

ikanos.eus Digital Competences roadmap

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Developing digital competences for employability Workshop
Bilbao, 19th-20th June



EUSKO JAURLARITZA
GOBIERNO VASCO

EKONOMIAREN GARAPEN
ETA AZPIEGITURA SAILA

DEPARTAMENTO DE DESARROLLO
ECONÓMICO E INFRAESTRUCTURAS

ikanos.eus



Why ikanos?

ikanos.eus



innovation



DigComp

best way forward in
digital competence

Hard work in:



Designing



Comparing



Testing



Customizing



Very early
contacts with
DigComp
framework



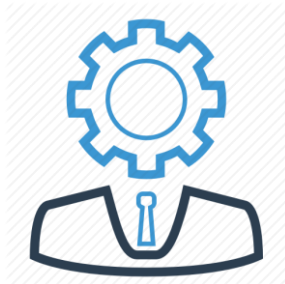
Now, widespread **dissemination**

We trust in ikanos **validity**

What is ikanos?

ikanos.eus

disseminate,
share + boost



expert
support

roadmap



public
initiative

digital
competences

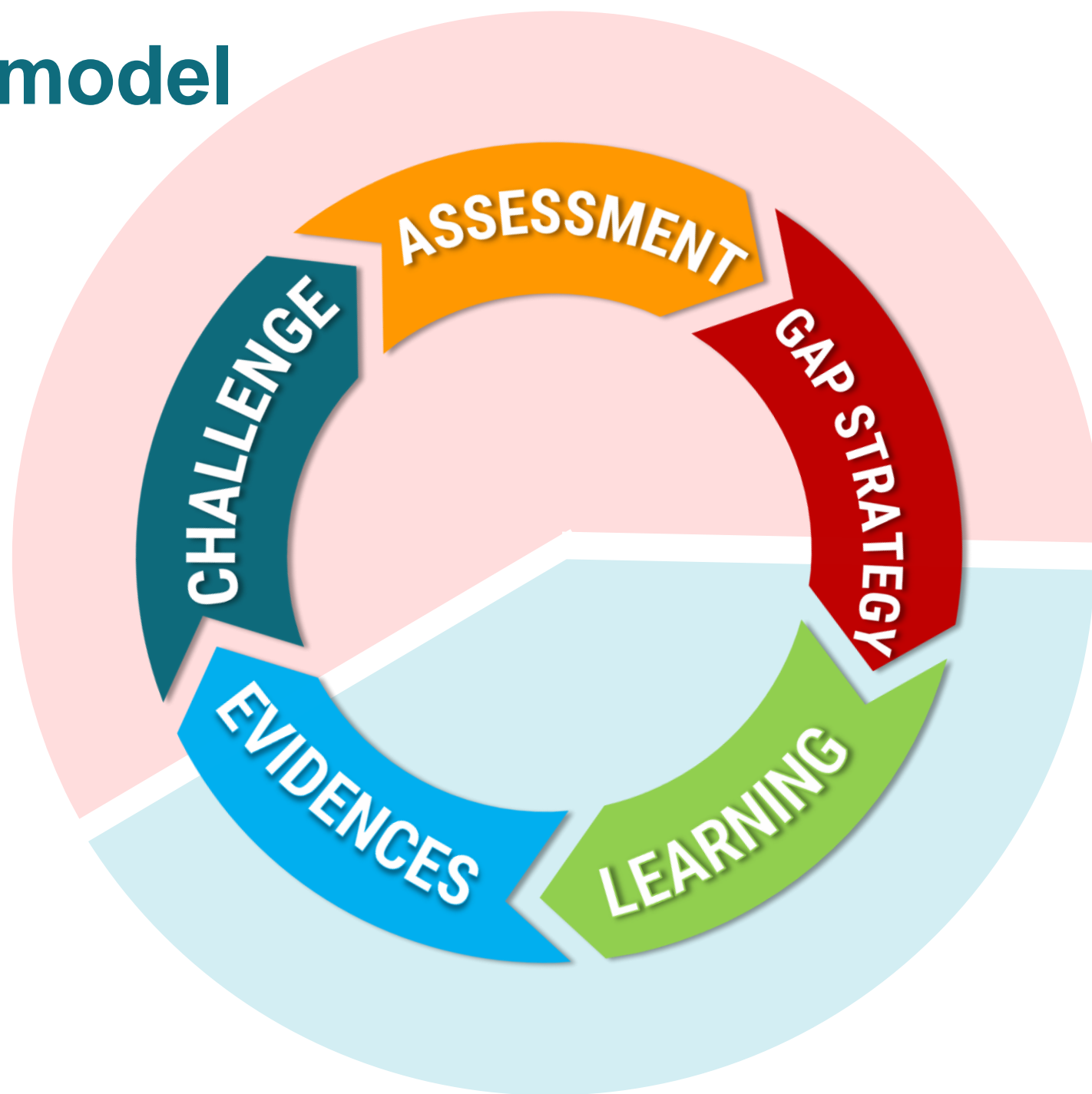




Ikanos model

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Strategy



Action



Ikanos model

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Strategy

PROFESSIONAL
DIGITAL PROFILE

BAIT
CERTIFICATION

CHALLENGE

ASSESSMENT

TEST
IKANOS

GAP STRATEGY

PERSONAL
DIGITAL PROFILE

ORIENTATION
RESOURCES
CATALOGUE

EVIDENCES

LEARNING

P.L.E.
e-PORTFOLIO

Action



ikanos PROFESSIONAL DIGITAL PROFILE

Professional Digital Profile: **Primary Care Healthcare Professionals**

Competition	Level	Basic		Intermediate		Advanced		Expert	
		A1	A2	B1	B2	C1	C2	D1	D2
1.1 Navigate, search and filter information		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.1 Using internal clinical information services		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.2 Using external clinical information services		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2 Evaluating information		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2.1 Assessing the quality of clinical information (PILAR)		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2.1 Valuate Patient Apps		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3 Storing and retrieving information		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3.1 Know and maintain Integrated Management System		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3.2 Sorting and deleting document versions		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3.3 Content Healing		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.1 Interacting through technologies		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2.1 Making Video Conferences with Lync		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 Sharing information and content		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2.1 Sharing documents using Osabox		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2.2 Using Osabegi to share information		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 Online Participation		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 Collaborate through digital channels		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4.1 Managing knowledge through Jakinsarea		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4.2 Collaborate on projects through Osagune		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4.3. Increasing the online relationship with patients		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5 Netiquette		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6 Managing digital identity		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

01. gathers the **digital requirements** of an occupation.

02. specifies the **level of digital skills** required

03. to perform adequately **the tasks that require ICT** in a job or occupation.

examples inspire...



CHALLENGE: Professional Digital Profiles

GENERAL PROFILES

- Administrative staff
- Sales representative
- Entrepreneur

EXPERT

- Economist in Consulting and Auditing
- Marketing Economist
- Responsible for Digital Transformation SMEs
- Economist in Business Management

INDUSTRY 4.0

- Advanced industry maintenance technician
- 3D design technician for additive manufacturing
- Collaborative Robotics Technician
- Technician Operator of Additive Manufacturing
- Numerical Control Operation Technician

HEALTH

- Primary Care Doctor
- Manager Health Center
- Administrative Health Center



Ikanos partners

Education & Universities

Universities



**Mondragon
Unibertsitatea**



Universidad
País Vasco

Euskal Herriko
Unibertsitatea

Modernization



Berritzegune
Nagusia



ETORKIZUNEKO HEZKUNTZA

Tknika

LANBIDE HEZIKETARAKO BERRIKUNTZA ZENTROA
CENTRO DE INNOVACION PARA LA FORMACION PROFESIONAL

Associations

HADE



EUSKO IKASTOLA BATZA



kristau-eskola



Tolosaldea
Lanbide Heziketa Institutua

Basque Institutions

Basque Government



**EUSKO JAURLARITZA
GOBIERNO VASCO**



Health Service



Osakidetza
Servicio vasco de salud

Tech centres



BA/T

Companies & Associations



Groupe
Crédit Agricole



HIRUDI
SISTEMAS 3D



Sociedades Laborales
de Euskadi



ekonomistak
Euskal Elkargoa - Colegio Vasco



Employment



prestik
ENPLEGU AZOKA
FERIA DE EMPLEO





ASSESSMENT: Ikanos test questions

INFORMATION13%

03. What do you do for locating and accessing the information you require:

0: I don't know it / I am not able to | 10: I have a thorough knowledge of

I use general (Google, Bing, DuckGo) or specialized (scienceresearch.com, Microsoft Academic Search) search engines0810

I use advanced search tools to improve my results0310

I design my own search strategies that I adapt according to my needs0610

I have set up a personal learning environment (PLE) in order to receive news, which helps me to follow the best resources that I have identified0610

I search for, filter and share information, resources and best practices within the digital communities that I belong to0410

OPTIONS

PREVIOUSNEXT

CONTENT CREATION48%

13. Please, indicate your level of knowledge of certain tools from each category:

	Nothing	Basic	Intermediate	Advanced
WORD PROCESSORS: Word, GoogleDocs, Writer, etc.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
PRESENTATIONS: PowerPoint, Impress, GooglePresentations, etc.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
PRESENTATIONS with animation: Prezi, Keynote, Emaze, PowToon, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
IMAGE EDITORS: PhotoShop, Gimp, Coreldraw, etc.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
SPREADSHEETS: Excel, Calc, GoogleSpreadsheet, etc.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
DATABASES: Access, MySQL, Dbase, ORACLE, etc.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VIDEO: Premiere, Youtube editor, Pinnacle Studio, etc.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
AUDIO: Audacity, Adobe Audition, Audio Editor, etc.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WEBSITE CREATION: Dreamweaver, MAGIX Web Designer, WebSite X5, etc.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

OPTIONS

PREVIOUSNEXT

SAFETY79%

22. Indicate how "green" your behaviour is when using technology

☐ I understand the meaning of the "Green IT" concept

☒ I apply basic measures to save energy (trying not to print on paper, improving energy-saving settings on my devices, turning my devices off when I finish work, etc.)

☒ I recycle devices (electronic components, toners, etc.), and dispose of them at a suitable site

☒ I use videoconferencing and telemeetings systems in order to cut down on commuting

☐ I take part in social networks in order to mobilise, raise awareness and share ideas about sustainability

OPTIONS

PREVIOUSNEXT

SAFETY65%

18. Which of the following statements apply to you in relation to the secure use of your digital devices online?

	YES	NO
I have installed an antivirus program on my devices and I keep an eye on its updates	<input checked="" type="radio"/>	<input type="radio"/>
I proceed with caution whenever I receive messages with content and attached files from a sender I do not know (SPAM)	<input type="radio"/>	<input checked="" type="radio"/>
I use different passwords to access my devices and digital services and I change them on a regular basis	<input checked="" type="radio"/>	<input type="radio"/>
I change the access code of my home wifi network on a regular basis	<input type="radio"/>	<input checked="" type="radio"/>
I advise and provide guidelines to my friends and family in order to prevent security risks when using their devices	<input type="radio"/>	<input checked="" type="radio"/>

OPTIONS

PREVIOUSNEXT

Slider

Multiple Choice

Matrix

Yes/No



GAP STRATEGY: Ikanos PERSONAL PROFILE:

MIKEL ATKINSON

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- **Personal report with objectives:** to compare user results with the expected values.
- **Target values in green**, are taken from the professional digital profile.
- **Personal results in purple** come from the answers to the test.



Data for Benchmarking



Custom questions and items



Segmentation and anonymous users



Mobile version



Custom design for organizations

Area	Digital Competence	Foundation	Intermediate	Advanced
Information Nivel intermedio	Browsing, searching and filtering information	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Evaluating data, information and digital content	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Managing data, information and digital content	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Communication Nivel intermedio	Interacting through digital technologies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Sharing through digital technologies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Engaging in citizenship through digital technologies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Collaborating through digital technologies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Netiquette	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Managing digital identity	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Content creation Nivel intermedio	Developing content	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Integrating and re-elaborating digital content	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Copyright and licenses	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Programming	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety Nivel intermedio	Protecting devices	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Protecting personal data and privacy	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Protecting health and well-being	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Protecting the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Problem solving Nivel intermedio	Solving technical problems	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Identifying needs and technological responses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Creatively using digital technology	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Identifying digital competence gaps	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>



High-level soft skills

are supported by digital skills

- DigComp competences most related to **self-learning** and **teamworking** skills have been identified.
- An **INDEX** is calculated to provide information to HR departments.
- These indicators have been used in **internal recruitment** for new areas created in digitalization projects.

Digital Competences for Self-Learning: 4,9

Foundation

Intermediate

Advanced

Information	Browsing, searching and filtering info.	3,6	4,6
	Evaluating information	5,3	6,1
	Managing information	5,3	5,8
Communication	Collaborating through digital technologies	1,9	3,8
	Netiquette	7,9	7,6
	Managing digital identity	5,5	6,8
Problem Solving	Identifying needs and technological responses	4,8	5,5
	Identifying digital competence gaps	4,8	7,2

Digital Competences for Teamworking: 6,1

Foundation

Intermediate

Advanced

Information	Managing information	5,3	5,8
Communication	Interacting through digital technologies	6,0	7,0
	Sharing through digital technologies	4,4	5,0
	Collaborating through digital technologies	1,9	3,8
Content Creation	Developing content	3,8	4,7
	Integrating and re-elaborating digital content	6,3	7,2



LEARNING: Orientation guide



ikanos **Orientation Guide** is a **tool for professional guidance counselors:**

- To verify test results.
- To go further in digital diagnosis.
- To compare test results with professional profiles that match candidate skills.

Competence 1.3 Storing and retrieving information: Store information and content to facilitate retrieval and organize information and data.

The user has obtained his score in this competence by rating:

- His/her methods and habits of storing information, on physical media and in the cloud
- The way in which you classify and archive information.
- How quickly it locates and retrieves stored information..

We need to verify that the user:

- Understands how information is stored on different devices and services.
- Knows different storage media options and is able to select the most appropriate one.
- Is able to use information management services, programs and applications.
- Structures and classifies information and contents according to one or several classification methods.
- Uploads and classifies information and digital content and accesses and retrieves stored information.
- Is capable of tagging content.

Other questions related to storing and retrieving information:

- How do you back up your files? What storage hardware or service do you use?
- How is your naming strategy for folders and files?

Other questions about Cloud Skills:

- Do you know how to use Dropbox? Evernote, Pocket? OneDrive or Google Drive?
- Do you have a strategy for tagging new elements?
- Do you know how to synchronize bookmarks from your browser on another computer?
- When using social bookmarks (Delicious or Diigo) the categorization and use of tags is fundamental. Do you know any of these services? What do you think of them?



LEARNING: Personal Learning Environment



Well-defined methodology and **suitable material** about Personal Learning Environment.



Disseminate key ideas around the concept of PLE:

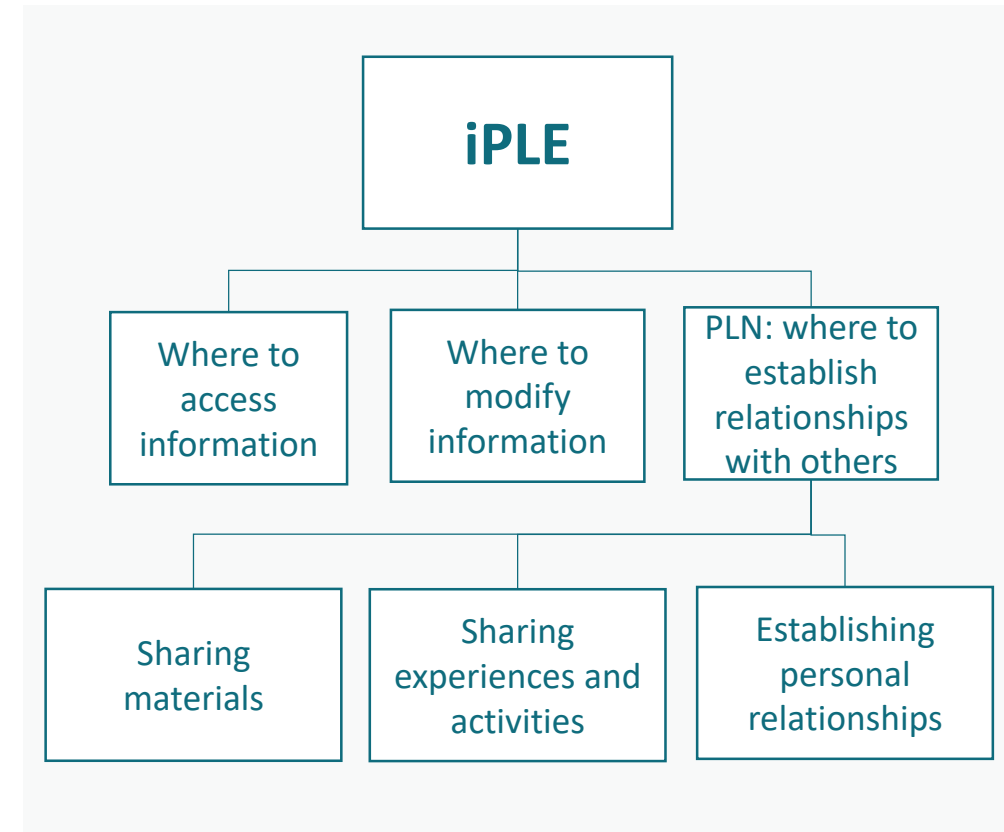
- Web tools and services.
- Sources and strategies of information management.



Expand, consolidate real experiences of non-formal and informal learning.



Collaborative work, building learning communities.





Course: Advanced Excel for Dashboards		
A1C1	BROWSE, SEARCH	FOUNDATION A2
A1C3	STORE	INTERMEDIATE B2
A2C2	SHARE	INTERMEDIATE B2
A3C2	INTEGRATE CONTENT	ADVANCED C1
A3C4	PROGRAMMING	INTERMEDIATE B2



STAGE 1:

RESOURCE
OBJECTIVES & ACTIVITES
IDENTIFICATION



STAGE 2:

DigComp
COMPETENCES
INVOLVED



STAGE 3:

COMPETENCE
LEVEL
IDENTIFICATION



STAGE 4:

LABEL CREATION



EVIDENCES: BAIT Certification



BAIT es un Sistema de Certificación de Competencias básicas en Tecnologías de la Información, que acredita las competencias que una persona tiene en la utilización de herramientas informáticas e Internet.



Ikanos next steps

01. ikanos test 3.0

- Customized, variable weights,
- Objectives & training advice

02. ikanos label

- Catalogue training resources

03. Certification

- Recognition of BAIT certification in public sector

04. Benchmarking

- Digital competences results by sectors and countries

05. Shortcuts

- identifying training resources in companies

06. Training methods

- In-company training resources with DigComp perspective

07. High level competences

- Modelling digital competences that support high level competences

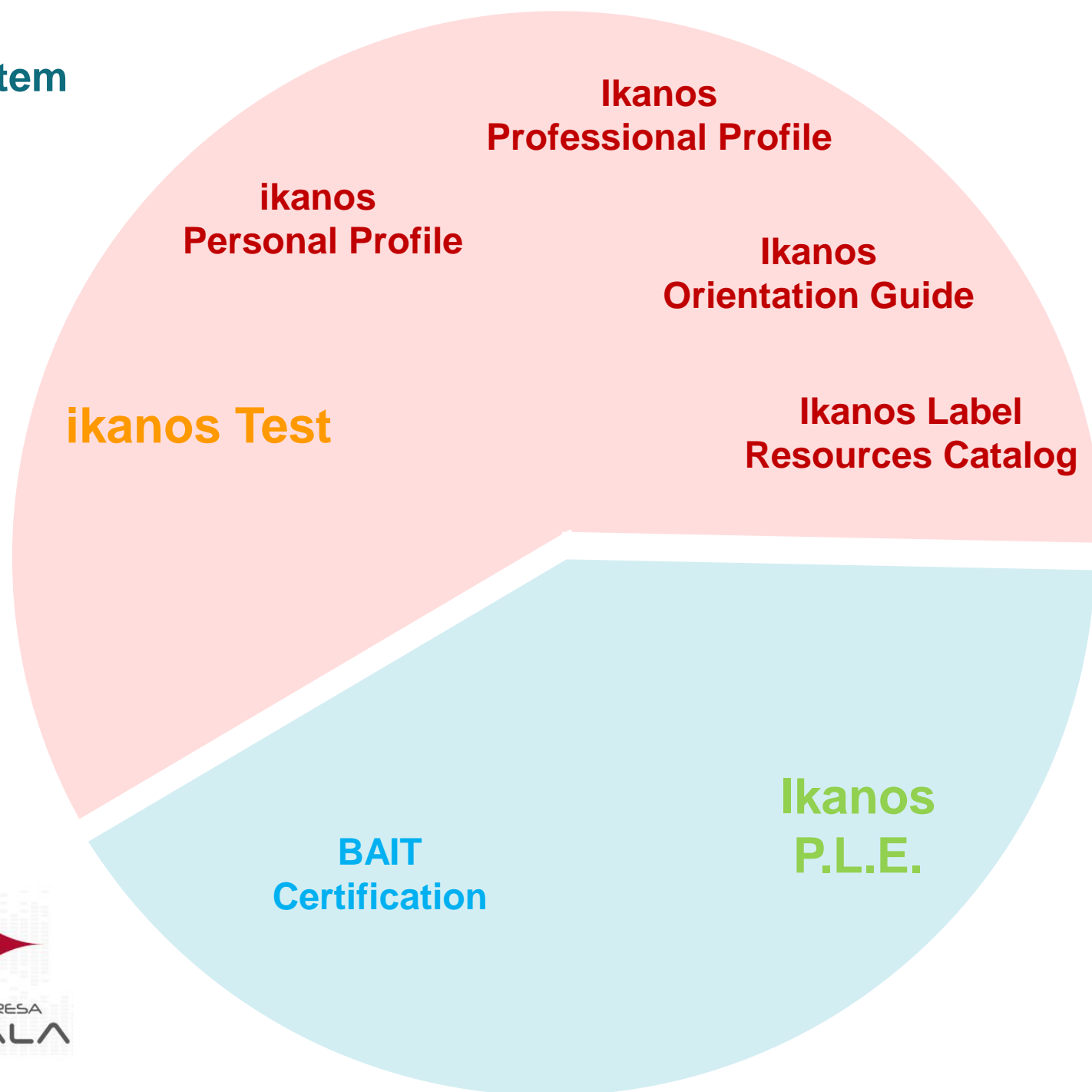


ikanos Ecosystem

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**Digital Skills and
Jobs Coalition**





**Thank you
eskerrik asko**