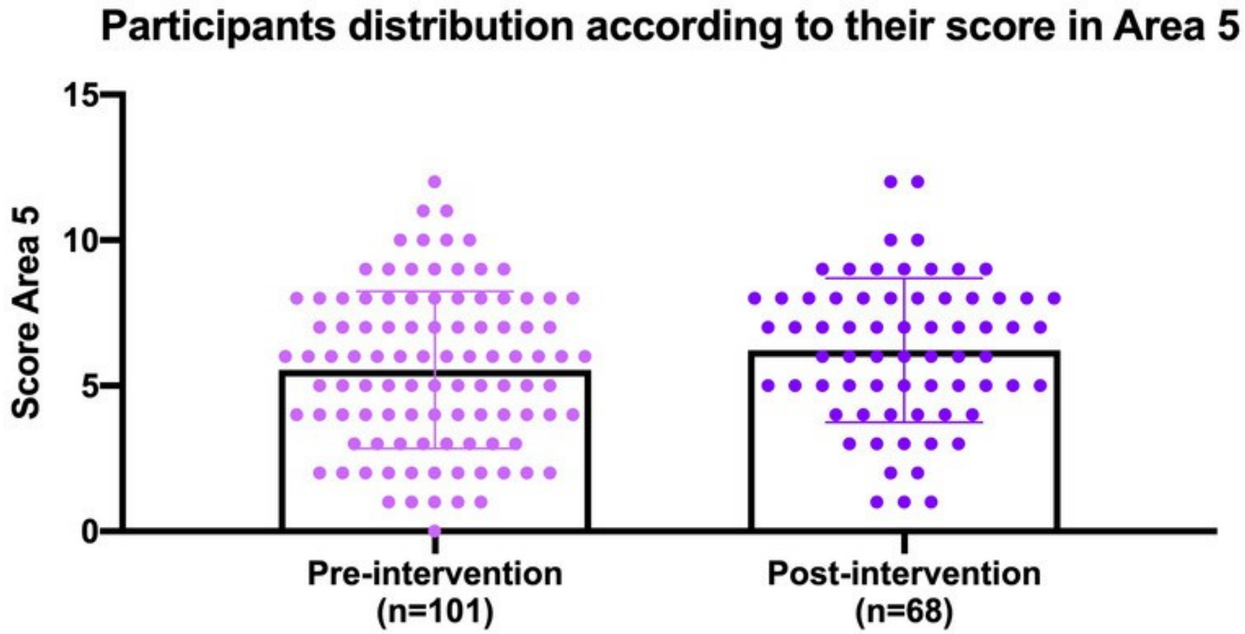
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 4 – Assessment	5.16/2.83	6.37/2.89	0.004*

DIGCOMPEDU - AREA 5

Results

Area 5 – Empowering Learners

1. Accessibility & inclusion
2. Differentation & personalisation
3. Actively engaging learners



T test to dependent sample (n=38)

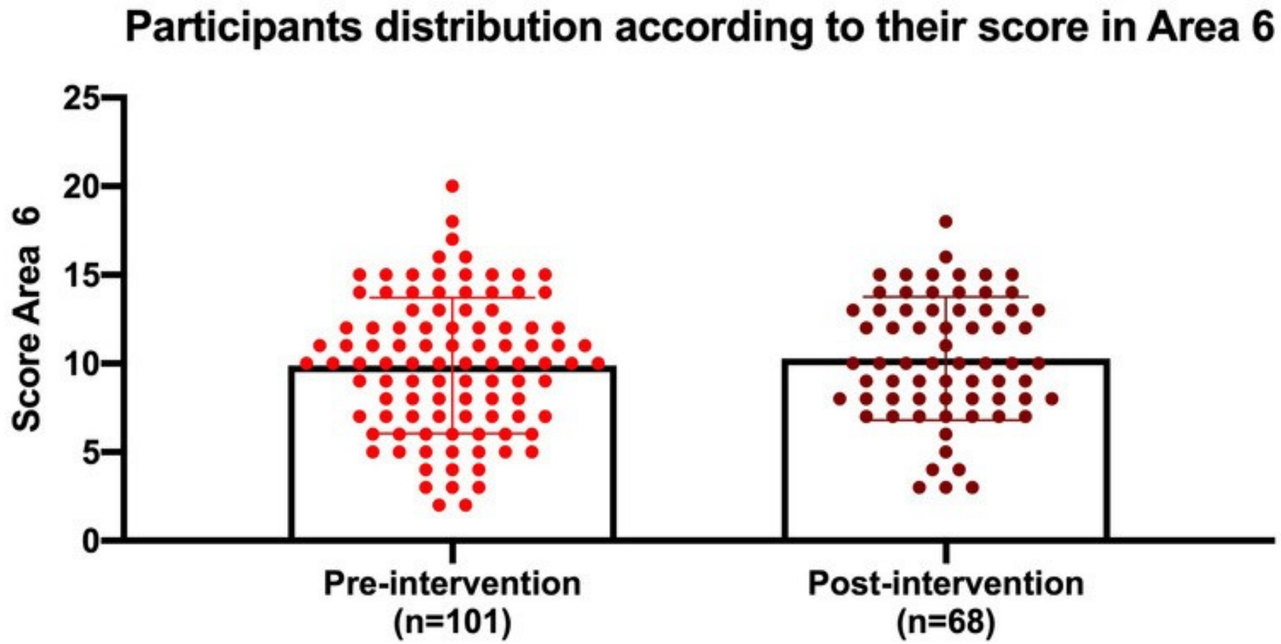
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 5 – Empowering learners	4.84/2.53	6.58/2.53	0.000*

DIGCOMPEDU - AREA 6

Results

Area6 – Facilitating Learners' digital competence

1. Information & media literacy
2. Communication
3. Content creatina
4. Responsible use
5. Problem solving



T test to dependent sample (n=38)

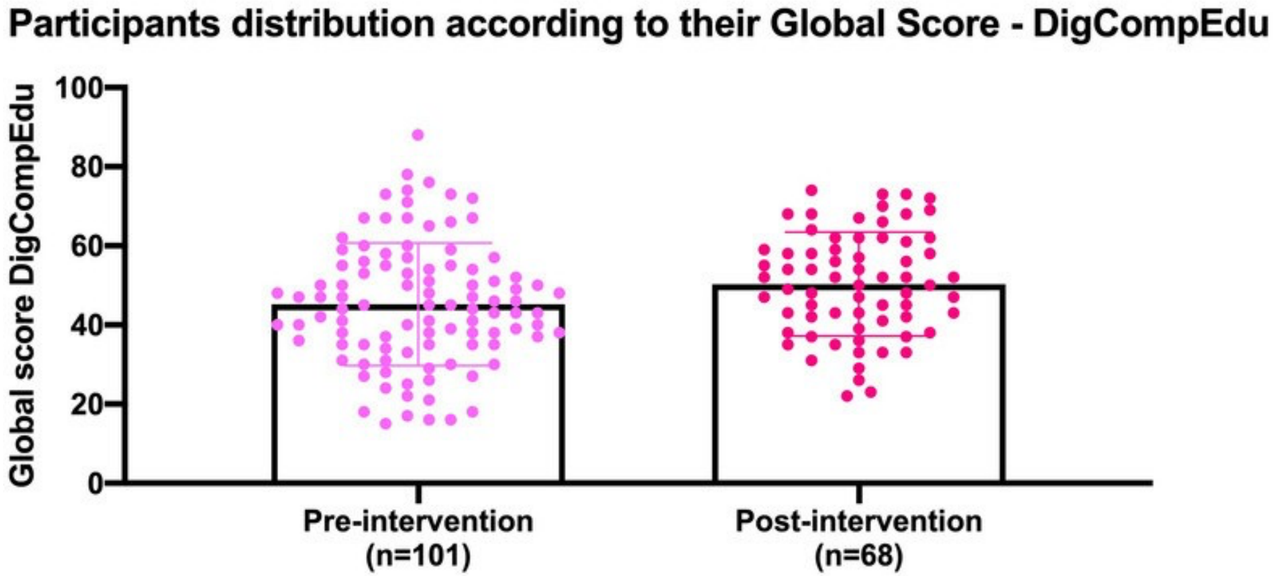
DigCompEdu	Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
Area 6 – Facilitating learners digital competence	8.74/3.72	10.29/3.26	0.000*

DIGCOMPEDU - GLOBAL VALUE

Results

T test to dependent sample (n=38)

DigCompEdu		Mean/SD – pre- intervention (n=38)	Mean/SD – post-intervention (n=38)	p
DigcompEdu value	**global**	41.82/14.51	51.58/12.68	0.000*



Conclusion

- ONL participants had statistically significant changes for all areas verified for digital competences;
- Community building competences showed significant changes to emotional presence.

QUESTIONS RAISED

- **Are Digital Competences easier to develop than community building?**
- **Do the participants need more time to develop these skills?**

QUESTIONS RAISED

- **Is there a minimal important difference for COI?**

Thank you

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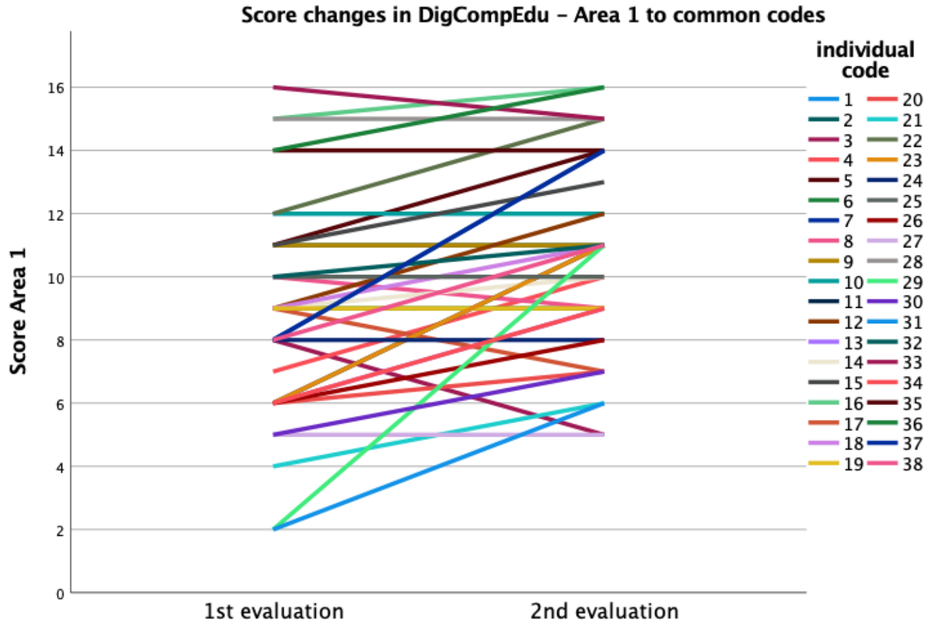
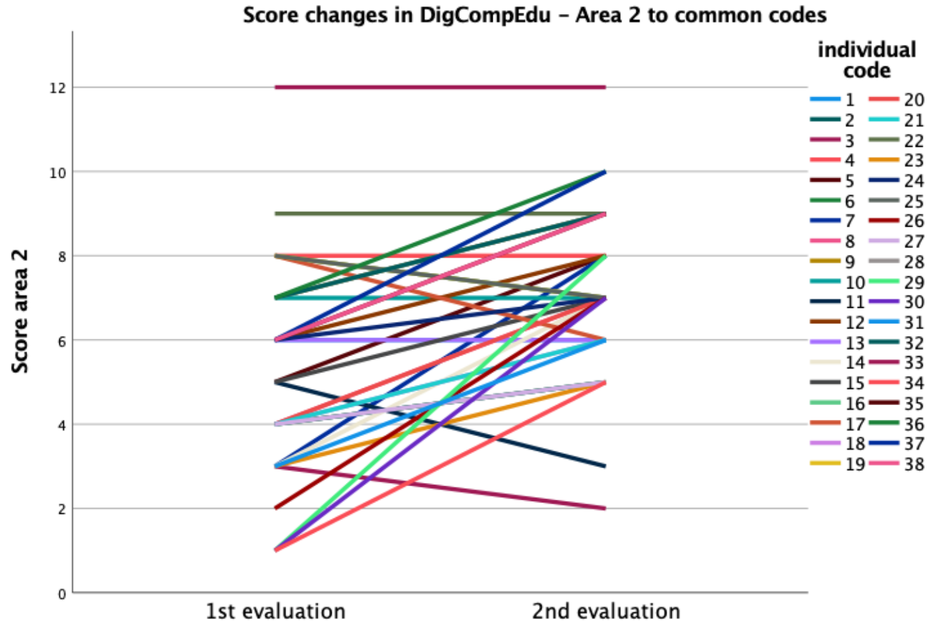
Score changes to common codes

DIGCOMPEDU - AREA 1

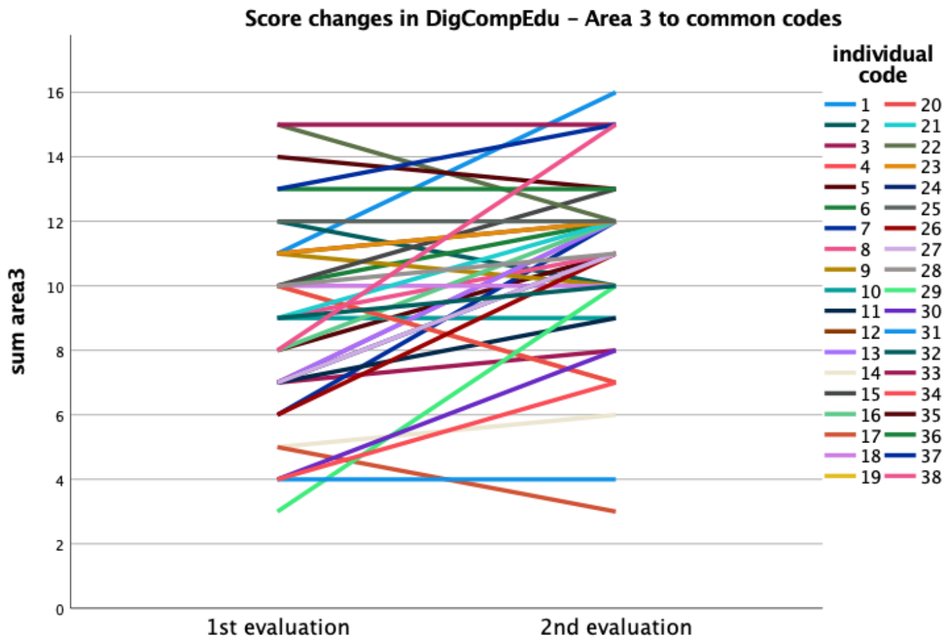


DIGCOMPEDU - AREA 2

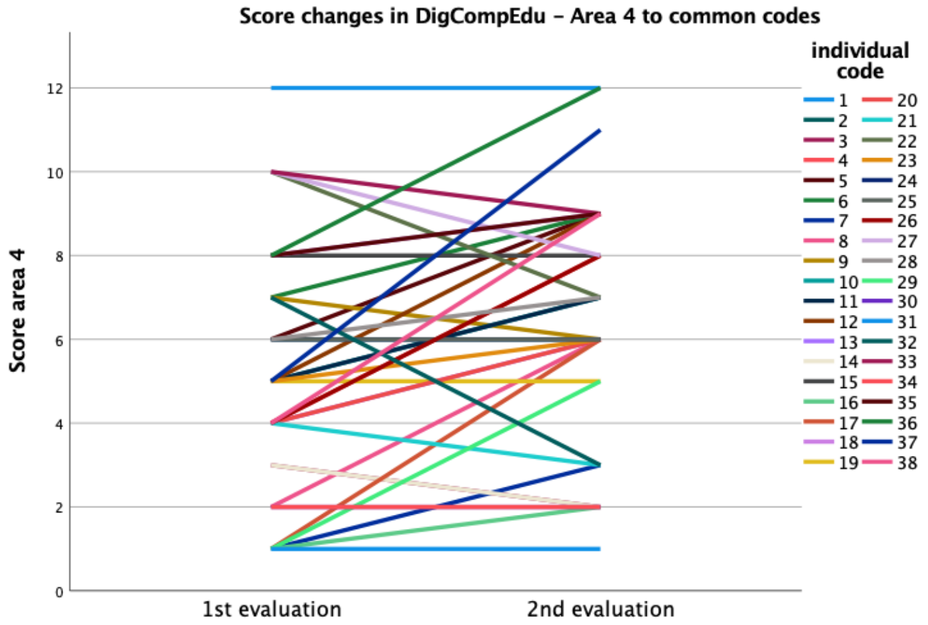


Score changes to common codes

DIGCOMPEDU - AREA 3

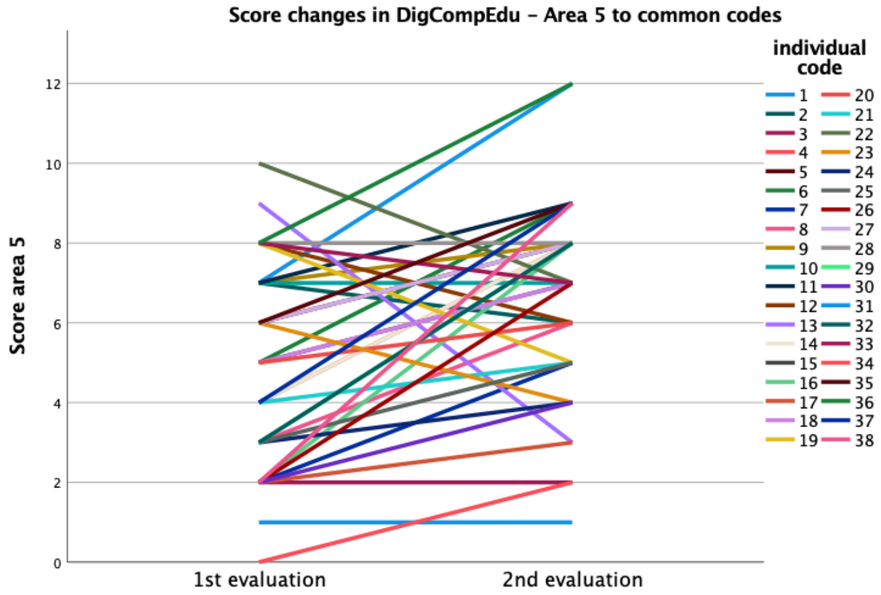


DIGCOMPEDU - AREA 4

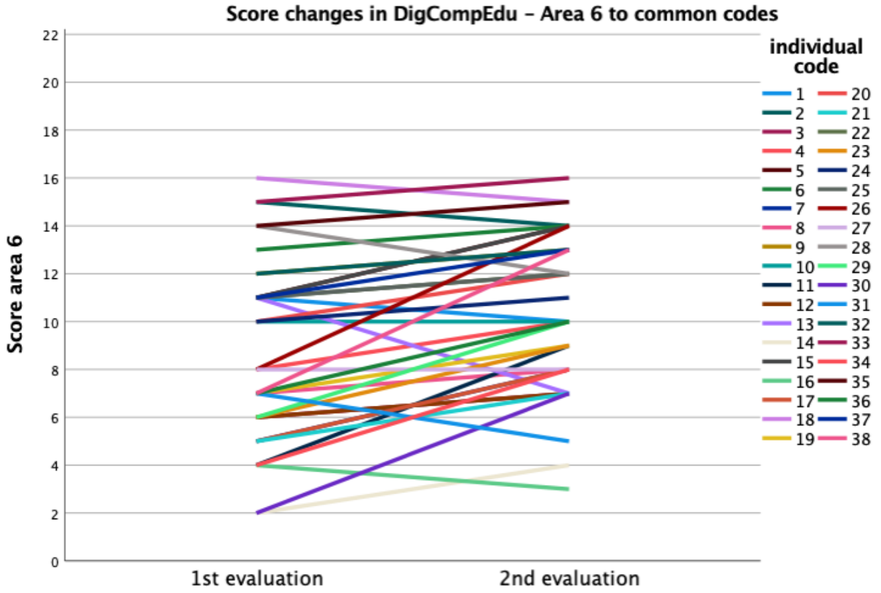


Score changes to common codes

DIGCOMPEDU - AREA 5

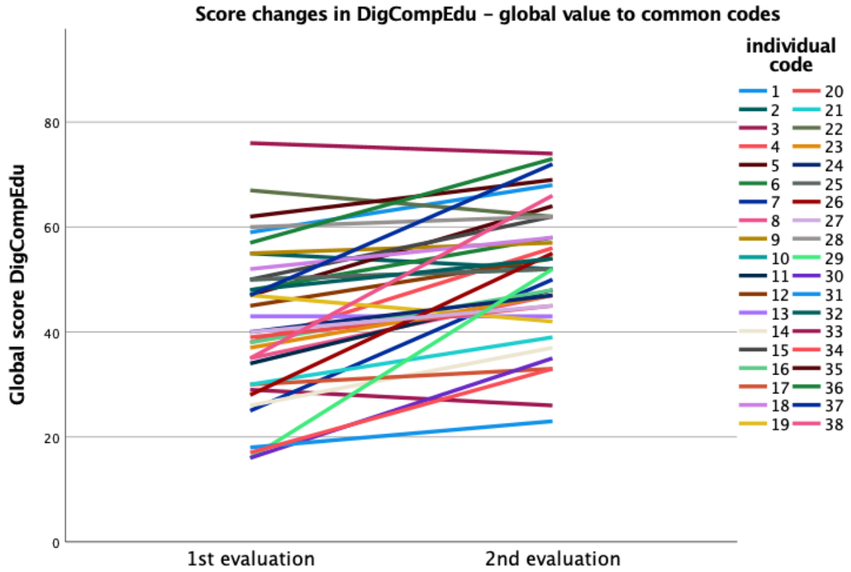


DIGCOMPEDU - AREA 6



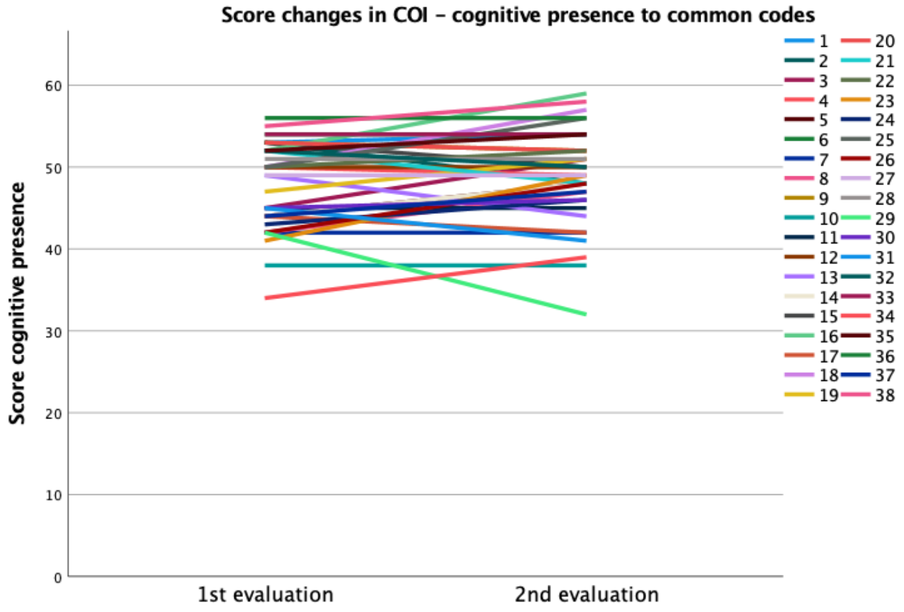
Score changes to common codes

DIGCOMPEDU - GLOBAL SCORE

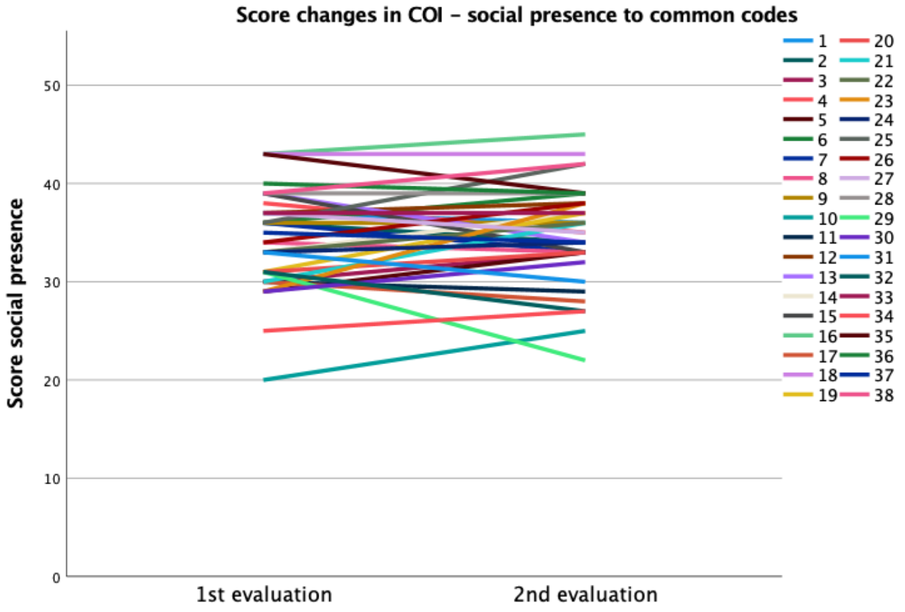


Score changes to common codes

COI - COGNITIVE PRESENCE

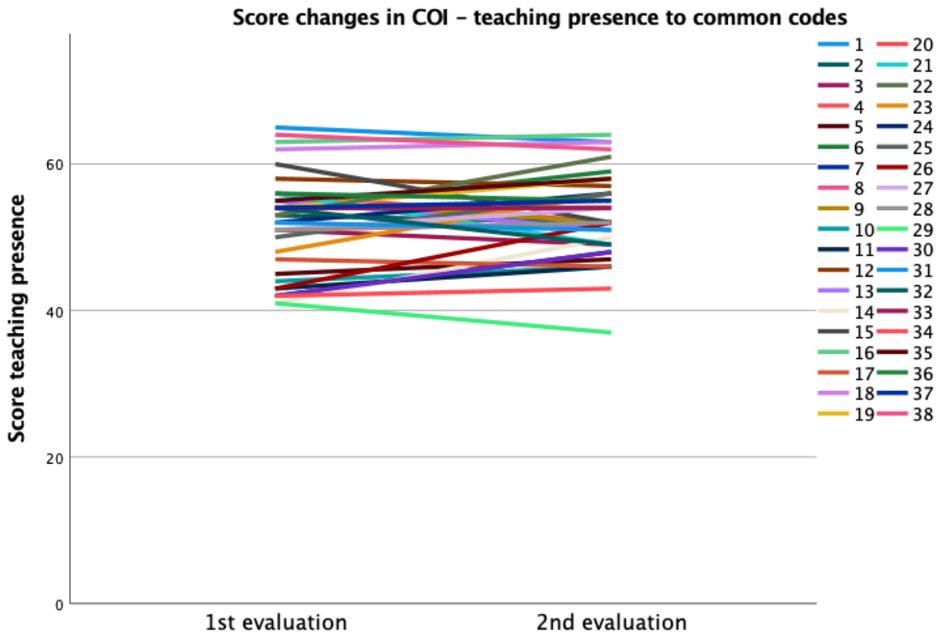
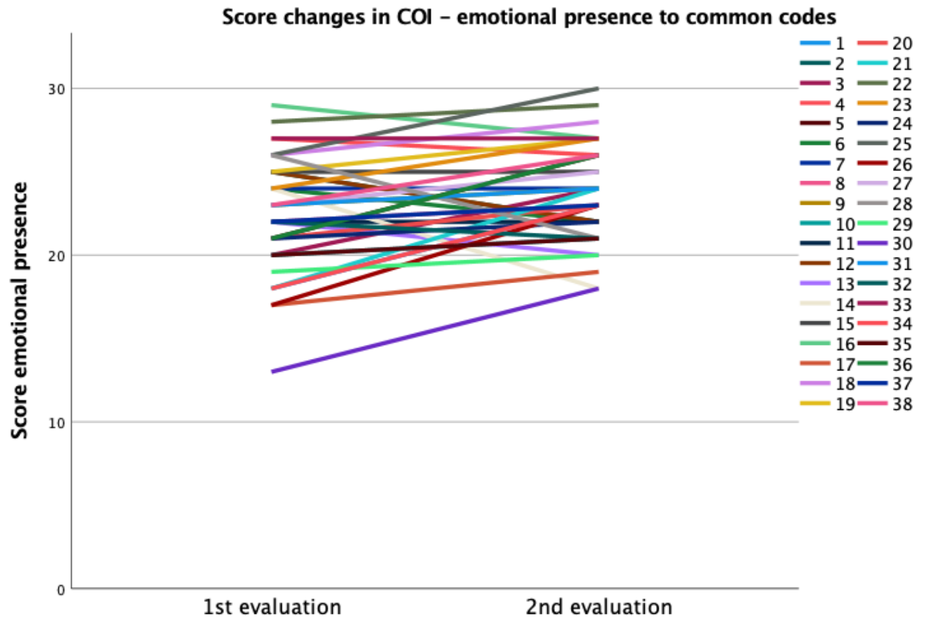


COI - SOCIAL PRESENCE



Score changes to common codes

COI - TEACHING PRESENCE



COI - EMOTIONAL PRESENCE