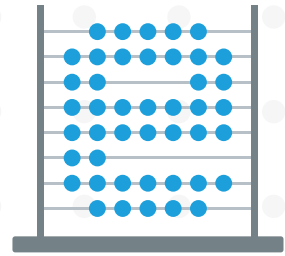


Framework for the Digital Competence of School Principals



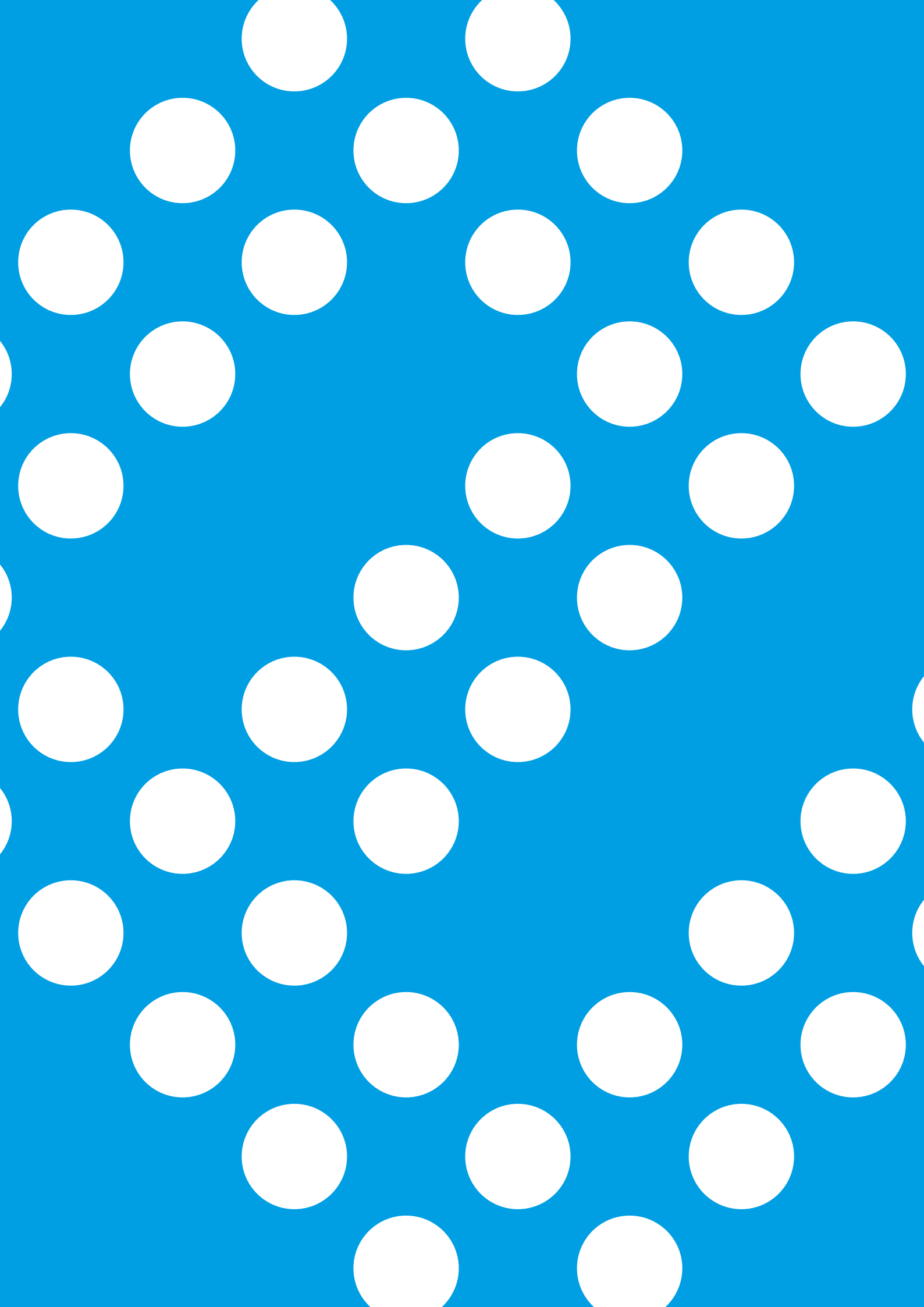
e-Schools

DEVELOPMENT OF THE SYSTEM
OF DIGITALLY MATURE SCHOOLS

(II. PHASE)

CARNET





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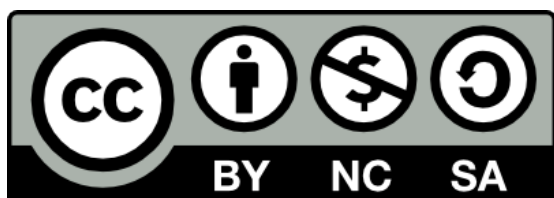
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ENGLISH

Framework for the Digital Competence of School Principals



Introduction

This Framework was developed as part of the “e-Schools” project after seeing the need to define digital competencies of principals and their importance for developing digitally mature schools. Based on the “e-Schools: Establishing a System for Developing Digitally Mature Schools (Pilot Project)”, which was conducted in 151 schools in the Republic of Croatia, it was found that principals have an important and even decisive role in developing digitally mature schools. The e-Schools pilot project, followed by the “e-Schools: Development of the System of Digitally Mature Schools (II. phase)” program and the preparation of the Framework for Digital Maturity, showed that there was a need to define and describe the competencies required for managing a digitally mature school.

The pilot project had a

significant impact on specific digital competencies related to school management, particularly in terms of planning and administration. In that context, there was felt to be a need for establishing a comprehensive Framework for the Digital Competence of School Principals due to weaknesses in the previous framework (Handbook for Digital Competence Framework at School: Teachers and Associates, Principals and Administrative Staff, 2016). In this document, principals were regarded only as one of the user groups and their role was not significantly different from other user groups in school.

The Framework for the Digital Competence of School Principals is the product of systematic scientific research consisting of the following phases:
analysis of scientific literature, relevant digital competence frameworks and models, and other documents regulating principals’ work;
preparation of the initial

version of the Framework (proposal);
Framework content validity assessment with the help of experts;
Framework content validity assessment with the help of principals;
Framework finalisation based on the results of the previous stages.

The Framework for the Digital Competence of School Principals and the Framework for Digitally Mature Schools (“FDMS”) are related in terms of their concept and by the process in which principals develop their competencies by raising the level of digital maturity of schools and vice versa. These are closely related processes of developing not only institutions and principals, but also all other staff, students and parents/guardians/foster parents.

The Framework for the Digital Competence of School Principals (“Framework”) is to be interpreted as a suggestion, rather than

a requirement imposed on principals. It is based on a concept focused on developing the digital competencies necessary for managing a digitally mature school well. The Framework sought to cover the following issues:

- the immediate context of school management, taking into consideration the principals’ tasks and requirements for heading the process of developing a digitally mature school;
- public policies, including the existing legal frameworks regulating the principals’ work, the Proposed Strategy for Digital Maturity of Schools and Education System in the Republic of Croatia¹, and the curriculum for the cross-curricular topic “Use of Information and Communication Technology”;
- the existing relevant digital competence frameworks (particularly the Digital Competence Framework

1 <https://pilot.e-skole.hr/wp-content/uploads/2018/12/Strategija-digitalnog-saz-rijevanja-cjeloviti-tekst.pdf>

for Citizens², European Framework for the Digital Competence of Educators³, European Framework for Digitally Competent Educational Organisations⁴, Framework and Instrument for the Digital Maturity of Primary and Secondary Schools in the Republic of Croatia⁵, Digital Competence Framework at School: Teachers and Associates, Principals and Administrative Staff⁶, Norwegian model⁷) and relevant Croatian and foreign standards, such as the Croatian Qualifications Framework⁸, Australian⁹,

2 <https://publications.jrc.ec.europa.eu/repository/handle/JRC106281>

3 https://www.e-skole.hr/wp-content/uploads/2020/04/CARNET_digitalne_kompetencije_2020.pdf

4 <https://publications.jrc.ec.europa.eu/repository/handle/JRC98209>

5 https://pilot.e-skole.hr/wp-content/uploads/2018/08/carnet_a4_e-skole_okvir_i_upitnik_WEB.pdf

6 https://pilot.e-skole.hr/wp-content/uploads/2016/12/OKVIR_digitalne_kompetencije.pdf

7 <https://www.udir.no/contentassets/081d3aef2e-4747b096387aba163691e4/pfdk-framework.pdf>

8 <https://hko.srce.hr/registar/standard-kvalifikacije/detalji/27>

9 <https://www.aitsl.edu.au/tools-resources/resource/australian-professional-standard-for-principals>

American¹⁰ and other standards.

The Framework aims to encourage principals to take an active role, focusing on their ability to take social action at three different levels: (1) individual level, (2) level of individual schools and local communities, and (3) public policy level. The entire concept is based on the idea of distributed pedagogical leadership – coordinating activities by distributing them within an organisation, where management activities represents the joint work of the staff taking care of the social and digital involvement of all stakeholders¹¹. All the competencies described have a common purpose – encouraging a responsible and critical approach to planning and using digital technologies.

professional-standard-for-principals

10 https://www.npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf

11 Bolden, Richard. "Distributed leadership in organizations: A review of theory and research." *International journal of management reviews* 13, no. 3 (2011): 251-269.

AREA

Planning, management and leadership







1.1.

COMPETENCY

In collaboration with the staff and other stakeholders, the principal prepares school strategy documents, in which the use of digital technology features has an important role and complies with the requirements of the school, public policies, legal regulations and good practice.

COMPETENCY DESCRIPTION

As part of annual and multiannual planning activities, the principal coordinates the inclusion of digital technologies in all forms of work. In this context, collaborative planning is important to ensure that strategy documents are accepted by the staff, students, parents/guardians/foster parents, school founders and other stakeholders, and that they are actually applied in school operations. When preparing the documents, the principal considers the specific requirements of the school and school community with respect to digital technology and analyses the latest trends critically.

TYPICAL ACTIVITIES

The principal:

- organises good practice exchanges and involves the staff in the preparation of strategy documents;
- based on the examples of good planning practices and existing strategy documents, encourages the development of school plans focused on a purposeful integration of digital technologies into school operations;
- in collaboration with other school staff and stakeholders, explores specific school requirements that are to be included in strategy documents;
- ensures compliance of strategy documents with legal regulations;
- organises the dissemination of strategy documents to school staff and stakeholders in education activities;
- organises continuous monitoring and evaluation of strategy document implementation and purpose.



1.2. COMPETENCY

The principal coordinates, monitors and evaluates the planning, procurement and implementation of digital technologies in teaching and business processes.

COMPETENCY DESCRIPTION

Based on the plans, the principal coordinates the implementation of digital technologies, monitors the results continuously and evaluates them periodically. Specific characteristics of the school are integrated into public procurement planning.

TYPICAL ACTIVITIES

The principal:

- appoints a team responsible for monitoring and evaluating the implementation of digital technology in school operations;
- organises coordination meetings;
- organises real and virtual space for collaboration and coordination of planning, monitoring and evaluating digital technologies in school;
- prepares a strategic plan implementation progress report and includes it in the existing school performance reports;
- adapts the existing and introduces additional activities to achieve the goals set;
- appoints a team to find alternative procurement funding sources and digital technology applications (e.g. projects, donations, etc.);
- appoints a person to coordinate public procurement and provides necessary working conditions (personnel, professional training).



1.3. COMPETENCY

For the purpose of making informed decisions, improving school operations and achieving transparency, the principal uses the data from information systems and encourages the school staff, students and other stakeholders to use available data actively and appropriately.

COMPETENCY DESCRIPTION

The principal monitors past school performance and compares it with similarly developed schools in the county and in other counties. The principal analyses and compares data in collaboration with the staff, based on which he/she gives suggestions for improving school operations and makes informed/well-founded decisions. The principal makes sure that the data is shared with the students and other stakeholders (e.g. parents) appropriately and encourages them to use that information for making informed decisions about their specific needs. The principal encourages the students and their parents/guardians/foster parents to use the data actively and to make suggestions for improving school operations.

TYPICAL ACTIVITIES

The principal:

- encourages the use of data from the electronic grade book, e-Register, CARNET – delta, ŠeR database, platform for compiling school results (Loomen) and other platforms;
- refers the staff and students to data sources and gives recommendations for their use;
- organises training courses on the use of data from the existing systems (analytics and statistics tools currently used in education and business processes) for the staff, students and their parents/guardians/foster parents;
- directs the staff's attention to the need for connecting and analysing data from various systems in order to improve working practices;
- improves working practices based on the data used;
- disseminates available data to stakeholders timely in order to achieve transparency and connect with the founders and the wider social community.



1.4. COMPETENCY

The principal coordinates the development and implementation of the policy for a responsible and safe use of digital technology in the staff's and students' work.

COMPETENCY DESCRIPTION

The principal coordinates the establishment of common rules to define acceptable and unacceptable behaviour, ensure a clear division of tasks and responsibilities, and define consequences in case of non-compliance. The principal introduces organisational measures to protect the integrity of the school's IT system and to ensure its smooth operation under assumed forms of threat.

TYPICAL ACTIVITIES

The principal:

- coordinates the preparation and integration of rules related to digital technologies into the existing school rules;
- coordinates the implementation of the rules and task distribution;
- organises training courses on:
 - activities related to the implementation of rules;
 - necessary measures (organisational, technical and program-related);
- coordinates the implementation of the recommendations specified in Safe and Responsible Use of ICT in School;
- coordinates the activities for familiarising new staff/students with the rules related to digital technologies when being employed/opening user accounts.



1.5. COMPETENCY

The principal establishes a quality assurance system for digital technology application in school.

COMPETENCY DESCRIPTION

The principal coordinates the development and integration of the quality assurance system for digital technology application in school, which is to be integrated into the comprehensive school quality assurance system.

TYPICAL ACTIVITIES

The principal:

- appoints a special quality assurance officer for digital technology application in school;
- in collaboration with the staff, defines the plan (activities and criteria) for successful quality assurance for digital technology application in school;
- arranges status reports (of the principal and school board);
- arranges quality improvement activities and their coordination in collaboration with other staff;
- monitors the role of digital technology in increasing the quality of educational and other school processes.



1.6. COMPETENCY

The principal coordinates the preparation and use of common digital communication platforms and channels at the school level with all stakeholders.

COMPETENCY DESCRIPTION

To ensure systematic operations and simplicity, the principal coordinates the preparation and use of common digital communication platforms and channels at the school level with all stakeholders, ensures their use and coordinates the addition of new tools.

TYPICAL ACTIVITIES

The principal:

- familiarises the entire staff with the existing prescribed tools;
- participates in the arrangements about defining the criteria for choosing communication platforms and channels (suitability for the education system and age group, simplicity, free-of-charge use, content exchangeability, etc.);
- decides on the choice of communication platforms and channels mandatory for the entire school;
- informs the students and parents/guardians/foster parents on the use of selected communication platforms and tools and organises training courses on their use if necessary;
- educates the students and parents/guardians/foster parents about the use of selected communication platforms and tools and organises training courses on the legal and ethical aspects of their use if necessary.

AREA

Digital technologies in learning and teaching







2.1. COMPETENCY

The principal creates an encouraging environment for an appropriate use of digital technologies in learning and teaching.

COMPETENCY DESCRIPTION

An encouraging environment for an appropriate use of digital technologies in learning and teaching is created by fulfilling all the necessary prerequisites: human resources and physical/ material, financial, IT and organisational prerequisites.

The principal focuses on the staff and students because only informed, competent and motivated persons can actively and efficiently use the digital technologies appropriate for certain learning and teaching styles.

TYPICAL ACTIVITIES

The principal:

- in collaboration with the staff, raises awareness of the importance of a critical and responsible use of technology in learning and teaching processes;
- raises awareness of the use of technology in student-centred learning and teaching processes;
- involves the staff and students in the preparation and monitoring of the fulfilment of objectives related to the use of digital technologies in learning and teaching, as well as in the further development of the encouraging environment;
- coordinates the integration of digital technology in learning and teaching with the existing school plans;
- in collaboration with the staff and students, defines the objectives and plans the use of technology in the classroom as a support tool, such as interactive whiteboards and mobile devices.

2.2.

COMPETENCY

The principal coordinates and encourages a purposeful and creative use of digital technologies in learning and teaching.

COMPETENCY DESCRIPTION

Through dialogue and active collaboration with the teachers and students, the principal determines the technologies and methods appropriate for a particular purpose and producing the best results. Teachers who are more competent in using digital technologies in learning and teaching are provided with the prerequisites for their creative use.

TYPICAL ACTIVITIES

The principal:

- in collaboration with the staff, raises awareness that technology must be used in a creative and purposeful way in order to achieve the teaching objectives and intended outcomes;
- encourages the implementation of the curriculum for the cross-curricular topic “Use of Information and Communication Technology”;
- ensures that technology is used as support for learning and creativity in the following ways:
 - in collaboration with other staff, encourages the teachers and students to make an appropriate and informed choice of the devices, software and methods to

achieve intended results;

- encourages the teachers and students to collaborate in a digital environment with the aim of improving the learning and teaching process (preparation of shared materials in the cloud, participation in good, argumentative online discussions);

- encourages the teachers and students to adopt an innovative approach to learning and teaching processes, as well as to develop new teaching forms and methods: experimental, research, problem-oriented, etc. teaching supported by technology;

- encourages critical thinking about technology among the teachers and students;

- encourages the teachers and students to acquire proper time management skills, as well as to use technology conscientiously and to exercise self-control;

- encourages the teachers and students to freely and openly express their skills, imagination and creativity when working with digital technology;

- encourages experimenting with various software and combining it to create new works;

- encourages the use of methods for developing (individual and group) student creativity that allow them to design and produce digital content in a simpler way;

- encourages the teachers to develop critical thinking among the students and to seek new and different ways to solve tasks.

2.3.1. COMPETENCY

The principal provides the conditions for teachers' and students' access to high-quality digital content and tools.

COMPETENCY DESCRIPTION

Another important aspect of high-quality learning and teaching is the use of high-quality digital content and tools. Besides defined technical requirements, such digital content and tools also fulfil all other criteria related to the form, content, and teaching and learning objectives, while also being appropriate for the students' stage of development, abilities and needs. Together with the teachers and professional assistants, it is necessary to define and raise awareness of the quality criteria, as well as to promote the importance of their application when choosing digital content and tools. It is particularly important to pass on and develop the practice of using high-quality digital content among the students.

TYPICAL ACTIVITIES

The principal:

- plans and ensures all the resources necessary to access high-quality digital content and tools in collaboration with the teachers, professional assistants and students;
- develops guidelines for recognising high-quality digital content and tools, taking into account the following factors when selecting digital resources and materials and deciding how to use them:

- recognition, evaluation and selection of digital resources and materials appropriate for learning and teaching;
- learning objectives, context, pedagogical approach and specific groups of students;
- by engaging in dialogues and monitoring activities systematically, encourages the teachers and students to use high-quality, reliable digital content, including open educational resources (OER);
- encourages the teachers to lead by example and use various class activities to raise awareness (of the need for) and develop the practice of selecting and using high-quality digital content and tools among the students;
- organises the space for exchanging good practice and other information related to the quality of digital content and tools among the teachers, professional assistants and students;
- organises the creation of a database containing high-quality digital educational content;
- informs all the staff and students about the moral and material responsibility related to digital content abuse, unauthorised use and sharing;
- organises annual employee and student training courses on digital content authorship, plagiarism, data protection and similar issues.



2.3.2. COMPETENCY

The principal encourages purposeful and responsible digital content creation, use and sharing.

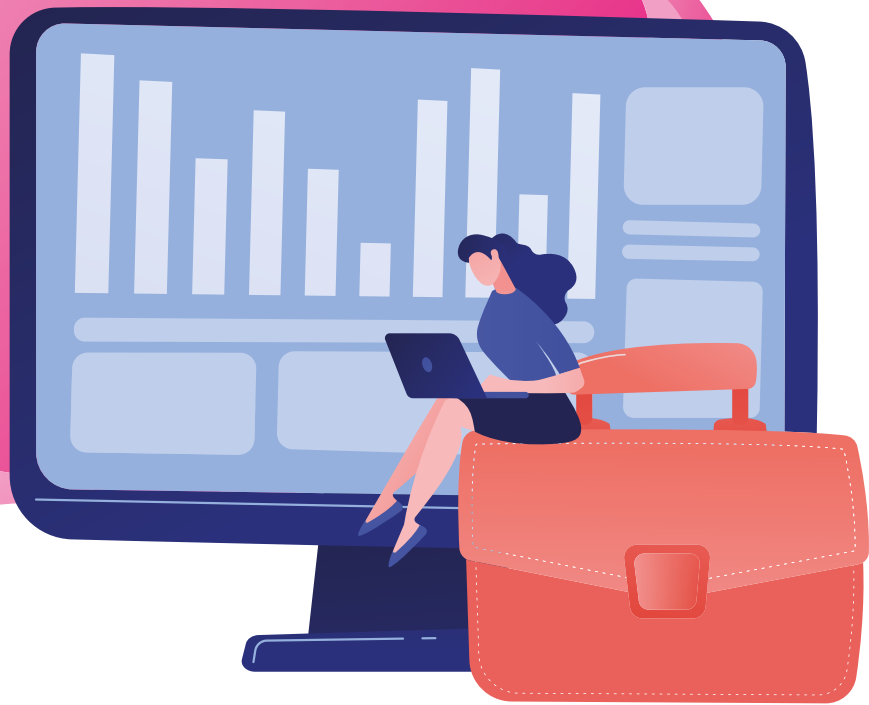
COMPETENCY DESCRIPTION

When creating digital content, it is necessary to focus primarily on its purpose and appropriateness. However, digital content creators must approach its creation, use and sharing responsibly, respecting any copyright, data protection, licences and similar rights.

TYPICAL ACTIVITIES

The principal:

- in collaboration with assistants, establishes rules for creating the school's digital content, including the description of individual types of digital content, authorships, licences, their potential use, sharing, etc.;
- encourages the creation and adaptation of digital materials, adaptation and rework of materials available under open licences and other materials allowing adaptations and rework;
- encourages the creation of new digital educational materials independently or in collaboration with others, taking into account learning objectives, context, pedagogical approach and specific groups of students when creating digital materials and deciding how to use them;
- encourages the creation of a digital content database and ensures access for students, parents/guardians/foster parents and other stakeholders;
- coordinates the protection of sensitive digital content and application of privacy rules in accordance with the legal framework and school rules on digital technologies;
- encourages the teachers and students to create open-access (open-licence) digital content for all interested users;
- monitors and evaluates the teachers' work on creating digital educational content.



2.4. COMPETENCY

The principal supports a purposeful and safe use of digital technologies for monitoring the students' work and evaluating their achievements (including peer assessment and self-assessment), as well as for giving and receiving feedback.

COMPETENCY DESCRIPTION

Digital technologies are used as support for monitoring student progress and evaluating their work, as well as for self-assessment and peer assessment. Using the data from learning platforms and the electronic grade book, it is possible to obtain various kinds of information contributing to a better understanding of the students' and teachers' work, which can be used to develop further action plans based on evaluation results and performance monitoring. Besides that, digital technologies can be used to give feedback to students timely, but also as an encouragement and a tool for self- and peer assessment.

TYPICAL ACTIVITIES

The principal:

- in collaboration with professional services, collects information about positive experiences with using digital technologies for performance monitoring;
- in collaboration with assistants, establishes rules/guidelines on the safe use of digital technologies for performance monitoring and student evaluation, which cover the description of use, information involved, application of information protection mechanisms, etc.;
- encourages the teachers to use tools within communication platforms to monitor and evaluate the students' work;
- encourages the use of advanced technologies and collaboration tools to give feedback;
- encourages the students to use advanced tools, communication tools and collaboration tools for self- and peer assessment;
- encourages the students to create e-portfolios and participate in projects;
- encourages the teachers and students to use information from the electronic grade book for monitoring progress, learning and self-learning.



2.5. COMPETENCY

The principal encourages the teachers and students to review the purpose of using digital technologies for improving teaching based on experience and student feedback.

COMPETENCY DESCRIPTION

The use of digital technologies in teaching must be justified, i.e. purposeful. Purposefulness is defined as the ability to achieve the objectives and planned results in teaching. In this context, it is important to continuously monitor the students' experience and feedback related to the use of digital technologies in teaching and to initiate improvement activities based on them.

TYPICAL ACTIVITIES

The principal:

- together with the teachers and professional assistants, defines the methods and frequency of collecting student feedback, the content of student feedback on the purpose of using digital technologies in teaching, and the methods of analysing and interpreting results;
- encourages the students to openly and honestly share their experience with the use of digital technologies in teaching;
- encourages the teachers, professional assistants and students to critically assess the purpose and their own practice of using digital technologies in the teaching process;
- analyses the students' experience and feedback and interprets the results together with the teachers and professional assistants;
- together with the teachers and professional assistants, taking into account the students' experience, defines the activities necessary for a more purposeful use of digital technology and for the resulting teaching improvements;
- ensures mechanisms motivating the teachers and professional assistants to carry out the defined improvement activities and to introduce changes;
- ensures continuous collection, analysis and interpretation of results, as well as resulting activities aimed at making the use of digital technologies in teaching more purposeful.



2.6. COMPETENCY

The principal encourages the teachers and professional assistants to apply digital technologies with purpose when working with students with special educational needs.

COMPETENCY DESCRIPTION

Digital technologies can be of great help as a form of assistive technology used to ensure equal opportunities in the education system and they can also help with fulfilling the maximum potential of each student. All students with special educational needs, students with developmental disabilities and gifted students can and should benefit from using digital technologies in the teaching process. This concerns primarily the facilitation of individualised instruction, i.e. ensuring the adaptation of content and an individualised approach (adaptation of teaching procedures and the learning environment). Teachers and professional assistants must be aware of, trained and motivated for a purposeful application of digital technologies in their work with children with special educational needs.

TYPICAL ACTIVITIES

The principal:

- in collaboration with the teachers and professional assistants, defines and, when required, improves general guidelines (and rules) on using digital technologies when working with students with special educational needs;
- identifies the needs of students with developmental disabilities and gifted students on an annual basis (or when necessary) for the purpose of identifying required digital technologies and adaptations;
- in collaboration with the teachers, professional assistants, students and their parents/guardians/foster parents, identifies and provides all the resources necessary to ensure a purposeful application of digital technologies in the work with students with special educational needs;
- organises exchanges of good practice and experience for teachers and professional assistants regarding the use of digital technologies in their work with students with special educational needs;
- designs mechanisms for motivating the teachers and professional assistants to apply digital technologies in their work with students with special educational needs;
- keeps up with the methods, results and experience with applying digital technologies in the work with students with special educational needs.

Development of digital competencies







3.1. COMPETENCY

The principal identifies priority areas for the development of digital competencies of all the staff and students based on the results of continuous communication about their needs and monitoring of their work.

COMPETENCY DESCRIPTION

In an environment that encourages professional development, the principal, together with the staff, monitors and recognises the need for the development of their own and students' digital skills. In doing so, the principal acts as an organiser of digital competence development, which in the strict sense relates to the skills and abilities of educators. The principal makes sure that the staff improve their digital competencies according to their own needs with regard to:

- communication and collaboration in a digital environment;
- creating and sharing digital content;
- resolving issues in a digital environment;
- evaluating students in a digital environment;

- strengthening students;
- responsible use;
- critical digital literacy;
- safe use of digital technologies in teaching and on social networks;
- specific needs of the school and local community.

TYPICAL ACTIVITIES

The principal:

- in collaboration with professional services and a team of employees, integrates the development of digital competencies into annual professional development plans based on the needs of teachers, school and the school community;
- periodically analyses the original digital content produced by the students, teachers and professional services, as well as communication and collaboration in a digital environment, detecting areas where digital competencies can be developed further;
- keeps up with available learning opportunities and encourages the staff to search the internet and find appropriate training opportunities;
- uses and encourages taking advantage of online training opportunities, such as video tutorials, MOOCs, webinars, etc.;
- in collaboration with professional services and a team of employees, uses digital technologies and the online environment to organise training courses for the entire staff.



3.2. COMPETENCY

The principal encourages the continuous development of digital competencies of all the staff and students for the purpose of achieving business and educational objectives and learning outcomes.

COMPETENCY DESCRIPTION

By engaging in constant dialogue with the staff and leading by example, the principal emphasises the importance of continuous professional development and monitoring of the development of digital technologies required to achieve business and educational objectives and learning outcomes.

TYPICAL ACTIVITIES

The principal:

- motivates the staff to undergo professional development training by engaging in dialogue with them and creating an encouraging environment;
- ensures the financial support, makes time and provides the infrastructure required for organising and carrying out professional development training;
- uses and encourages the use of the internet for improving professional competencies;
- uses, encourages and steers the use of the internet towards learning about new pedagogical methods and strategies;
- uses, encourages and steers the use of the internet towards finding digital resources and materials supporting professional development.

3.3. COMPETENCY

The principal supports and promotes the importance of non-formal and informal knowledge acquisition and good practice exchange in relation to digital technology use.

COMPETENCY DESCRIPTION

Leading by example, the principal openly promotes the importance of non-formal and informal knowledge acquisition as an important segment of lifelong learning, which raises the quality of the educational institution's performance.

TYPICAL ACTIVITIES

The principal:

- participates in communities of practice for principals and exchanges knowledge and experience in networks of principals;
- encourages the teachers and other staff to take responsibility for developing their own digital competencies and to encourage students to do the same;
- encourages the creation and sharing of digital educational content in collaboration and communication areas in and outside of the school (shared virtual school space, posts in the Edutorij repository and on other knowledge exchange platforms);
- creates an acknowledgment and/or a reward program for the staff designing and sharing high-quality digital content;
- provides the conditions for networking and exchanging good practices at the school level and outside of the school by:
 - encouraging networking via meetings of different teaching staffs, where the employees can learn one from another;

- encouraging participation in projects stimulating the development of digital competencies of the staff and students;
- encouraging the organisation of teaching staff meetings, where teachers can transfer the knowledge acquired by participating in projects, conferences and various forms of training courses;
- planning school workshops that involve a creative exchange of knowledge and work encouraging constructive feedback;
- inviting and coordinating the involvement of former students (alumni) and parents/guardians/foster parents of the current students working with digital technologies in order to share their knowledge with the school;
- encouraging the staff to make reflective journals about possible further activities for improving technology use;
- encouraging and organising mentoring relationships where the staff with better digital skills would help the staff with basic digital competencies through direct mentorship and/or training courses, or workshops where older/more experienced students would educate younger/less digitally competent students;
- uses a database for increasing non-formal and informal knowledge: recordings, videos, articles and posts, tools, parts of student portfolios, etc.;
- arranges database sharing levels;
- together with professional services or advanced digital tool users (teachers and students), coordinates the preparation of instruction manuals, video tutorials and other resources, which can be accessed by other staff, students and parents/guardians/foster parents at their own discretion using an agreed platform;
- encourages non-formal connections, exchange and discussions about possible solutions to issues in the digital space.

AREA

Digital culture







4.1. COMPETENCY

The principal encourages and develops the digital culture of the school, where all the students and staff have access to digital technologies and resources and use them responsibly.

COMPETENCY DESCRIPTION

The principal develops a school culture which promotes modern pedagogical methods and a critical approach to digital technology use, with the school functioning as a laboratory that encourages students to learn and the staff to undergo professional development training, as required by the digital era. Guided by the principles of equal opportunities and inclusion, all the students and staff must have access to digital technologies and resources.

TYPICAL ACTIVITIES

The principal:

- coordinates the creation of the school's digital content database, arranges/establishes the rules on its use, includes student e-portfolios and defines the levels of content sharing in collaboration with the staff and students;
- coordinates the use of resources and makes sure that all the staff and students can access and use the resources;
- encourages the students and staff to use digital resources, making sure that they are used with purpose;
- provides a room where students can access a computer during working hours and use it for educational purposes (library or some other place that students may access);
- changes and introduces new rules where necessary in order to ensure responsible access to resources and to maximise their potential.



4.2. COMPETENCY

The principal ensures digital presence and visibility of the school for the purpose of affirming school identity and providing information and publishing content on time.

COMPETENCY DESCRIPTION

Visibility in the local community and beyond is important for the school's overall presence and proactivity. A school is not an isolated community working for itself, but rather a potential incubator of knowledge and action in the community to which it belongs. For that reason, it is important to establish a connection between the school and the community using advanced digital technologies, to ensure its visibility in the community and to inform the stakeholders about its activities on time through formal and informal channels.

TYPICAL ACTIVITIES

The principal:

- in collaboration with the staff and students, creates the public image of the school, examines what makes the school special and interesting, and makes sure that such information is highlighted on the school's website;
- in terms of the school's communication strategy, the principal is guided by the needs of the local community; the principal thinks about what makes the school fit in its environment and what needs it addresses apart from education, highlighting the special characteristics of the school linked to the local community;
- appoints a team to maintain the school's website and makes sure that students participate in it as well; the website must be updated timely and have a clean design; the principal coordinates the publishing of information, which must be relevant and allow communication with students, parents/guardians/foster parents and the local community; the principal looks after the website design and accessibility;
- includes former students' (alumni's) experience with the school on the website;
- ensures that the website is linked to the school's social networks;
- appoints a team to manage social networks; involves professional services, teachers and students in the creation of social network content.



4.3. COMPETENCY

The principal coordinates the selection and leads by example to encourage a systematic use of arranged communication and collaboration channels in and outside of the school with the aim of establishing clear, safe and responsible connections and creating common resources and knowledge.

COMPETENCY DESCRIPTION

Due to an increase in the number of different communication and collaboration channels (instant messages, e-mail, videoconference tools, platforms, etc.), it is important for the school to show that it chooses communication tools systematically, making sure that they are used by the staff, students, parents/guardians/foster parents and the local community, as well as that they are free and safe to use. Virtual collaboration and knowledge building spaces are particularly important, so it is necessary to arrange them, define access rights and methods of use.

TYPICAL ACTIVITIES

The principal:

- together with his/her associates, identifies the communication and collaboration systems used by the staff, students and local community in order to make a critical selection of tools – what communication and collaboration tools are to be used and for what purpose, in accordance with the school’s needs;
- arranges communication and collaboration rules in the systems selected, guided by the principles of establishing clear, safe and responsible connections;
- adjusts the selection depending on circumstances (changes to terms and conditions of use, upgrades, channel load);
- coordinates and, where necessary, develops the collaboration space (data storage and sharing service) in the cloud, as well as the content located there, e.g. categorisation of shared content for the purpose of visibility and accessibility.



4.4. COMPETENCY

The principal encourages understanding and implementation of a set of digital technology laws pertaining to copyright, intellectual property, personal data management, privacy protection, cyberbullying and other aspects of safe and responsible digital technology use.

COMPETENCY DESCRIPTION

Compliance with legal regulations on digital technology is extremely important for numerous educational practices and protection of children and young people. Specifically, this concerns a set of copyright laws on creating, sharing and downloading digital educational content, protection of intellectual property rights to such content, personal data management, which is subject to special regulations for minors, and privacy protection. Besides that, there is also a set of laws and subordinate legislation on cyberbullying, an issue that schools nowadays often come across when trying to protect the rights of students.

TYPICAL ACTIVITIES

The principal:

- in collaboration with professional services and a team of employees, organises workshops about the laws related to digital technology in education, which are intended for other staff and students;
- in collaboration with professional services and the staff, monitors the implementation of such laws and sees to their enforcement as prescribed;
- coordinates training courses on the use of licences, which specify the terms and conditions of using digital materials and potential consequences in case of improper use;
- coordinates courses on the importance of using open licences;
- develops strategies for licensing created content for various groups – professional services, teachers and students;
- pays special attention to cyberbullying prevention and coordinates awareness-raising activities, workshops and content preventing peer violence;
- establishes a system of rules on peer violence in collaboration with the staff and students;
- encourages education and monitoring of changes in the legal frameworks on digital technologies in education.

Digital infrastructure







5.1. COMPETENCY

The principal plans and coordinates upgrades to the school’s digital infrastructure according to the needs identified and in collaboration with experts, staff, founders and the Ministry.

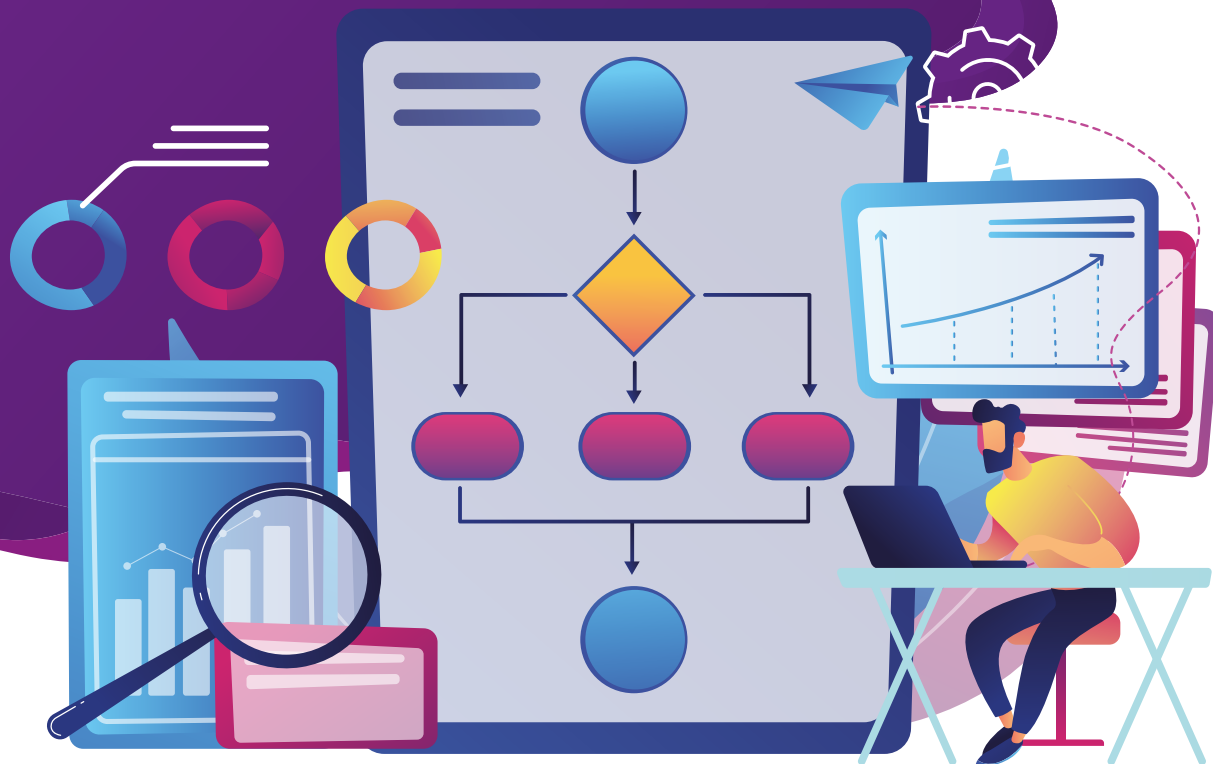
COMPETENCY DESCRIPTION

The Ministry, in collaboration with CARNET, adopts a plan for upgrading the digital infrastructure of the education system. Schools may express different needs in their own development plan, mission and vision. The needs may also exceed the Ministry’s planned investment. In collaboration with the Ministry, founders, school board and the community of parents/guardians/foster parents, the principal explores the possibilities of procuring missing digital infrastructure.

TYPICAL ACTIVITIES

The principal:

- familiarises himself/herself with the Ministry's plan for upgrading the digital infrastructure of schools adopted for a certain period;
- in collaboration with other stakeholders, makes a plan for developing the school's digital infrastructure in accordance with the Ministry's plan;
- communicates with other stakeholders about how to realise the procurement of digital infrastructure that the school requires, but is not addressed by the Ministry's plan.



5.2. COMPETENCY

The principal supports and coordinates the development and upgrade of the school's network infrastructure based on identified needs and capabilities.

COMPETENCY DESCRIPTION

The Ministry, in collaboration with CARNET, adopts a plan for upgrading the network infrastructure based on standard models of assumed user requirements. Knowledge and greater engagement of teachers and students can make it possible for a school to achieve better results from applying digital technologies than expected. Accordingly, it may need a different network infrastructure, i.e. higher speeds, more access points, subnetworks and enhanced monitoring of network access in and outside of the school.

TYPICAL ACTIVITIES

The principal:

- familiarises himself/herself with the Ministry's plan for upgrading the schools' network infrastructure adopted for a certain period;
- in collaboration with other stakeholders, makes a plan for developing the school's network infrastructure in accordance with the Ministry's plan;
- communicates with other stakeholders about how to realise the procurement of network infrastructure that the school requires, but is not addressed by the Ministry's plan;
- organises an individualised approach to individual network resources for particular teachers and students due to greater engagement, knowledge and faster development.



5.3. COMPETENCY

The principal manages the distribution of digital devices according to the recognised staff and student needs, planned schedule and established criteria.

COMPETENCY DESCRIPTION

The principal, together with his/her assistants, defines the criteria for distributing digital devices and granting authorisations based on identified forms of use. Certain teachers use digital infrastructure at a very advanced level, which can be identified by monitoring their own activities, student activities and their results. This requires equipment that meets the conditions for relevant communication forms, as well as the minimum standard of technology requirements for using relevant tools. One of the criteria for distributing new devices is also technological obsolescence relative to the pace at which tools develop, communication needs, and particularly the possibilities of visualisation and virtualisation of teaching content.

TYPICAL ACTIVITIES

The principal:

- coordinates recordkeeping of digital devices in the classrooms and labs, devices kept by the teachers, other staff and students, and also monitors their obsolescence;
- coordinates the monitoring of various types of activities for preparing and holding classes, as well as vertical and horizontal communication for the purpose of identifying the needs for specific/new digital devices (advanced use of technology);
- checks teacher and student evaluation results using digital devices;
- participates in defining the criteria for distributing digital devices;
- oversees the process of distributing digital devices and authorisations based on identified forms of use.



5.4. COMPETENCY

In collaboration with the staff, the principal determines the purpose of using software to support business, learning and teaching processes.

COMPETENCY DESCRIPTION

In collaboration with the teachers, the principal develops software use models, taking into account the specific characteristics of the teaching process, teachers' competencies and the potential of digital equipment. In collaboration with other staff, the principal develops software use models as support for non-teaching processes. In collaboration with the teachers and other staff, the principal adopts a plan of transitioning from simpler to more complex software use models with the aim of increasing the quality of classes and non-teaching processes.

TYPICAL ACTIVITIES

The principal:

- keeps up with particular software features for supporting business, learning and teaching processes;
- familiarises himself/herself with the competent Ministry's requirements regarding the standard form of software use;
- in collaboration with the teachers and other staff, identifies how and what types of software is used;
- in collaboration with the teachers and other staff, develops software use models as support for business, learning and teaching processes;
- determines and provides the prerequisites for making a transition to more complex software use models with the aim of increasing the quality of business, learning and teaching processes;
- motivates the staff to apply more complex software use models.



5.5. COMPETENCY

The principal ensures and coordinates technical support and the school's infrastructure maintenance system.

COMPETENCY DESCRIPTION

As schools use more and more digital devices, there is a need to carry out technical and software maintenance. However, end users (teachers, other staff and students) do not have the necessary knowledge to perform such tasks. In collaboration with the Ministry, the principal seeks to ensure additional funds or redistribute the working time for the employees carrying out such tasks in school. In collaboration with the Ministry, the principal seeks to hire a person with the necessary knowledge to provide technical support in schools that use many digital devices. In collaboration with the founders, the principal ensures funds for financing technical support provided by specialised business operators.

TYPICAL ACTIVITIES

The principal:

- ensures and coordinates technical maintenance of digital devices;
- communicates with the founders and the Ministry to ensure additional funds to compensate the employees with adequate competencies for the time spent performing maintenance tasks;
- communicates with the Ministry to obtain permission to hire a person (professional assistant) with the necessary competencies for performing maintenance tasks in schools that use many digital devices;
- communicates with the founders and the Ministry to obtain permission for concluding a technical support contract with specialised business operators;
- in collaboration with experts, makes a protocol for fulfilling technical maintenance requirements;
- keeps up with technical maintenance requirements for the purpose of organising additional training courses for digital device users