



Mapping resources

Results Juli 14 2020 (second round)

Why mapping?

- Identifying blank spots: DigComp 2.1 Digital Competence Framework
- Collecting additional information for selecting resources, building local toolkits.
- Description of resources in European database.
 - Allowing librarians to select resources.
- Assessment, evaluation, policy recommendations.

What did we map?

- Resources Voyageurs du Numerique (VDN) – Bibliothèque Sans Frontières, Bibliothèque Sans Frontières Belgique
 - Plus Cybersimple.be
- Additional resources brought in by projectpartners *for local focus*
 - Finish Library Association, Fundacja Rozwoju Społeczeństwa Informacyjnego and Koninklijke Bibliotheek

On what denominators?

- 21 competences of DigComp 2.1
 - Plus four additional competences on operating devices
- Proficiency levels 1, 2 and 3 of DigComp 2.1
 - Plus an additional baselevel 0
- Targetgroups (see first round)
- Types of resources (see first round)
- Types of content (see first round)
- Weight based on size of resource
- Usability for EU database: copyrights, fees, range
- Other

Results in two parts

- Part 1: Totals
- Part 2: Mapping to the Digcomp 2.1-framework.

Part 1: Totals

- Counted
- Weighted

Totals – counted

- 244 resources labeled by partners

BSF	152
FI	17
NL	23
PL	52

- 203 resources without copyright restrictions.
- 202 resources without copyright restrictions and free of charge.
- 150 resources without copyright restrictions, free of charge and with non-national range (of content)

Totals – weighted (1)

- Weights based on size of VDN-resources.
 - Average time to work through VDN resources for learner = 1 hour
 - One hour of additional learning material equals 1 additional resource.
- 424 hours of learning material labeled
 - BSF (VDN) 144 hours
 - Other partners 280 additional hours/'resources'

Totals – weighted (2)

- Without copyright restrictions and fees and with non-local focus
- **180 hours of learning material labeled**
 - BSF (VDN) 129 hours
 - Other partners 51 additional hours/'resources'

Part 2: Mapping to the Digcomp 2.1 framework

- Blank spots?
 - 3 proficiency levels + 1
 - 21 competences + 4
- Mapping
 - Totals per proficiency level
 - Totals per competence
 - On competence per proficiency level
- Five measurements
 1. All resources; counted
 2. All resources; weighted by seize
 3. Only resources without copyright restrictions and fees and with non-local focus; counted
 4. Only resources without copyright restrictions and fees and with non-local focus; weighted by seize
 5. Only resources without copyright restrictions and fees and with non-local focus; weighted by seize and ratio

Totals per proficiency level

	N	N (weighted)	N (strict)	N (strict and weighted)
Level 0	19	96,25	8	34,25
Level 1	131	187,25	88	90,25
Level 2	86	102,50	50	51,25
Level 3	8	38	4	4

Totals per competence

Area 0 – Operating devices

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
0.1 Operating computers	16	59	3	3	0,85
0.2 Operating tablets	5	24,25	0	0	0
0.3 Operating smartphones	7	6,25	1	0,75	0,15
0.4 Operating peripheral devices	2	2,25	2	2,25	0,30

Totals per competence

Area 1 – Information and data literacy

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
1.1 Browsing, searching, filtering data, information and digital content	44	140,50	16	18	7,86
1.2 Evaluating data, information and digital content	43	117,25	22	20,75	12,83
1.3 Managing data, information and digital content	26	59,5	11	10,75	4,95

Totals per competence

Area 2 – Communication and collaboration

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
2.1 Interacting through digital technologies	33	100	9	8	4,09
2.2 Sharing through digital technologies	37	115,75	17	14,75	6,31
2.3 Engaging in citizenship through digital technologies	11	29,25	5	3,75	1,39
2.4 Collaborating through digital technologies	15	46,50	7	7,50	4,14
2.5 Netiquette	15	16,75	9	8	3,78
2.6 Managing digital identity	35	84,75	16	18,50	18,50

Totals per competence

Area 3 – Digital content creation

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
3.1 Developing digital content	37	110	13	29,75	17,98
3.2 Integrating and re-elaborating digital content	6	13	0	0	0
3.3 Copyright and licenses	12	47,75	5	4,25	2,80
3.4 Programming	54	92,75	49	81,25	81,25

Totals per competence

Area 4 – Safety

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
4.1 Protecting devices	23	88	11	9,50	9,50
4.2 Protecting personal data and privacy	61	159,25	28	25,25	14,66
4.3 Protecting health and well-being	13	17,25	7	6,75	4,75
4.4 Protecting the environment	4	4,5	2	2	2

Totals per competence

Area 5 – Problem solving

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
5.1 Solving technical problems	11	39,75	3	2	0,45
5.2 Identifying needs and technological responses	23	55,75	2	1	0,15
5.3 Creatively using digital technologies	21	62	12	18,25	6,50
5.4 Identifying digital competence gaps	7	6,75	1	1	1

Conclusions mapping to proficiency levels and competences (totals)

- Proficiency levels
 - No blank spots for totals
 - Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, limited amount of resources for:
 - level 0
 - and level 3
- Competences
 - Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, blank spots for totals on:
 - Area 0 - Operating devices
 - 0.2 Operating tablets
 - Area 3 – Digital content creation
 - 3.2 Integrating and re-elaborating digital content

Part 2: Mapping to the Digcomp 2.1 framework

- White spots?
 - 3 proficiency levels + 1
 - 21 competences + 4
- Mapping
 - Totals per proficiency level
 - Totals per competence
 -  - On competence per proficiency level
- Five measurements
 1. All resources; counted
 2. All resources; weighted by seize
 3. Only resources without copyright restrictions and fees and with non-local focus; counted
 4. Only resources without copyright restrictions and fees and with non-local focus; weighted by seize
 5. Only resources without copyright restrictions and fees and with non-local focus; weighted by seize and ratio

Proficiency levels 0

Area 0 – Operating devices

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
0.1 Operating computers	4	24,50	1	,50	,30
0.2 Operating tablets	2	21,00	0	0	0
0.3 Operating smartphones	1	1,00	0	0	0
0.4 Operating peripheral devices	0	0	0	0	0

Proficiency level 0

Area 1 – Information and data literacy

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
1.1 Browsing, searching, filtering data, information and digital content	6	33,75	2	1,25	,63
1.2 Evaluating data, information and digital content	3	11,75	2	1,25	1,03
1.3 Managing data, information and digital content	0	0	0	0	0

Proficiency level 0

Area 2 – Communication and collaboration

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
2.1 Interacting through digital technologies	5	34,25	1	,75	,38
2.2 Sharing through digital technologies	5	34,50	0	0	0
2.3 Engaging in citizenship through digital technologies	2	11,25	1	,75	,19
2.4 Collaborating through digital technologies	1	,75	1	,75	,19
2.5 Netiquette	0	0	0	0	0
2.6 Managing digital identity	0	0	0	0	0

Proficiency level 0

Area 3 – Digital content creation

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
3.1 Developing digital content	5	35,00	0	0	0
3.2 Integrating and re-elaborating digital content	0	0	0	0	0
3.3 Copyright and licenses	0	0	0	0	0
3.4 Programming	1	30,00	1	30,00	30,00

Proficiency level 0

Area 4 – Safety

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
4.1 Protecting devices	2	21,00	0	0	0
4.2 Protecting personal data and privacy	5	42,50	1	,50	,50
4.3 Protecting health and well-being	0	0	0	0	0
4.4 Protecting the environment	0	0	0	0	0

Proficiency level 0

Area 5 – Problem solving

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
5.1 Solving technical problems	2	1,00	2	1,00	,15
5.2 Identifying needs and technological responses	8	27,50	2	1,00	,15
5.3 Creatively using digital technologies	2	21,00	0	0	0
5.4 Identifying digital competence gaps	0	0	0	0	0

Conclusions mapping to competences on level 0 (1)

- Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, blank spots on:
- Area 0 - Operating devices
 - 0.2 Operating tablets
 - 0.3 Operating smartphones
 - 0.4 Operating peripheral devices
- Area 1 – Information and data literacy
 - 1.3 Managing data, information and digital content
- Area 2 – Communication and collaboration
 - 2.2 Sharing through digital technologies
 - 2.5 Netiquette
 - 2.6 Managing digital identity

Conclusions mapping to competences on level 0 (2)

- Area 3 – Digital content creation
 - 3.2 Integrating and re-elaborating digital content
 - 3.3 Copyright and licenses
- Area 4 – Safety
 - 4.1 Protecting devices
 - 4.3 Protecting health and well-being
 - 4.4 Protecting the environment
- Area 5 – Problem solving
 - 5.3 Creatively using digital technologies
 - 5.4 Identifying digital competence gaps

Proficiency levels 1

Area 0 – Operating devices

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
0.1 Operating computers	8	30,75	1	1,50	,15
0.2 Operating tablets	0		0	0	0
0.3 Operating smartphones	2	2,25	0	0	0
0.4 Operating peripheral devices	1	1,50	1	1,50	,15

Proficiency level 1

Area 1 – Information and data literacy

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
1.1 Browsing, searching, filtering data, information and digital content	21	50,75	8	6,50	4,39
1.2 Evaluating data, information and digital content	22	51,25	12	9,75	7,70
1.3 Managing data, information and digital content	11	13,75	7	6,25	2,98

Proficiency level 1

Area 2 – Communication and collaboration

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
2.1 Interacting through digital technologies	15	47,75	5	4,25	2,44
2.2 Sharing through digital technologies	19	38,50	12	10,25	4,79
2.3 Engaging in citizenship through digital technologies	3	12,00	2	1,50	,83
2.4 Collaborating through digital technologies	4	4,25	2	1,75	1,08
2.5 Netiquette	11	13,00	7	6,50	3,40
2.6 Managing digital identity	23	39,75	12	14,75	6,95

Proficiency level 1

Area 3 – Digital content creation

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
3.1 Developing digital content	15	45,75	6	15,25	7,05
3.2 Integrating and re-elaborating digital content	4	10,50	0	0	0
3.3 Copyright and licenses	5	9,75	3	2,75	1,40
3.4 Programming	26	39,50	22	30,00	20,15

Proficiency level 1

Area 4 – Safety

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
4.1 Protecting devices	15	27,25	9	7,25	5,85
4.2 Protecting personal data and privacy	40	68,75	22	19,75	10,84
4.3 Protecting health and well-being	10	10,75	7	6,75	4,75
4.4 Protecting the environment	3	3,00	2	2,00	,40

Proficiency level 1

Area 5 – Problem solving

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
5.1 Solving technical problems	1	3,00	0	0	0
5.2 Identifying needs and technological responses	8	19,50	0	0	0
5.3 Creatively using digital technologies	8	30,50	5	13,00	4,75
5.4 Identifying digital competence gaps	2	2,25	0	0	,15

Conclusions mapping to competences on proficiency level

1

- Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, blank spots on:
 - Area 0 - Operating devices
 - 0.2 Operating tablets
 - 0.3 Operating smartphones
 - Area 3 – Digital content creation
 - 3.2 Integrating and re-elaborating digital content
 - Area 5 – Problem solving
 - 5.1 Solving technical problems
 - 5.2 Identifying needs and technological responses
 - 5.4 Identifying digital competence gaps

Proficiency level 2

Area 0 – Operating devices

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
0.1 Operating computers	3	2,75	0	0	0
0.2 Operating tablets	2	1,25	0	0	0
0.3 Operating smartphones	4	3,00	1	,75	,15
0.4 Operating peripheral devices	1	,75	1	,75	,15

Proficiency level 2

Area 1 – Information and data literacy

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
1.1 Browsing, searching, filtering data, information and digital content	13	21,50	5	9,25	2,65
1.2 Evaluating data, information and digital content	15	20,75	8	9,75	4,10
1.3 Managing data, information and digital content	13	14,25	3	3,00	,48

Proficiency level 2

Area 2 – Communication and collaboration

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
2.1 Interacting through digital technologies	13	18,00	3	3,00	1,28
2.2 Sharing through digital technologies	12	12,75	5	4,50	1,53
2.3 Engaging in citizenship through digital technologies	6	6,00	2	1,50	,38
2.4 Collaborating through digital technologies	8	10,00	4	5,00	2,88
2.5 Netiquette	4	3,75	2	1,50	,38
2.6 Managing digital identity	11	15,00	4	3,75	1,05

Proficiency level 2

Area 3 – Digital content creation

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
3.1 Developing digital content	15	27,75	6	13,50	10,13
3.2 Integrating and re-elaborating digital content	2	2,50	0	0	0
3.3 Copyright and licenses	6	8,00	2	1,50	1,40
3.4 Programming	27	23,25	26	21,25	19,78

Proficiency level 2

Area 4 – Safety

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
4.1 Protecting devices	2	5,25	1	1,25	,38
4.2 Protecting personal data and privacy	14	16,50	5	5,00	3,33
4.3 Protecting health and well-being	3	6,50	0	0	0
4.4 Protecting the environment	1	1,50	0	0	0

Proficiency level 2

Area 5 – Problem solving

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
5.1 Solving technical problems	6	4,75	0	0	0
5.2 Identifying needs and technological responses	4	4,75	0	0	0
5.3 Creatively using digital technologies	9	8,50	6	4,75	1,25
5.4 Identifying digital competence gaps	3	3,00	0	0	0

Conclusions mapping to competences on proficiency level 2

- Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, blank spots on:
 - Area 0 - Operating devices
 - 0.1 Operating devices
 - 0.2 Operating tablets
 - Area 3 – Digital content creation
 - 3.2 Integrating and re-elaborating digital content
 - Area 4 – Safety
 - 4.3 Protecting health and well-being
 - 4.4 Protecting the environment
 - Area 5 – Problem solving
 - 5.1 Solving technical problems
 - 5.2 Identifying needs and technological responses
 - 5.4 Identifying digital competence gaps

Proficiency level 3

Area 0 – Operating devices

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
0.1 Operating computers	1	1,00	1	1,00	,40
0.2 Operating tablets	1	2,00	0	0	0
0.3 Operating smartphones	0	0	0	0	0
0.4 Operating peripheral devices	0	0	0	0	0

Proficiency level 3

Area 1 – Information and data literacy

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
1.1 Browsing, searching, filtering data, information and digital content	4	34,50	1	1,00	,20
1.2 Evaluating data, information and digital content	3	33,50	0	0	0
1.3 Managing data, information and digital content	2	31,50	1	1,50	1,50

Proficiency level 3

Area 2 – Communication and collaboration

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
2.1 Interacting through digital technologies	0	0	0	0	0
2.2 Sharing through digital technologies	1	30,00	0	0	0
2.3 Engaging in citizenship through digital technologies	0	0	0	0	0
2.4 Collaborating through digital technologies	2	31,50	0	0	0
2.5 Netiquette	0	0	0	0	0
2.6 Managing digital identity	1	30,00	0	0	0

Proficiency level 3

Area 3 – Digital content creation

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
3.1 Developing digital content	2	1,50	1	1,00	,80
3.2 Integrating and re-elaborating digital content	0	0	0	0	0
3.3 Copyright and licenses	1	30,00	0	0	0
3.4 Programming	0	0	0	0	0

Proficiency level 3

Area 4 – Safety

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
4.1 Protecting devices	4	34,50	1	1,00	,10
4.2 Protecting personal data and privacy	2	31,50	0	0	0
4.3 Protecting health and well-being	0	0	0	0	0
4.4 Protecting the environment	0	0	0	0	0

Proficiency level 3

Area 5 – Problem solving

	N	N (weighted)	N (strict)	N (strict and weighted)	N (strict and weighted x ratio)
5.1 Solving technical problems	2	31,00	1	1,00	,30
5.2 Identifying needs and technological responses	3	4,00	0	0	0
5.3 Creatively using digital technologies	2	2,00	1	,50	,50
5.4 Identifying digital competence gaps	2	1,50	1	1,00	,20

Conclusions mapping to competences on proficiency level 3 (1)

- Based on minimum of one free, unrestricted, non-local resource dedicated (partly or wholly) to competence, blank spots on:
- Area 0 - Operating devices
 - 0.2 Operating tablets
 - 0.3 Operating smartphones
 - 0.4 Operating peripheral devices
- Area 1 – Information and data literacy
 - 1.2 Evaluating data, information and digital content
- Area 2 – Communication and collaboration
 - 2.2 Sharing through digital technologies
 - 2.5 Netiquette
 - 2.6 Managing digital identity

Conclusions mapping to competences on proficiency level 3 (2)

- Area 3 – Digital content creation
 - 3.2 Integrating and re-elaborating digital content
 - 3.4 Programming
- Area 4 – Safety
 - 4.2 Protecting personal data and privacy
 - 4.3 Protecting health and well-being
 - 4.4 Protecting the environment
- Area 5 – Problem solving
 - 5.2 Identifying needs and technological responses

Overall conclusions (1)

- 244 resources mapped
- Wide range: type, content, workload (see first mapping)
- Substantial amounts for age groups (see first mapping);
 - few specifically for vulnerable groups
 - few for refugees/immigrants and low literate
- Mapping showed missing competence (operating devices) and proficiency level (absolute beginners (level 0) in DigComp 2.1 framework
- Significant increase in number of resources when weighted by workload for learner, taking 1 hour as a unit of measurement (424)
- But: Significant reduction in amount of resources when restricted to copyright free, cost free, and non-local resources (180).

Overall conclusions (2)

- Limited amount of resources on proficiency level 0 and 3
- No free, non-copyright restricted, non-local resources for competence '0.2 Operating tablets' and competence '3.2 Integrating and re-elaborating digital content'.
- Less than one hour of free, non-copyright restricted, non-local learning material for competences 0.1, 0.3, 0.4, 5.1, 5.2
- Very little learning material (less than hour of free, non-copyright restricted, non-local learning material) for near all competences on proficiency level 0.
- Very little learning material (less than hour of free, non-copyright restricted, non-local learning material) for most competences in competence area 0 and 5, on proficiency level 1.

Overall conclusions (3)

- Very little learning material (less than hour of free, non-copyright restricted, non-local learning material) for most competences in competence area 0, 4 and 5, on proficiency level 2.
- Very little learning material (less than hour of free, non-copyright restricted, non-local learning material) for nearly all competence on proficiency level 3.

For more detailed results on specific competences, proficiency levels or combinations see the different sections above and the intermediate conclusions.