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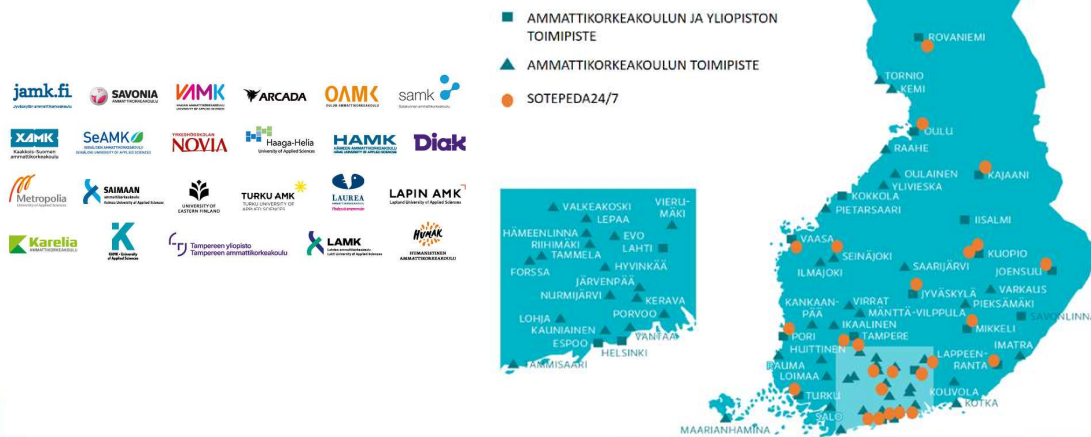
## Multidisciplinary Competences for Health and Social Care Services in Finland - SotePeda 24/7

- Project was funded by the Finnish Ministry of Education and Culture
- Duration: 2018-2020
- Coordinator: Laurea University of Applied Sciences
- 23 partner universities



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## SotePeda 24/7 covered most of Finland geographically



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## Mission of SotePeda 24/7 project



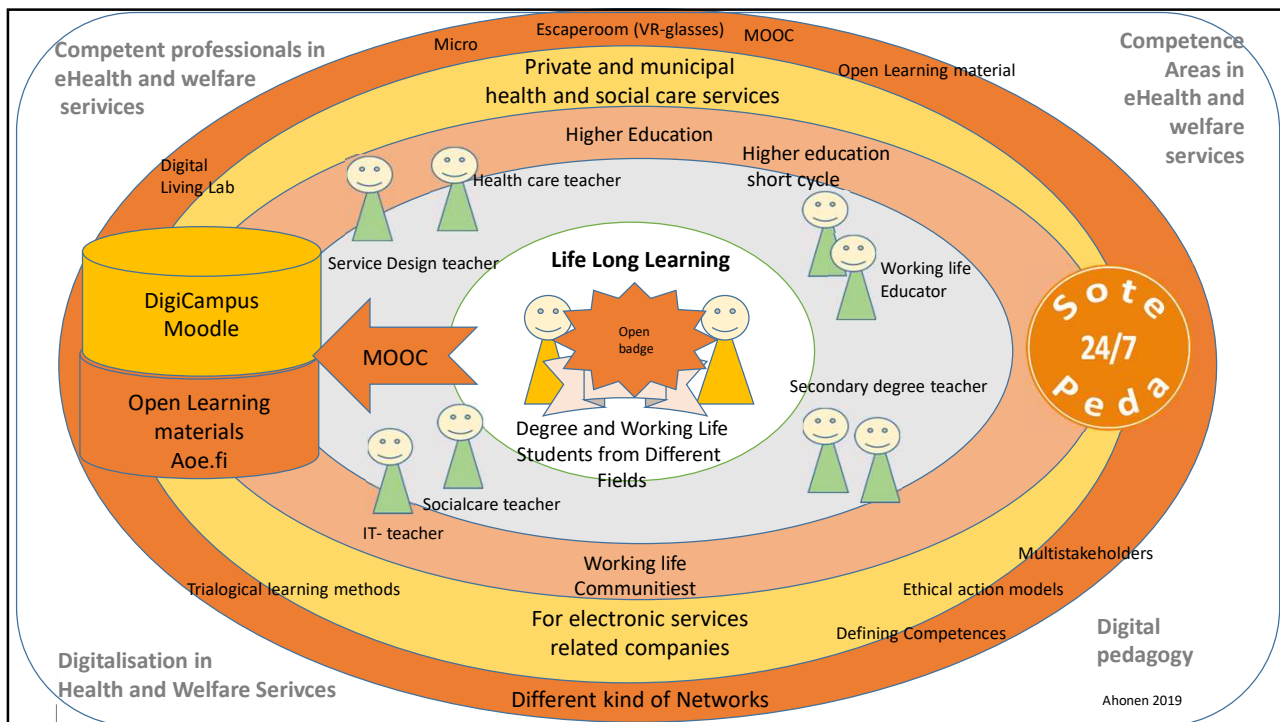
From 2020 onwards, an open learning environment will provide multi-disciplinary studies which are based on **triological learning approach** and are produced by using **co-creation methods**.

The project develops the expertise of educators, students, and working life representatives in developing human centric digital services in health and social care sector, working in eHealth and social care and in digital pedagogy.



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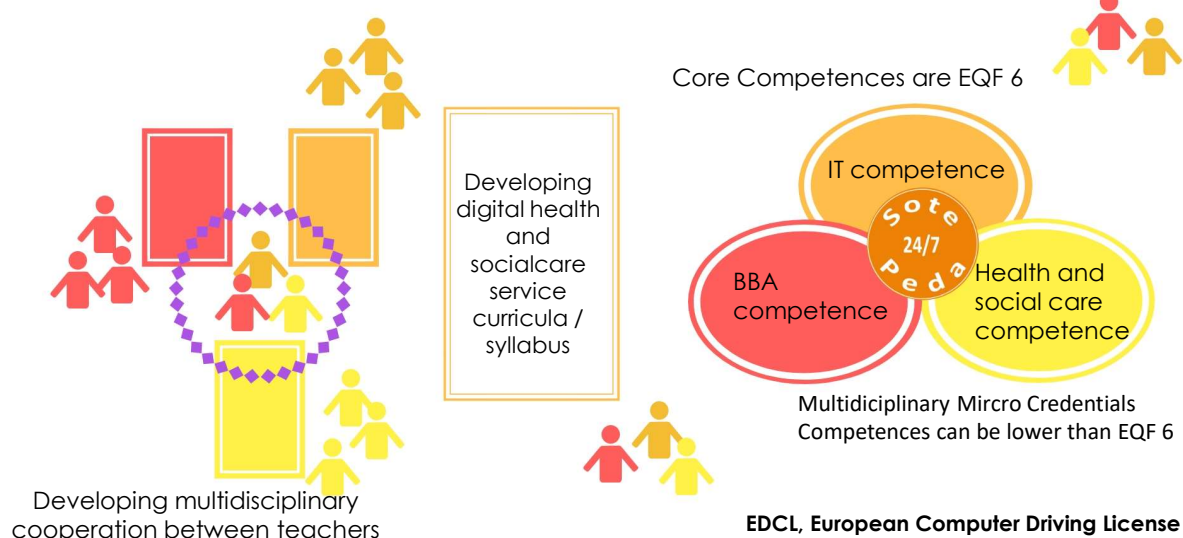
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| Level 6  | Finnish National Qualifications Framework Descriptors  | European Qualifications Framework Descriptors  |
|--|--|--|
| <ul style="list-style-type: none"> <li>Bachelor's degrees (universities of applied sciences)</li> <li>Bachelor's degrees (universities)</li> </ul> | <ul style="list-style-type: none"> <li>Has a good command of comprehensive and advanced knowledge of his/her field, involving a critical understanding and appraisal of theories, key concepts, methods and principles.</li> <li>Understands the extent and boundaries of professional functions and/or disciplines.</li> <li>Has advanced cognitive and practical skills, demonstrating mastery of the issues and the ability to apply knowledge and find creative solutions and applications required in a specialised professional, scientific or artistic field to solve complex or unpredictable problems.</li> <li>Works independently in expert tasks of the field and in international co-operation or as an entrepreneur.</li> <li>Manages complex professional activities or projects.</li> <li>Can make decisions in unpredictable operating environments. In addition to evaluating and developing his/her own competence, he/she takes responsibility for the development of individuals and groups.</li> <li>Has the ability for lifelong learning.</li> <li>Considers communal and ethical aspects when dealing with different people in learning and working communities and other groups and networks.</li> <li>Communicates to a good standard verbally and in writing in his/her mother tongue both to audiences in the field and outside it.</li> <li>Communicates and interacts in the second national language and is capable of international communication and interaction in his/her field in at least one foreign language.</li> </ul> | <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p> <p>Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups</p> <p><b>The framework for qualifications of the European Higher Education Area</b><br/>Qualifications that signify completion of the first cycle are awarded to students who:</p> <ul style="list-style-type: none"> <li>have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</li> <li>can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li> <li>have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;</li> <li>can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</li> <li>have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li> </ul> |

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## Successful multidisciplinary development of digital health and social care service **requires** changes and cooperation in education



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| Level 6  | Finnish National Qualifications Framework Descriptors   | European Qualifications Framework Descriptors  |
|--|---|--|
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## The Definition of Digital Competences in Health and Social care version 1.0

- Basic ICT skills
- Online Interaction Competences
- Service Competences in Digital Health and Social Care Sector
- Guiding skills in Digital Environment
- Skills to monitor health and well-being in Digital Environment
- Health and Social Care Informatics Competences
- Multi-actor service co-development competences
- Ethical competences
- Service Design Skills
- Knowledge Management Skills
- Research, Development and Innovation competences
- Society Competences

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Table 1. Definitions of health care and social welfare informatics competencies.

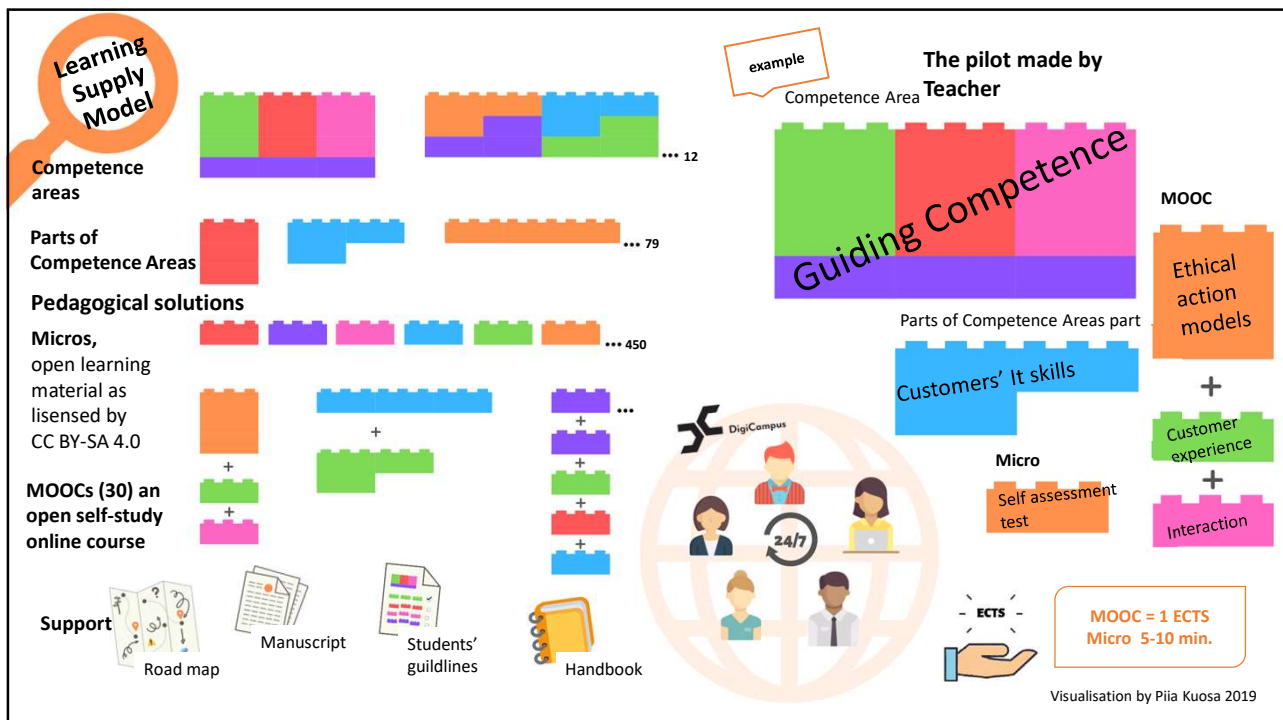
| Area of competence   | Main content  |
|--|---|
| • Basic information and communications technology (ICT) competencies     | Information management and its tools, information and communication technologies and information literacy skills. Introducing new operating models, anticipating service and training needs, anticipating future digital literacy skills and motivation.  |
| • Online interactive competencies  | Online dialogue with persons, changes in the roles of professionals, electronic communication environments, online meetings and consultations and the use of social media and online services.  |
| • Service competencies in digital health and the social care sector      | Health and social care service structures, the usefulness of electronic health services, different electronic service environments and tools, the roles of social and healthcare actors, electronic service pathways, e-services and virtual reception.   |
| • Person-centred guiding competencies in a digital environment           | Assessing customers' IT skills, IT guidance for customers, directing customers in search of information, supporting self-care by clients, the preparation of electronic guidelines, the production of online material, electronic outpatient clinics and information services, such as chat rooms.                    |
| • Competencies to monitor health and well-being in a digital environment | Artificial intelligence, sensors, robotics, wearable technology, utilities, various monitoring tests and instruments, monitoring information literacy and assessing the reliability and adequacy of information.  |
| • Health and social care informatics competencies                        | The interoperability of electronic systems, the communication of information via electronic information systems, electronic logging, national patient and social welfare data repository Kanta.fi, electronic data storage and roles and responsibilities regarding the use of information and legislation.           |
| • Multi-stakeholder service co-development competencies                  | Assessing the reliability of data sources, information management guidance and collaboration, privacy and security, co-operation and new operating models.  |
| • Ethical competencies   | Ethical operating models and ethical competence in electronic services.   |
| • Service design competencies  | User orientation, participation, innovativeness and new service pathways.   |
| • Knowledge management competencies                                      | The use of monitoring and research data, customer- and patient-specific information, availability, quality and effectiveness of services (e.g. considering changing needs).   |
| • Research, development and innovation competencies                      | Assessment and continuous improvement of one's own skills, work community skills development, the development of electronic services, quality criteria for electronic services, the development of health and well-being technologies, exploitation of evidence-based information and an evaluation of effectiveness. |
| • Societal competencies  | Continuous consideration of information security in operations, the social impact of health technology on well-being and daily life, digital democracy and the promotion of social inclusion.   |

The first version of the competences as Micro Credentials from the following article:  
 Värri, A., Tiainen, M., Rajalahti, E., Kinnunen, U-M, Saarni, L. & Ahonen, O. 2020. The Definition of Informatics Competencies in Finnish Healthcare and Social Welfare Education in Pape-Haugaard, L.B. et al. (Eds.), Proceedings of MIE2020, Digital Personalized Health and Medicine. Pp. 1143-1147.  
 Doi:10.3233/SHTI200341 <http://urn.fi/URN:NBN:fi-fe2020082563162>

The competences 2.0 article is currently in the refereeing process.

The original version (in Finnish) is available at:  
[https://sotepeda247.fi/wp-content/uploads/2020/11/SotePeda-247sotedigi-osaamisen-maarittely\\_191120.pdf](https://sotepeda247.fi/wp-content/uploads/2020/11/SotePeda-247sotedigi-osaamisen-maarittely_191120.pdf)

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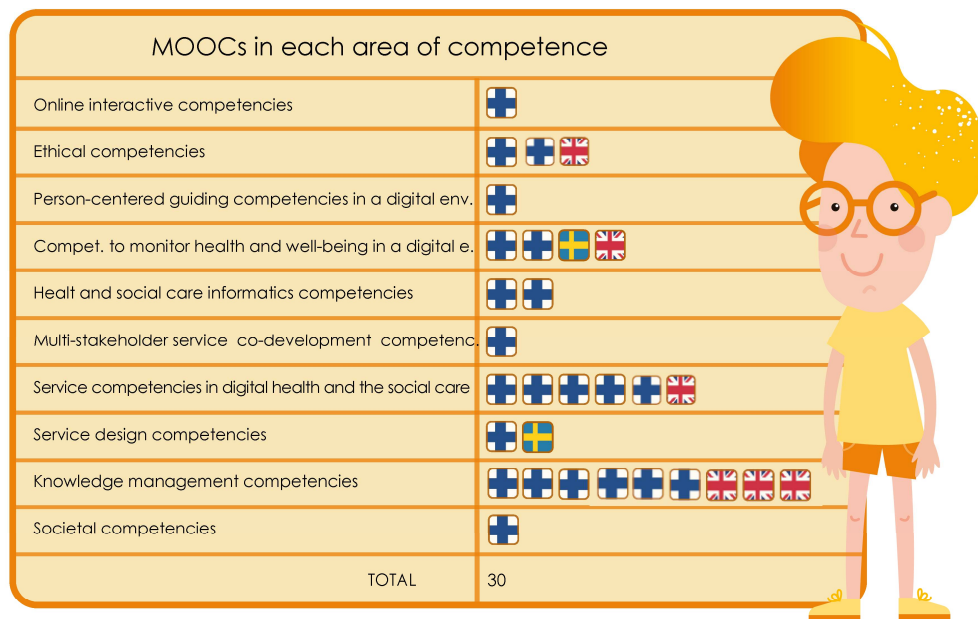


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## Open learning material almost 450 modules

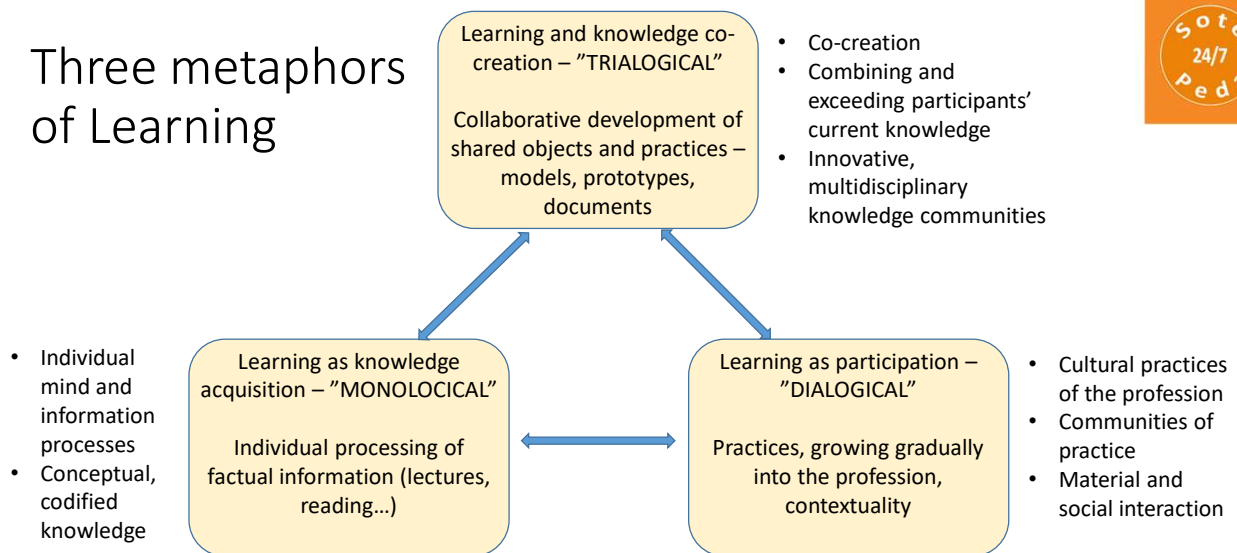
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## Three metaphors of Learning



Paavola &amp; Hakkarainen, 2005 &amp; 2009, Muukkonen, 2013

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## Competencies implementation to the degree studies in bachelor level EQF6



- There are variations of the level of implementation between different degrees (nurse, physiotherapist, engineer, social work, bachelor of business administration, designer)
- There are variations of the level of implementation between different universities of applied sciences (UAS)

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## The professional specialization education for postgraduates



- There is a curriculum plan for professional specialization education for postgraduates in multidisciplinary environment
- The level of education is eqf6
- The education is 30 ECTS
- There is possibility to multidisciplinary environment to study with different degree's background

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Thank you for your attention!

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