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Evaluation of individual systemic projects supported by PO 3 OP RDE-II Part II:

Part II: Evaluation area C

- Evaluation of the PPUČ project

4th INTERIM REPORT

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1 Executive summary

The individual systemic project "Support of capacity building for the development of basic pre/literacies in pre-school and basic education – Supporting Teaching Practice" (PPUČ)¹ is part of the evaluation of systematic and conceptual projects supported by PA 3 OP RDE. The presented Interim Report of this evaluation is based on the investigations carried out by the contractor in the second half of 2021. This Interim Report links to the previous three developed interim reports: IR 1 – evaluates the period from the commencement of the project to March 2019, IR 2 – from April to September 2019, IR 3 – from October 2019 to November 2020. This Interim Report was compiled for the period from December 2020 to September 2021.

The PPUČ project is entering the final months of implementation - it started on 1.12.2016 and the project implementation ended on 30.11.2021. The total project budget amounts to CZK 98.7 million.

Conformity of the management and implementation of the PPUČ project with the project application

Under this evaluation, to what extent management activities and implementation of the PPUČ project follow the project application is monitored. The evaluation looked in detail at several project aspects: the implementation of key activities and processing of their outputs according to the planned schedule and current needs of the project implementation; the rate of achievement of its intended objectives and expected changes to the current situation; the existence of potential risks endangering the project and achievement of the objectives; the existence of obstacles to successful project implementation; progress of the evaluation activity within the project. **Implementation of key project activities** is carried out according to the developed project management documentation and original schedule. Good project management is also demonstrated by the low number of changes conducted within the project (related to the span of the project). Regular monitoring of the project implementation and its current needs to which the project's progress is adjusted where necessary, is being carried out.

The current stage of the project implementation already shows **changes in the actual state of the project and achievement of its objectives**, as opposed to the previous IRs, (most of the outputs were completed in the monitored period of the project). According to the obtained information, all outputs of these KA seem to have been successfully completed, and their objectives and expected changes have been fulfilled

Further information related to the achievement of its objectives was established in the questionnaire research among participants of the communities of practice and summer school. These respondents think that communities of practice and summer school meet the objective to encourage and promote a shared understanding of teachers and the professional public in respect of quality in education in the development of mathematical, reading and digital literacy in practice at nursery and elementary schools

Risks and barriers

Risks posing a threat to the project implementation and achievement of its objectives as well as barriers to implementing the project, were also assessed in the evaluation. As opposed to the findings from IR 3, the Beneficiary no longer perceives the merger of NIDV and NÚV as a risk. Since autumn 2020, the system of work of the newly established organization has stabilized after the new director was appointed. There is still a persisting risk related to the existing epidemiological situation, however, the Beneficiary has learned to adequately respond to it. Another identified risk was a reduction of the

¹ Project registration number CZ.02.3.68/0.0/0.0/15_001/0002110.

implementation team in the last phase of implementation, perceived by MŠMT representatives as well. However, MŠMT representatives found the risk marginal. As followed from the interviews carried out with MŠMT representatives, another identified risk was a lack of interest from teachers in using the self-evaluation instrument - Teacher21 profile - and insufficient interest in the gramotnosti.pro campaign. Generally, both MŠMT representatives and the evaluator assess the risks as marginal and the Beneficiary managed to identify and eliminate them in time.

As to the barriers perceived in this evaluation report as obstacles which occurred during the implementation of the project, both the Beneficiary and MŠMT representatives identified the barrier of administrative burden and lack of interest from teachers (especially in the field of self-development). Generally, no barriers have been identified which would prevent the successful implementation of the project. As can be observed, the Beneficiary managed to adequately overcome all barriers in the past (such as the barrier identified in the previous monitored period relating to the merger of NÚV and NIDV, after which some members of the project team left) and they had no negative impact on the project implementation.

Evaluation activities carried out within the project

The last aspect that has been evaluated from the point of view of project management and project implementation are evaluation activities carried out within the project. The evaluator finds the scope, level and quality of the current KA 3 Evaluation similar to the evaluation in IR 1, IR 2 and IR 3, that is, good and satisfactory. This conclusion is also made by MŠMT representatives who participated in the structured interviews. There were no changes to the information about evaluation activities stated in IR 1, IR2 and IR3. In the evaluated period of IR 3, the project team was expanded by an internal evaluator – previously 2 part-time staff members carried out the evaluated period of IR 4, one of the two part-time workers terminated his employment (for personal reasons). This situation had no negative impacts on the project implementation.

According to the plan, discussions were held with the members of the internal opponent panel (online/offline). This activity is obligatory, and its minimum scope is specified by the MŠMT and MA administrators. There is a plan of PPUČ products, the internal opponent panel makes a standpoint on each product at the time the work is started, followed by the development of expert's opinions for the products.

The self-evaluation report is drawn up once a year. Online focus groups were newly created to develop the self-evaluation report, which reflected the following topics: risk management; opportunities; current measures.

As can be observed, the project team implements the internal evaluation at an above-standard level. It was also concluded that the Beneficiary complies with the evaluator's Code of Ethics and adheres to the formal standards of evaluation.

Evaluation of project outputs by key stakeholders

Respondents obtained inspiration, new methods in the PPUČ project, they became aware of trends and opportunities for self-development in the field of reading, mathematical and digital literacy, and gained access to good methodological materials related to introducing literacy into education. According to respondents, the most beneficial outputs are publications with ideas for basic literacy activities for individual levels of education (sets of specific teaching activities for pre-school education, first and second grade made up of 35 online lectures on RVP.CZ for mathematical, reading and digital literacy (education modules), transformation of the user environment on the Methodology Portal of the RVP (personalising of services, greater possibility of collections), implementation of expert panel mini-conferences and the final conference of the project.

Cooperation

As to the cooperation with other relevant projects and the results, the activities of the Beneficiary are evaluated as very good, even setting an example for other projects. Although the cooperation was specified rather broadly in the call, the PPUČ project team did very well. Face-to-face cooperation was the cornerstone, supported by the positive effects of the merger between the NIE and NIFE (NÚV, NIDV) later. By merging these two institutions, the SRP and SYPO projects became "internal", which also improved the cooperation. The newly established organisation - NPI ČR (National Pedagogical Institute of the Czech Republic) stabilized its operations during the monitored period, which promoted cooperation and communication between projects.

The most intensive cooperation is still being seen with the SYPO project. It is ongoing cooperation, carried out between methodological rooms (e.g., national mathematics rooms) and the KIM network (network of regional ICT methodologists). An example of cooperation is the presentation of the PPUČ project outputs in the field of literacy to the above-stated rooms. There is intensive cooperation with the APIV B and SRP projects as well. The PPUČ and APIV B projects cooperated particularly in the form of mutual participation in expert panels within the cooperation between both projects, sharing good practice (e.g., webinar preparation, creation and implementation), meetings of project workers to share information about the current progress of the projects, and joint meetings of the MŠMT and IPs. As to the SRP project, the cooperation consists in participating in educational events for the IPo MAP beneficiaries, expert panels and transfer of information.

As for the other individual systemic projects, the cooperation primarily consists in participating in expert panels or ad-hoc meetings focused on common relevant topics, which recently involves support for schools in remote teaching, for example. The cooperation is proceeding similarly as in previous IRs, i.e., primarily coordination of the objectives and project outputs, setting and implementation of the activities and mutual sharing of information. Cooperation between the projects was affected by the existing epidemiological situation (COVID-19) which prevented the implementation of some offline events, but encouraged cooperation with other projects. The cooperation consisted in using PPUČ project materials focused on digital literacy and materials published on the Methodology Portal of RVP.CZ.

The interviews identified one recommendation for cooperation between the NPI ČR projects - to better set up cooperation between the projects in the future so that they can better complement each other and build on each other, also in the process of preparing applications to allow the activities to link to each other as much as possible.

Unintended impacts of the project

The last topic dealt with in this Interim Report was the unintended impacts of the project. Two unintended impacts were identified in PR 4 in the group interview with the Beneficiary. In the first place, the links between teachers and other stakeholders of the project at the final conference held on 17.–18.8.2021 were strengthened in the accompanying programme ("well-being teachers"). Secondly, the information systems were interconnected via the SRP project output - fulfilment of the knowledge database HLEDEJ.NPI.CZ. One unintended impact arose in the interview with an MŠMT representative – the creation of a community of schools – pilot schools, where cooperation is expected to continue. A further implemented survey (CAWI – participants of communities, participants of expert panels and summer school, users of the RVP.CZ Methodology Portal) showed the following findings. The project focus and its overall grasp was assessed by respondents as very useful, however, it poses considerable time requirements to study all outputs, integration in project activities and partially also administrative tasks associated with involvement. They also positively evaluated meeting experts in practice who took part in many project activities in regions. The professional erudition and human approach of individual staff members of NPI ČR (Beneficiary) were very positively rated, which

significantly increased the involvement of individual target groups in the project and interest in literacy generally. Finally, respondents mentioned recognition of the necessary FEPW in digital literacy.

2 Introduction and report context

2.1 Purpose of report

The objective of the evaluation is ongoing monitoring and evaluation of the project implementation, including fulfilment of the identified objectives and evaluation of how the progress of the implementation conforms to the initiation identified in the project application

2.2 Objectives and focus of PPUČ project

The objectives of "Supporting teaching in practice" (PPUČ) is to support education worker competences in developing reading, mathematical and digital pre/literacy (basic literacies) in preschool and elementary school education. The project aims to enforce the development of basic literacy in all education fields of the curriculum at both nursery and elementary schools and helps increase the quality of schooling for each educated child. This can be achieved by systematic methodological and technological support of teachers in their preparation, teaching and feedback.

The project is implemented through six key activities, where actual activities focused on changing the current status of introducing literacy into education are KA 4–6. KA 2 links to them with the objective to interconnect the outputs of the PPUČ with other OP RDE projects and predict possible cooperation and exchange of experience in contact with target groups, to prevent any overloading of the target group (particularly pedagogical workers). Project management is conducted under KA 1, evaluation is carried out under KA 3.

3 Summary of evaluation procedure since last report and description of future processes

3.1 Focus of evaluation activities

The evaluation is based on the evaluation matrix described in the Inception report. The Inception report focused on detailed planning of individual evaluation questions, primarily for Interim report 1 and Interim report 2 ("IR"), i.e., evaluation activities in 2019. Evaluation activities for 2020 and the following years were planned in consideration of the development of the project implementation and in connection with the resolution of evaluation questions in IR 1 and IR 2.

The outcomes and conclusions included in this Interim Report are primarily based on analyses of the opinions and attitudes of Key Activity Managers and target groups listed in chapter 4.2 Field research.

3.2 Field research

The scope of the research respects the requirements identified in the tender documentation. The provided solution is based on the plan of activities defined in the Inception Report and also takes into account the current state of the project implementation. The scope and the methods of the conducted research have been regularly consulted and agreed on by the Contracting authority.

Under IR 1, when it was still impossible to evaluate the benefits and impacts of the project, the teams instead focused on evaluation of the process questions related to the progress of the project implementation, its direction toward fulfilment of the objectives and expectations of the key stakeholders. Under IR 2, IR 3 and IR 4, the team analysed the fulfilments of the recorded expectations and their comparison between the monitored periods. The objective of the field research was to interview the relevant stakeholders involved in the implementation of the project activities and stakeholders with competences and knowledge to formulate expectations and their fulfilment in relation to project activities.

The following field research was conducted in the monitored periods:

Method	Respondent	Number	Date
Group interview	Senior project managers and KA managers, Internal evaluator	1	15.09.2021
Individual interviews	Project administrator OP RDE ² Relevant guarantor Representative of relevant responsible department of the MŠMT		4.10.2021 4.10.2021 4.10.2021
Individual telephone interviews	Senior Project Manager of the SYPO project and APIV B	2	1.9. – 4.10.2021

Table 1 Summary of conducted research

² The methodology of the interview with the project administrator was changed upon the request of the Contracting authority – instead of structured interviews, the information was established via email correspondence, where a scenario with defined questions was sent.

Method	ethod Respondent r		Date
Participant observation	Participation in the final conference of the project ³	1	17.–18.8.2021
CAWI	Participants of communities of practice, Summer school, mini- conference expert panels, final conference and users of the Methodology Portal RVP.CZ	respondents addressed	3.9.2021 – 8.10.2021
Individual telephone interviews	9 involved schools	3 interviews at 6 schools, 2 interviews at 3 schools 4	
Individual telephone interviews	Representatives of educational, research and consulting organisations;	3 persons in	1.9. – 14.10.2021
Individual telephone interviews	Community of experts	4 persons in total	
Individual telephone interviews	dividual telephone Workers popularizing science and		

3.3 Recapitulation of the progress for the following stages

The Final Report should be handed over on 31.3.2022. It will contain an overall synthesis of knowledge established during the implementation of all interim reports. It will also look into how the objectives and goals of the PPUČ project were met.

³ Considering the state of emergency caused by coronavirus (COVID-19), two expert panels (mathematical literacy and digital literacy) were brought forward. The only event held in the spring, as originally scheduled, was the mini-conference of the reading literacy expert panel. It was held as an online videoconference. The participants were divided into 4 groups with approximately 15 members each. Two groups met in the morning and two in the afternoon, with 2 hours devoted for each group.

⁴ The interviews were held at all 9 schools. Only one school refused but it was replaced by another one. An interview with the school director and school coordinator was held at 3 schools, the teachers' representative refused to participate.

⁵ Interviews with 4 persons were scheduled in the action plan. Nonetheless, despite repeated urging, suggestions/comments and contacting substitutes on the part of the evaluator, PPUČ Senior Project Manager and MŠMT, we managed to complete 3 interviews.

⁶ See footnote 6.

4 EQ identification

The objective of the evaluation is regular project monitoring and evaluation of its implementation, fulfilment of its objectives and correspondence with the setting specified in the project application. IR 2 dealt with the questions listed below.

EO C.1 To what extent do the management and implementation of the PPUČ project conform to the project application?

C.1.1: Do the executing of key activities and processing of outputs correspond to the planned timetable and current needs of the project implementation?

C.1.2: To what extent are the objectives of the PPUČ project and changes in the existing situation expected as a consequence to be achieved?

This part of the evaluation aims at verifying the coherence of the project implementation plan with the actual implementation of the individual key activities of the project so far and verifying the coherence with the current needs. The second part of the evaluation deals with fulfilment of the KA objectives.

Individual activities, outputs and objectives were verified from the Implementation reports and their appendices (for this IR, approved ZoR 1 to 18 were available). The state of the implementation process of individual key activities was verified particularly by structured interviews with KA managers and MŠMT representatives as well as the questionnaire research among involved educationalists.

A detailed evaluation of the process and fulfilment of planned activities in individual KAs is provided in Appendix 1 - Technical report. The project schedule does not specify deadlines for subtasks under KA, so the evaluator can only monitor fulfilment of the deadlines for the main outputs, not individual subtasks. The deadlines for main outputs were properly met, in well-grounded cases requests for deadline rescheduling were made (Request for change).

The following facts were identified from the interviews with MŠMT representatives:

- By implementing the PPUČ project, MŠMT obtained a comprehensive view of the impact of the literacy concept on formulating the expected learning outcomes and processes of planning and implementing teaching in schools. It should be noted, though, that the project involved a limited number of schools (pilot schools). Now care must be taken to ensure that MŠMT studies the project outputs and addresses the general public under the RVP revision and specific individuals involved in the PPUČ project can be invited to participate in the work groups (to create the RVP).
- The project outputs can definitely be applicable for MŠMT in developing other literacies such as one of the sources for the MŠMT Expert panel. The outputs related to literacies will be used for RVP revision. It is one of the key issues dealt with by MŠMT. The objective of MŠMT is to incorporate literacy as part of the competence model.
- Under the PPUČ project implementation, MŠMT obtained a "rating" system for the quality of
 educational materials (i.e., the reputation system on the existing Methodology Portal RVP.CZ)
 with which MŠMT plans to work further in the future. The precondition for its quality
 functioning is that educational materials will be regularly evaluated by the panel of experts
 and good-quality materials are uploaded.
- PPUČ project implementation provided to MŠMT a support instrument for interconnection with the teacher carrier system (Teacher Profile 21 on the Methodology Portal). However, the

MŠMT representative believes that such a product might be better used by the NPI. The limit to its use is that most teachers do not see self-education as an integral part of their work. Teachers should have some positive motivation to wish to learn.

- MŠMT has a system available to support networking of those interested in individual topics and sharing examples of good practice (following on from the innovation of selected modules on the Methodology Portal RVP.CZ), provided its operation is maintained even after termination of the PPUČ project implementation.
- In terms of reflection of expert knowledge concerning the growth in quality of initial education, the situation is as follows. The supporting materials and outputs from the conference were handed over to the Management body with the Implementation report. The provided underlying documentation shows that the PPUČ project contributed to the growth in quality of initial education by implementing its activities, which was one of the main project objectives. Expert knowledge and observations on the growth in quality of initial education gathered under the project are also submitted by way of the Steering committee to MŠMT Department II (Department of Education and Youth) as the underlying documentation for management of the education policy in regional education. Representatives of MŠMT Department II attended the conference and can directly reflect on the expert observations concerning the growth in quality of initial education.
- MŠMT representatives did not participate in regional events of the PPUČ project where summaries of project activities in specific regions in the field of teaching basic literacies were presented. Outputs from all events are always incorporated into implementation reports so the Management body can be made acquainted with them. Some events implemented online are also recorded by the Beneficiary on the project's YouTube channel, where the members of the Management body can watch them.
- Overview studies have not been used by MŠMT yet⁷, they are planning to use them in the future.⁸

Under this evaluation task, the process tracing method was also carried out (see EQ C.5).

The following facts were established in the implemented questionnaire research among educationalists. Stakeholders of the communities of practice think that the communities of practice as well as summer school meet the objective to encourage shared understanding by teachers and the expert public on what the quality of education in developing mathematical, reading and digital literacy in practice at nursery and elementary schools is (see Chart 1). Chart 8 shows the very positive assessment of respondents from both pilot and non-pilot schools. Stakeholders most frequently rated their expectations with a 1 or 2, i.e., they completely meet the project objectives or they nearly meet the project objectives in Round 1 of the research. They also positively evaluated the events under round 2 of the research where they were rated together –the communities of practice and the summer school. Their responses show that the events are useful for the stakeholders and meet the objective of the project. This is in accordance with the responses to the question of what changes to the joint

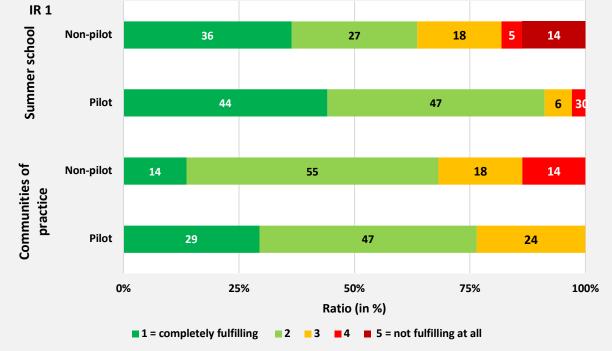
⁷ The Overview study with recommendations (examples of specific measures for schools on how to develop mathematical, reading and digital literacy in schools in practice) and the Overview study with references and examples of good practice (part of examples of good practice from the Czech Republic and abroad – research of literature)

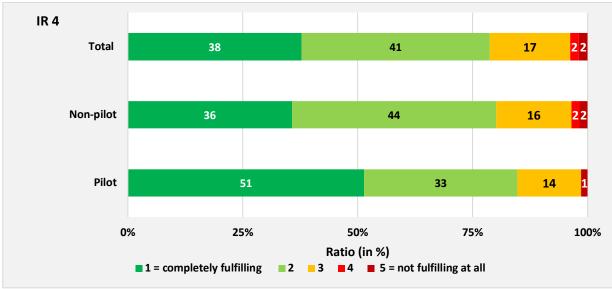
⁸ The respondent could not answer the questions concerning the specific use of the overview studies because he was newly appointed to the position.

events they would propose to achieve greater effectiveness of the knowledge transfer. The most frequent answers were they have no proposals or no changes are necessary (Chart 8). Where a proposal was given in Round 1 of the research, it suggested increasing practice and decreasing theory at the events. Some respondents would welcome recorded sessions on the project website, and better availability of the events. Round 2 of the research showed more proposals for raising greater awareness of the project, organising more events directly at schools and implementing events (offline and online) at weekends or in the morning. There was also a proposal to organise a greater number of peer-to-peer meetings held more frequently.

The results of research were compared with the internal sources of the implementation team (a presentation evaluating the communities of practice) and expert opinions from the internal opponent panel (https://gramotnosti.pro/posudky). The implementation team had to cope with the current situation and react by changing the form and targeting of the events, they had to respond to restrictions during the pandemics.







Note: Question: 2019: How do the communities of practice meet the objective to support shared understanding of teachers and the professional public concerning the quality of education in the development of mathematical, reading and digital literacy in teaching? (rate on a scale of 1-5, where 1 = fully meet, 5 = do not meet at all). 2021: How did the events carried out under the PPUČ project meet the objective to promote shared understanding of teachers and the professional public concerning the quality of education in the development of mathematical, reading and digital literacy in teaching? (rate on a scale of 1-5, where 1 = fully meet, 5 = do not meet at all). 2021: How did the events carried out under the PPUČ project meet the objective to promote shared understanding of teachers and the professional public concerning the quality of education in the development of mathematical, reading and digital literacy in teaching? (rate on a scale of 1-5, where 1 = fully meet, 5 = do not meet at all). In 2019, the events were divided according to the type of offline event, in 2021, all events in total were offline.

Source: Own calculation based on the questionnaire research conducted in 2019 and 2021. Number of respondents in 2019: total = 56, Npilot = 34, Nnon-pilot = 22. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 192.

Evaluation conclusion

The detailed analysis of the progress of individual project activities and qualitative research (individual/group interviews) with the Beneficiary and MŠMT representatives shows that the project activities proceed in the anticipated scope and according to the original schedule.

According to the results of the analysis (interim) outputs and progress of the implemented project activities, the project implementation proceeds according to the schedule. Based on the detailed analysis of the implemented project activities as seen in the implementation reports and qualitative research data with stakeholders involved in the project, the evaluator finds the progress of the project and current outputs to respond to the current needs of the project and achievement of its objectives. The project implementation team identifies potential risks to the project and responds to them with corresponding measures. Neither the information available about the project's activities nor the information provided by the involved stakeholders indicates that the conditions to ensure successful implementation of the project are not being fulfilled.

Participants of communities of practice (teachers from both pilot and non-pilot schools) think that communities of practice and the summer school meet the objective to promote shared understanding of teachers and the professional public considering the quality of education in the development of mathematical, reading and digital literacy in teaching at nursery and elementary schools.

EQ C.1 To what extent do the management and implementation of the PPUČ project conform to the project application?

C.1.3: Are there any risks which pose a threat to the project implementation and the achievement of objectives?

C.1.11: Where does the implementation team see the greatest barriers to successful implementation within the project?

Under the evaluation, questions C.1.3 and C.1.11 were jointly addressed considering the logical links between them and the possibility to minimize unnecessary steps. Addressing both EQs jointly is based on the idea that risks to the project implementation can be perceived as potential barriers at the same time.

Under IR 2 and IR 3, risks and barriers were identified only from the Beneficiary and MŠMT representatives. Information established in the interviews is listed below.

Risks

Risks to the project were already defined in the Project Charter. In the introductory phase of the projects, the Risk management strategy was developed with the Risk catalogue, which is regularly updated (on a monthly basis).

• Beneficiary

As opposed to the findings from IR 3, the Beneficiary no longer perceives **the merger between NIDV and NÚV as a risk**. Since autumn 2020, the system of work of the newly established organisation has stabilized after the new director was appointed. The general mindset of the organisation has changed under his management.

As can be observed under IR 3, a new risk emerged due to the **existing epidemiological situation** (COVID-19) and related measures. The Beneficiary has learned to respond adequately to the unexpected risk and the newly obtained skill was used under IR 4. Some offline events (e.g., final conferences) had to be postponed due to the epidemiological situation, and some had to be changed from offline to online form. The risk had no impact on the project implementation.

Respondents also identified a risk of **the weakened implementation team in the last phase of the implementation**. Since the project was terminated on 30.11.2021, there is a growing number of implementation team members who restrict their involvement in the project, they transfer from the role of internal staff members to the role of external workers or completely end work with the team. Selected PPUČ staff obtained work opportunities outside NPI ČR and started collaboration with schools and other entities at the beginning of the 2021/2022 school year. The situation stabilised, the selected leaving staff members were covered for by peers who remained in the team and were ready to take over the agenda. The identified issue had no influence on the completion of obligatory project outputs and the implementation of key activities. The evaluator formulated recommendations based on the risk (see Chapter 6).

No obligatory sustainability has been determined for the PPUČ project. Nevertheless, the following requests were identified under the approval of the Project Charter concerning the project sustainability as a system project: "The Project implementer shall maintain services and outputs of the project on the Methodology Portal RVP.CZ even after termination of the activities for a period of 5 years after termination of the project implementation, i.e. until 2026." The evaluator formulated recommendations based on the risk (see Chapter 6).

• MŠMT representatives

As followed from the interviews carried out with MŠMT representatives, another identified risk was a lack of interest from teachers in using the self-evaluation Profil Učitel21 instrument or insufficient interest in the gramotnosti.pro campaign.

Some MŠMT representatives perceived a risk of **personnel setting of the project** (see the risk stated above, "weakening of the implementation team in the last phase of implementation"). Another risk mentioned was the epidemiological situation and the PPUČ project schedule and RVP revision not aligned together.

Generally, MŠMT representatives evaluate the risks as minor, and the Beneficiary identifies and eliminates them in time (among others, at steering committee meetings). An overview of measures taken by the Beneficiary is shown in greater detail in EQ C.1.6, C.1.7 and C.1.8.

• Other respondents

Representatives of the "professional public" target group⁹ proposed changes to the total setting of the project or changes under the implementation of individual events, not the risks or barriers to the project. A risk related to the **existing epidemiological situation** (COVID-19) was mentioned in one response, which also evaluated the ability of the project to respond to it and proceed with the implementation and achievement of its objectives.

Barriers

As to the barriers perceived in this evaluation report as obstacles which occurred during the implementation of the project, both the Beneficiary and MŠMT representatives identified the barrier of administrative burden and lack of interest from teachers (especially in the field of self-development). Generally, no barriers have been identified which would prevent successful implementation of the project. As can be observed, the Beneficiary managed to adequately overcome all barriers in the past (such as the barrier identified in the previous monitored period related to the merger of NÚV and NIDV, after which some members of the project team left) and they had no negative impact on the project implementation.

Evaluation conclusion

According to the evaluator, the established risks do not jeopardize the project implementation or achievement of its objectives. Similarly, no material barriers to implementing the project have been identified. As can be observed from the available findings of the qualitative research and information collected about the project implementation process, the implementing team took adequate action to overcome current barriers and risks which have emerged in the implementation and none of the barriers identified so far should negatively impact the implementation or delivery of the planned outputs and project objectives.

Detailed information is provided in the Appendix to IR II.

EQ C.1 To what extent do the management and implementation of the PPUČ project conform to the project application?

C.1.4: Does the progress of activity KA3 Evaluation conform to good evaluation practice?

The Quality management strategy and Project Benefits Measurement Plan were developed in the initial stage of the project for KA Evaluation. Internal evaluation of the project is carried out based on

⁹ CS: Professional public, persons popularizing science and curriculum reform, persons working in educational, research and consulting organisations

these developed documents. Within KA Evaluation, Evaluation reports are created on a yearly basis. The evaluation reports are prepared by the whole project team.

As part of this KA, an obligatory internal opponent panel was established (consisting of 4 members¹⁰) which conducts evaluation visits to pilot schools. The visits consist in discussing recommendations for products of the project, providing systemic recommendations, etc. and evaluating the support from the perspective of the PPUČ project. A joint meeting is held every six months where main recommendations are formulated and members of the internal opponent team process expert opinions on key project outputs.

The expert opinions primarily comprise basic assessment of the product and detailed written comments on the benefits of the product for the target groups, followed by literature research and individual conclusions. The expert opinion is followed by a short public review and final recommendations for handover of the product to the Management body of the OP RDE.

The opponent panel met in the monitored period as well, and the following products were discussed in the meeting: materials for literacy in the fields (publications created by the project with the ideas for basic literacy activities in individual levels of education, Guidebook for innovation of ŠVP at elementary schools with instructions for good practice in working with literacy in the school, study of literacy (an overview study with recommendations). Ideas for the direction of education modules were also discussed as well as the final deadlines of meetings of expert panel mini-conferences.

As can be generally observed in the monitored period, all opponent expert opinions for all the assessed products of the project were positive. This does not mean that all the products are flawless. Opponents note and recommend correcting formal, grammatical and material errors, but most importantly focusing on the products. Here are some examples of the received comments: focus of some products on all target groups (e.g., failure to distinguish nursery and elementary schools on the "Profil Učitel21" profile), unification of terminology, clarification of methodological outcomes or providing for availability of the products even after termination of the PPUČ project. The Beneficiary makes corrections based on the comments from the opponents.

The PPUČ project team stated that evaluation activities are similar to those under the three IRs (IR 1, IR 2, IR 3). They were newly extended for expert opinions for specific products which were not carried out in the first two years of the project. As an example, a reflection of communities of practice¹¹ has been developed, as well as reflection with pilot schools. Last but not least, the Beneficiary continues to develop the self-evaluation report. The conclusions were presented at the Management body. The internal evaluator held individual meetings with KA members and teams in online focus groups to develop the report. The groups reflected on the following ideas: risk management; opportunities; current measures.

The Beneficiary continuously creates and develops evaluation questionnaires which provide feedback to the project team and the possibility to make changes to the process and project outputs. The answers supply information about weak points of the outputs/activities and the team can seek how to resolve them. The Beneficiary also works with the team of guarantors, who help find problems and propose their resolution. The Beneficiary adequately requests feedback from the target groups and makes adjustments to its activities and outputs accordingly.

In the evaluated period of IR 3, the project team was extended by an internal evaluator – the job was performed by 2 part-time staff members. The evaluator thinks that the measure had a positive influence on the project. Internal evaluators help activity managers and task leaders by consulting with them the right form and content of the questions for the target group and its monitoring. In the

¹⁰ The internal opponent panel was extended by 1 more member under the project by way of the Change management.

¹¹ Each meeting of the communities of practice (held 2x a year) is followed by reflection, modifications to the tailor-made "product" and new instructions given to the team as to what measures are to be taken.

evaluated period of IR 4, one of the two part-time workers terminated his employment (for personal reasons). This situation had no negative impact on the project implementation.

The implementer monitors the use and impacts of all its products (e.g. analytics and behaviour of users for the website, for online/offline events it is the participants' feedback, meetings of the implementation team to reflect on the activities with the target group).

Conclusions and evaluation

The evaluation practice of the Beneficiary was verified via studying materials about evaluation progress, outputs of evaluation and structured interviews with the Beneficiary and MŠMT representatives. Based on the above-stated, internal evaluation is thought to be corresponding and conveniently linked to the implemented project activities. Internal evaluation is conveniently integrated into project activities and its outputs are used and reflected in the consequential project implementation.

EQ C.1 To what extent do the management and implementation of the PPUČ project conform to the project application?

C.1.5: How beneficial is methodological support, provided at all levels for education workers and management of supported schools?

C.1.10: To what extent is the experience transferred to other stakeholders/schools, for example, via regional centres for support of literacy and on-line methodological support?

This EQ was evaluated based on telephone interviews with a selected sample from nine schools involved in the project (3 interviews at each school – with the school director, coordinator and education worker). The evaluation linked to the developed case studies from IR 1 and similar telephone interviews conducted under the development of IR 2 and IR 3. The objective of the interviews was to collect information on how successful schools are in developing basic literacy in teaching as compared to the previous research. Interviews were aimed at identifying any changes to the perception of project outputs and the involvement of the schools in the project implementation.

This EQ was further evaluated upon the questionnaire research among participants of communities of practice, Summer school, expert panel mini-conferences, the final conference and users of the Methodology Portal RVP.CZ.

Controlled telephone interviews with selected target groups

The research used computer-assisted telephone interviewing (CATI) with representatives of the professional public (4 persons in total), educational, research and consulting organisations (3 persons) and representatives of workers popularizing science and curriculum reform (3 persons) to establish to what extent key stakeholders consider outputs/activities in the project beneficial/well applicable and why. It looked into the perceived benefits and applicability of the main outputs and activities of the PPUČ project by the representatives of future main users of the outputs and recommendations for improvement of the applicability and benefits of project outputs and activities for target users were defined.

Respondents were asked according to a scenario which contained 11 questions. The questions were open-ended, semi-open and closed.

Benefits of methodological support

The interviewed representatives of the "professional public" evaluated the individual PPUČ project outputs. They find the following project outputs most useful in terms of obtaining methodical support: sets of expected learning outcomes (OVU), online educational exercises on RVP.CZ, publications

with activities for the 1st to 5th years and 6th to 9th years of elementary schools and pre-school education, translation of the European Framework for the Digital Competences of Educators DIGCOMPEDU and five-minute videos from the YouTube channel Gramotnosti.pro. Expert panel mini-conferences, communities of practice and the final conference are very positively rated as well.

Transfer of experience

The representatives of the "professional public" pointed out it is important to bring the information to other schools to transfer the experience in introducing basic literacy to other stakeholders. They also mentioned the possibility to avail other projects of NPI (e.g., SYPO) which might help disseminate PPUČ project outputs after its termination. They noted the need to maintain the partnerships and communities established under the project because they represent an appropriate communication instrument between people and organisations in education.

Transfer of experience is also recommended as a basic attribute in introducing any follow-up projects.

Case studies

This EQ was evaluated based on telephone interviews with a selected sample from nine schools involved in the project. The evaluation linked to the telephone interviews carried out in the previous interim reports. The objective of the interviews was to collect information on how successful schools are in developing basic literacy in teaching compared to the previous research. Interviews were aimed at identifying any changes to the perception of project outputs and involvement of the schools in the project implementation.

Benefits of methodological support

The interviewed schools frequently use the PPUČ project activities for methodical support in introducing literacy into education. The PPUČ project team and its regional literacy coordinators were very positively evaluated as the most remarkable source of inspiration and methodical support, followed by the summer school and workshops focusing on literacy implemented by the PPUČ project. Methodical support was always provided to a selected staff member/school workers in this way, who then transferred the information to other peers at their schools. Most frequently, representatives of the interviewed schools (i.e., directors, coordinators, education workers) obtain methodological support for introducing literacy into education from their peers teaching the same subject at the specific level of education, school management and school coordinators.

As the survey showed, respondents introduce obtained experience in teaching, especially in the field of reading and digital literacy. Focus on digital literacy was also mentioned by the schools because it was necessary due to the epidemiological situation and because the corresponding technical equipment was provided to schools.

Transfer of experience

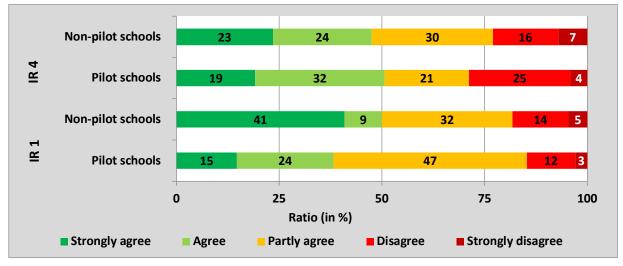
The research confirmed that schools exchange information obtained under the PPUČ project with other stakeholders when it comes to provision / transfer of experience in introducing basic literacy in teaching, either among the faculty of teachers at nursery/elementary schools or at nursery and elementary schools (provided it is one entity). Half of them transfer experience in their school but also to twin-schools in the surroundings/region/MAP. Transfer for experience proceeds in all three types of literacy, most frequently, however, digital literacy, which might be the effect of the current epidemiological situation.

The questionnaire research confirmed the results from previous interviews, both at the level of the transfer of experience and its focus on all literacy with the emphasis on digital literacy.

Questionnaire research

Stakeholders mostly expect to share experience, get inspiration and deepen their knowledge, i.e. selfdevelopment, at joint meetings of nursery/elementary school teachers and the expert public. Respondents would like to obtain specific inspiration in how to introduce literacy in teaching at such meetings. They also find meetings with teachers from other schools beneficial. These expectations were identified in the first wave of the research (IR 1) – carried out in the 2018/2019 school year as well as in Round 2 of the research (IR 4) - the 2020/2021 school year. The vast majority of respondents had no ideas concerning the joint offline events to increase their efficiency. Where a proposal was given, it suggested increasing practice and decreasing theory at the events. Some respondents would welcome the sessions being recorded on the project website, and better availability of the events. Proposals for improvements were identical in both rounds of the research. Respondents were asked whether they use the option to share good practice within the on-line activities (Methodology Portal RVP.CZ). Chart 2 shows the evident contrast in responses from respondents from pilot and non-pilot schools and the comparison between Round 1 and Round 2 of the research. Particularly pilot schools show a higher number of respondents who definitely use or rather use the opportunity to share good practice under on-line activities. This TG shows a reduction in partial use (from 47 % to 21 %) on the other hand. Non-pilot schools show a decline in the rate of "strongly agree" (from 41 % to 23 %) but an increase in the rate of "agree" (from 9 % to 24 %). Generally, the sum of "strongly agree" and "agree" answers shows no changes in both rounds of the research in the category of non-pilot schools (50 % in IR 1, 47 % in IR 4).

As can be observed, the rate of use of the opportunity to share good practice under on-line activities is relatively high in general, both in pilot and non-pilot schools¹². There was no significant increase in sharing by way of on-line activities in 2019 and 2021. Peer-to-peer sharing still seems to be strongly preferred.





¹² To compare the results of the research carried out under IR 1 and IR 4, we should take into consideration the broader group of respondents. Under IR 4, the number was extended by additional participants of the final conference, the summer school, expert panels and users of the Methodology Portal RVP.CZ.

Note: Question: Do you use the opportunity to share good practice under on-line activities (Methodology Portal RVP.CZ)? Source: Own calculation based on the questionnaire research conducted in 2019 and 2021. Number of respondents in 2019: total = 62, Npilot = 34, Nnon-pilot = 28. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (86 respondents in total stated that they do not know whether their school was involved in the project).

More than 45 % of respondents from pilot and non-pilot schools stated that they definitely disseminate the information and good practice obtained at joint offline events to other stakeholders (Chart 3) in Round 1 of the research. More than a third of respondents from both categories stated that they rather disseminate the information and good practice. Only a small percentage of respondents stated they do not disseminate good practice (sum of "disagree" and "strongly disagree" - 9 % from non-pilot schools and 3 % from pilot schools). Those who do not disseminate the information said the reason was they were busy or had participated in only one joint event. This shows that there are other objective reasons for not disseminating the information rather than inadequate quality of the information obtained (such as lack of time). Similar results were established under Round 2 of the research for IR 4. Differences in represented individual responses are shown in percentage points. Generally, there is an apparent high rate of dissemination of information and good practice from joint events to other stakeholders on a long-term basis. This proves the high level of the information obtained, participants consider it adequate to share it with their peers or other persons, as well as the high quality of the implemented offline events.

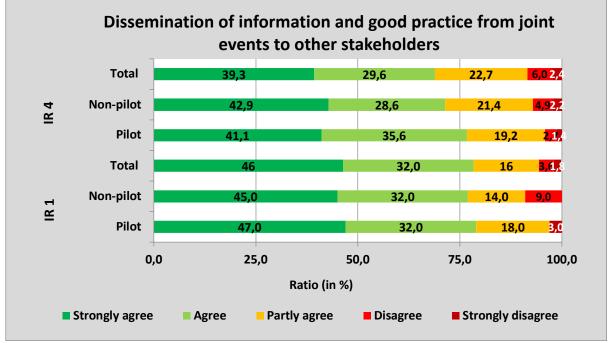


Chart 3 Dissemination of information and good practice from joint offline events to other stakeholders, categories according to respondents from pilot and non-pilot schools (response rate in %)

Note: Question: Do you personally disseminate information and good practice from joint events to other stakeholders (e.g., by writing a public online contribution, personal interviews with teachers at NS/ES and other interested parties)? Source: Own calculation based on the questionnaire research conducted in 2019 and 2021. Number of respondents in 2019: total = 56, Npilot = 34, Nnon-pilot = 22. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total 86 respondents stated that they do not know whether their school was involved in the project).

Minutes and evaluation of the foregoing surveys are shown in the Appendix to this IR No. 2.

Conclusions and evaluation

The conducted survey showed that respondents obtain information by attending expert panels or communities of practice or from the Methodology Portal. Respondents also stated that they share the obtained experience with their peers (in meetings also in an informal way) and with cooperating schools. The observation from Round 1 of the research is the same as that from Round 2.

EQ C.1 To what extent do the management and implementation of the PPUČ project conform to the project application?

C.1.6: Is the Reputation System used by the target groups according to the project plan?

C.1.7: Is the Profil Učitel21 profile used by the target groups according to the project plan?

C.1.8: Are education modules for basic literacy being used by the target groups according to the project plan?

The outputs from the Reputation system project (EMA) was put into operation on 1 July 2019 in the final version (pilot operation was launched on 1.12. 2018), the outputs from the Profil Učitel21 project was launched on 1.8.2019 in the pilot version and in regular run from 4Q 2019. Both products are closely linked to the current innovation of user profiles of the Methodology Portal RVP.CZ (launched in autumn 2019) but it was not until 2020 that more extensive dissemination of products proceeded. Accordingly, these instruments were not completely evaluated until under the previous IR (i.e., IR 3).

The Methodology Portal of the RVP.CZ provides teachers with an on-line environment in which they can inspire each other and share experience. Support is offered to teachers in individual modules (material storage site): Articles, DTM (digital teaching materials), Discussions, References, Wiki, Digifolio, AudioVideo, Blogs, E-learning, etc. Some of the modules on the portal are the already above-mentioned: EMA – catalogue of digital education resources; Učitel21 – instrument for teacher self-evaluation using ICT technology.

The rate of visits to more or less all modules increased due to the epidemiological situation (COVID-19) over the specified period (during the period monitored under IR 4). The module Articles has recorded the highest visit rate since the beginning of measurements (see Figure 1). Accordingly, Articles shows an increase in the audience ratings, the Digital teaching materials module shows a declining trend on the other hand. However, there was a greater visit rate in some time periods of the monitored period, influenced by cooperation with UčíTelka. This platform referred to contributions in the DUM module in topical plans of the TV broadcasting.

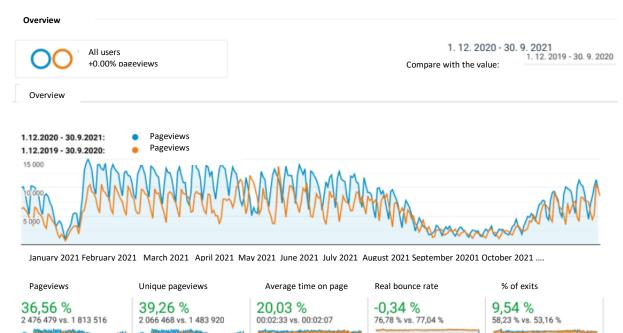


Figure 1 Use of the FEP Articles (Články RVP) module during selected periods

Source: internal data of the PPUČ project, 2019 2020 and 2021

Figure 2 Use of the Digital teaching materials module, for selected periods

Overview				
All users +0.00% page	reviews		1.12. Compare with the	2020 - 30. 9. 2021 1.12. 2019 - 30. 9. 2020 e value:
Overview				
1.12.2020 - 30.9.2021: 1.12.2019 - 30.9.2020: 60 000	 Pageviews Pageviews 			
40 000	M			
WW MAN	VAM MANN	(MAXAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Whan-	www.
January 2021 February 202	21 March 2021 April 2021 M	av 2021 June 2021 July 2021 A	August 2021 September 2020	01 October 2021
Pageviews	Unique pageviews	Average time on page	Real bounce rate	% of exits
-21,07 % 2 573 390 vs. 3 260 507	-18,65 % 1 912 532 vs. 2 350 853	22,13 % 00:01:08 vs. 00:00:56	3,36 % 68,11 % vs. 65,89 %	26,99 % 35,06 % vs. 27,61 %

Source: internal data of the PPUČ project, 2019, 2020 and 2021

PPUČ establishes co-operation with providers of materials for teachers (see EMA.RVP.CZ) a meta search engine for materials. The Beneficiary actively advertised it in the monitored period, there are 37 partners at the moment and other organizations will be contacted after completion of the search of their freely available materials. Supportive activities to disseminate DIGCOMPEDU and the Profil Učitel21 application were organised in cooperation with MŠMT, the landing page of the SELFIE

instrument and Profil Učitel21 was launched. The EMA development strategy led to interconnection of the instrument to the innovated portal, so that each query to RVP.CZ is automatically a query to EMA.

Another activity under KA 6 is the innovation in the Methodology Portal RVP.CZ. New functions for users were launched on the Methodology Portal RVP.CZ, which extended the portal modules with new options for working with the content (a new personal user page). In June 2021, the literacy education modules product was finalised. The launch followed after a pilot study for education modules with teachers from pilot schools of the project. They evaluated the education modules as comprehensible, attractive and useful. They also made some points on how to refine and improve it (both graphic and visual, as well as adding more specific examples). The portal innovation was finally completed in September 2021. Now, the EMA catalogue is a synergic part of the Methodology Portal RVP.CZ.

Figure 3 shows the statistics of visit rate to the EMA Reputation system in individual periods. The use of the reputation system grew particularly in the early spring of 2020, which was presumably related to the epidemiological situation (COVID-19) where many teachers were looking for supporting materials for remote teaching. A decline in interest is recorded afterwards, to which the Beneficiary responded by introducing several measures to increase the visit rate and effectiveness of the EMA instrument. They comprise the following measures and specify the manner of their fulfilment:

- Completion of innovations of the portal and linking of the services to the user's personal profile, which increases the number of materials in EMA.
 Innovations were not finished until in September 2021. Their impact will be evaluated now.
- Implementation of a targeted campaign to "reputators", i.e., attracting part of the educationalist community to actively upload materials to EMA and evaluate them. To develop the literacy practice, a search of literature is carried out on a continuous basis, appropriate materials are uploaded to EMA or negotiations are held with providers/authors of the specific materials.

The impact of the measures has not been reflected in the instrument statistics.

3. Involvement of more sources for negotiations of EMA partners.

There are 37 partners connected at the moment and another 20 organisations are on the waiting list to be addressed once the search of their freely available materials has been finished. The information systems have been interconnected with the SRP project (HLEDEJ.NPI.CZ).

Uploading of individual DVZ by users was monitored and new partners continued connecting. The system is available to all who are interested, it is gradually connecting to other storage of open education resources for teachers.

As to the EMA instrument, the Beneficiary wants to link the solutions to the current promotion campaign running on http://inovujeme.rvp.cz/ and social networks https://www.facebook.com/metodicky.portal. We should also note the intervention of the OP RDE in the call Digital education strategy implementation II, which involves 17 running projects focused on the popularization and dissemination of DIgCompEdu, available on the Učitel21 profile. Since using the Učitel21 profile is not an obligatory parameter in these projects, the foreseen synergy might not happen, as reflected by a website of one of the projects¹³ linking to the PPUČ outputs and referring to it. However, the Učitel profile is not promoted there.

Evaluation of EMA instrument in terms of fulfilment of objectives

An evaluation of the EMA instrument in terms of how the objectives of the specific instruments have been fulfilled is provided below. The evaluation was carried out upon information collected from the

¹³ http://digitalnikompetence.cz/

survey conducted for this Interim Report. Accordingly, the evaluator finds the objectives partly met. The inputs and action taken by the Beneficiary within the implementation of the EMA instrument were found as fulfilling the purpose.

EMA is a catalogue of digital educational resources. Its greatest advantage is that one site provides a database of references to digital educational resources with an open licence, otherwise saved on several different portals or websites. The second advantage of the catalogue is that users can upload evaluation of the materials, which are then ordered according to their popularity and quality, which allows easier orientation when searching for the right resources for teaching.

As to the operation of the EMA system, it should be noted that the work was officially completed by 1 July 2019. A greater promotional campaign of the system was conducted together with the launch of the new User profile, which did not take place until autumn 2020. The total statistics started in 2018 with beta testing of the system.

The visit rate of the EMA instrument is relatively low in terms of the number of visits so far. Nonetheless, it is a relatively new instrument and steps should be taken to publicize it so that educators use it as much as possible and individual uploading by educators or other entities increases. Measures taken to increase the visit rate are described above with their evaluation. Further development of the instrument and its use is not a deliverable of the PPUČ project (with respect to the deadline of project termination). It is the responsibility of MŠMT, or rather NPI ČR, and is related to maintaining the sustainability of the outputs of the PPUČ project. It should also be noted that the campaign for collecting feedback from users on DVZ (digital educational resources) has never been part of the time schedule and PPUČ plans.

It should also be noted that the success cannot be generally measured only according to the continuous growth of users and visits with this type of instrument. This is because EMA is used as an ad hoc instrument for introducing new sources and if teachers find a connected storage, they directly enter it in their next visit. There is no reason to path via the metasystem (EMU). They can return mostly when a reputation or an opinion about the specific material is being uploaded (it needs time, courage, energy, which are the most valuable commodities for teachers), or when a different source of information is being searched. Reputation for each material is generated by entries of users and technical evaluation of statistical data about the specific material (how many times it was downloaded, viewed, etc.). In the evaluation period, the average broadcast duration decreased from approx. 4.2 minutes in 2019 to approx. 3.4 minutes, however, this is approx. 0.2 min. more than in 2020. This time period was 3.4 min. over the whole period of functioning of the EMA Reputation system. (Figure 3). Pageviews in the evaluation period (2021) were 34 % of the total number of viewed EMA pages (approx. 55 thou. out of 160 thou.). The number of viewed pages (converted to the whole calendar year) is comparable to 2020, the previous evaluation period. The bounce rate has grown (by 10 %) though.

The pie chart in Figure 3 shows the distribution of activity among new visitors and returning visitors (new visitor) and returning visitors (returning visitor). Of the total number of visits to the EMA website in 2021 (11.5 thou. visits) activities of new users (6.7 thou. visits) prevailed. There is also a trend of a growing number of returning visitors (2.4 %), which is positively appreciated in terms of dissemination of the knowledge of the instrument. As the above-stated shows, this instrument found its target group of users who repeatedly return to visit and use it (returning visitors – see the green section in the pie chart).

The questionnaire research conducted under IR 4 showed that interviewed teachers from non-pilot schools evaluate the benefits of this output as the lowest compared to other activities and outputs of the project (for more, see Table 3). This could reflect their lack of acquaintance with this output.

To complete the context, it should be noted that EMA (Reputation system) was one of the measures under the Strategy for Digital Education (SDV), the acceptance process was attended by MŠMT workers responsible for fulfilment of this strategy. The report on SDV, including the accomplished task to create a reputation system, was submitted to the government of the Czech Republic in spring 2021.

When comparing two time periods of visit rate to the Reputation system, it can be observed that use of the module has not increased, the visit rate has been declining contrariwise. Since September 2021, EMA has been an integral part of the Methodology Portal RVP.CZ home page, which means that a change in behaviour of users is expected, who will obtain information about resources on the whole portal as well as on EMA. PPUČ representatives took part in the innovative hackathon DlgiEduHack in autumn 2021. The event showed that teachers and the professional public need solutions similar to EMA for their work. There are only great demands placed on the user interface and greater community outreach of the applications. EMA is a universal reputation instrument, so obviously, similar solutions will have to be moved to the learning communities of teachers where the evaluation and reputation of sources will take place to encourage the growing support of teachers. The Methodology Portal RVP.CZ offers in this regard an interconnection between EMA and the personal profiles of users with linked collections of materials (see the example on <u>https://gramotnosti.pro/kolekce-predskolni</u>).

The EMA Reputation system was generated under the PPUČ project to respond to the request specified by the Strategy for Digital Education. It was accepted in cooperation with the governing structures bodies of this strategy, and the instrument was also evaluated in a document submitted to the Czech Government. The EMA catalogue as a pilot and innovative project offers an interface for the collection of information on various storages available for teachers. Accordingly, the objective specified by the application for subsidy has been met in this respect. Partners of EMA are difficult to persuade as far as placing promo banners in their systems and promoting the use of EMA for giving feedback (for example, it is not set up in the connection to DB OP RDE and EMA. This is an option for improvement on the part of MŠMT). The project team has integrated EMA into the new landing page of Methodology Portal RVP.CZ, so each search on the portal also proceeds in EMA since September 2021, and the likelihood that visitors will find materials from NPI ČR and other partners is high. There is a research project in NPI ČR with TAČR (MFF UK, FF UK and PedF UK) which links to the experience with user behaviour and their searches and focuses on the creation of an Al assistant for teachers. The assistant will replace looking for sources on the portal with a smart chatbot.

Downloadable materials also contain articles to create a complex set by using attachments or links to DUM (this is how the PPUČ project worked on the creation of a publication with ideas for teaching, published on https://gramotnosti.pro/publikace (article), where a special article was written for each output (https://gramotnosti.pro/publikace-1stupen). The material alone was integrated into the attachment (https://clanky.rvp.cz/wp-content/upload/prilohy/22918/publikace_1_stupen.pdf). The visit rate of articles is higher on a long-term basis since this module contains motivational and promotional texts for innovations in teaching, the complete methodical instructions, which users can read and get motivated to directly use DUM or other reference resources.

MŠMT representatives are convinced that under the PPUČ project implementation, MŠMT have obtained a "rating" system for the quality of educational materials (i.e., the Reputation system on the existing Methodology Portal RVP.CZ) with which MŠMT plans to work further in the future when they learn more about the options of this instrument. The condition of good functionality is that educational materials will be regularly evaluated by the panel of experts and good quality materials are uploaded.

Figure 3 Use of EMA, for the selected periods of EMA operation

EMA – 2019		
All users 100.00% users		1. 1. 2019 - 15. 12. 2019
Overview		
Users		
200		
100	A A A A	he have a harman Monacher has
February March April May	June July August Septe	mber November December 2019
Users New users	Visits	New Visitor Returning Visitor
3 186 3 158	5 373	14,15
No of sessions per user Pageviews	No of pages per session	
1,69 28 438	5,29	825
Average session duration Real bounce	rate	
00:04:18 39,07 %	A	
EMA – 2020 All users 100.00% users		1. 1. 2020 - 15. 12. 2020
Overview		
Users		
500	Λ	
February March April May	June July August Sej	tember November December 2020
Users New users	Visits	New Visitor Returning Visitor
10 247 10 227	14 648	14,4%
No of sessions per user Pageviews	No of pages per session	
1,43 75 388	5,15	
Average session duration Real bounce r	I I	85,0%
00:03:23 37,77 %	adurandia	

Evaluation of individual system projects supported by PO 3 OP RDE-II Part II: Evaluation area C – Evaluation of the project PPUČ

EMA 2021 Přehled publika						
All users 100.00% users						1. 1. 2021 - 30. 9. 2021
Overview						
Users 300						
200	Munh	MM	m	~~~~		
February	March April	May	June	July	August	September 2021
Users	New users	Visits			New Visitor	Returning Visitor
6 843 No of sessions per user	6 746 Pageviews	No of pages p	er session		16,8%	
1,68	54 686	4,77	munnskykellen			63,2%
Average session duration	Real bounce rate					
00:03:42	47,14 %	utru.				

Evaluation of individual system projects supported by PO 3 OP RDE-II Part II: Evaluation area C – Evaluation of the project PPUČ

Přehled publika	duration of operation		
All users 100.00% users			1. 1. 2019 - 30. 9. 202
Overview			
• Users			
1 000			
500			
and the second	L. Marken Market	hundred	man and the man and the second s
	2020		2021
Users	New users	Visits	New Visitor 📕 Returning Visitor
20 288	20 544	32 017	14,4%
No of sessions per user	Pageviews	No of pages per session	
1,58	160 082	5,00	
all		hallotterman	85,6%
Average session duration	Real bounce rate		
00:03:37	41,81 %		
delater management	helpfor the matter and the second sec		

EMA – comparison of two time periods (1.12.2020-30.9.2021 and 1.12.2019-30.9.2020)

Overview		1. 12. 2020 - 30. 9. 2021 1. 12. 2019 - 30. 9. 2020 Compare with the value:		
All users +0.00% pa	geviews			
Overview				
1.12.2020 - 30.9.2021: 1.12.2019 - 30.9.2020:	PageviewsPageviews			
6 000				
4 000				
2 000	mont	Annon	<u></u>	
January 2021 Feb	ruary 2021 March 2021 Apr	il 2021 May 2021 June 2021 Ju	ly 2021 August 2021 Septem	ber 20201 October 2021
Pageviews	Unique pageviews	Average time on page	Real bounce rate	% of exits
-14,62 % 57 064 vs. 66 837	-7,01 % 42 430 vs. 45 628	22,51 % 00:00:59 vs. 00:00:48	25,53 % 47,31 % vs. 37,68 %	9,64 % 21,10 % vs. 19,25 %

Note: Users represent one browser, they are unique and make more visits. User = Users who initiated at least one visit during the specified period. New user = Number of users who visited the site for the first time during the specified period. The real bounce rate = rate of single-page sessions without interaction (downloading a file, posting a form, viewing a video, etc.) in all sessions. The percentage of exits is monitored only on selected pages. The increasing percentage of exits can be perceived positively in this case.

The real bounce rate of a page lower than 10 % means an incorrectly set implementation of measurement. Source: internal data of the PPUČ project, 2019 2020 and 2021

Figure 2 shows the visit rate statistics of the Profil Učitel21 profile for individual periods. The Profil Učitel21 site shows a distinct growth in visit rate in autumn 2020, which might result from promoting EMA and PU21 in the network of MAP projects in collaboration with the SRP project in September 2020. In autumn 2020, obligatory remote learning was introduced as well. There might also be a close link to the running ISDV2 projects (17 projects for compulsory cooperation with DIGCOMPEDU) which were launched and used the instrument at schools in their kick-off. The higher visit rate could also be linked to remote learning at schools due to the epidemiological situation (COVID-19). The considerable growth was maintained during the monitored period of IR 4.

Steps were taken to increase the visit rate and use of the foregoing instruments. It should be noted that DIGCOMPEDU and PU21 were approved at the meeting of the MŠMT management as a recommended framework of IT skills for Czech education. A presentation was organised for faculties of education in collaboration with the National Accreditation Bureau for Higher Education (NAÚ). In 2021, the Beneficiary prepared the following steps which have been fulfilled:

- Modification of the skola21.rvp.cz website as well as any other inputs to the instrument (start cooperation with edu.cz and other portals). The Beneficiary started collaboration with other projects and interconnected the information systems (HLEDEJ.NPI.CZ) with the SRP project.
- 2. Greater focus on motivation articles concerning individual parts outside the scope of competences.
- 3. Better use of the situation after the approved review of the RVP ZV (revize.edu.cz) which was anticipated to accentuate IT skills of students and teachers. IT skills of teachers will be more sought-after topic in the system.

RVP revision has not been developed yet. MŠMT expects the PPUČ project outputs to be used as a source for work of the MŠMT expert panel.

4. **Strengthened cooperation with other NPI projects**, the Beneficiary is planning to repeat it and personalise underlying documentation from the instrument for the needs of communication in other projects.

The Beneficiary implemented and encouraged collaboration on an ongoing basis. Generally, the improved atmosphere positively influenced the cooperation under NPI ČR as well as the individual projects.

Evaluation of Učitel21 Profile in terms of fulfilment of objectives

An evaluation of the Učitel21 Profile instrument in terms of how the objectives of the specific instruments have been fulfilled is provided below. The evaluation was carried out upon information collected from the research conducted for this Interim Report. Accordingly, the evaluator finds the objectives partly met. The measures taken by the Beneficiary in implementing the Profil Učitel21 instrument are found to be adequate and flexibly respond to the current situation. MŠMT representatives share the same opinion with the evaluator. MŠMT representatives find the instrument suitable for self-development, however, only some teachers perceive self-development as an integral part of their work.

PU21 is an instrument for the self-evaluation of teachers in terms of ICT technologies, i.e., it helps individuals assess their competences in the field of ICT technologies to which the PU21 aims¹⁴. This is why no data of the individuals are shared or distributed anywhere. Accordingly, dissemination of teachers' experience outside this instrument is restricted. Still, the Beneficiary intends to focus the use of the instrument in a specific communication campaign in collaboration with the core activity of the

¹⁴ The Profil Učitel21 generally focuses on penetration of digital technologies in a teacher's work. It has 6 dimensions, 5 of which relate to the common teaching portfolio (student assessment, communication with parents, browsing for teaching resources). One PU21 dimension also focuses on digital literacy of children and students.

NPI. The same applies to the plan of the Beneficiary to take further action to medialize the instrument to increase its use, i.e., testing of education worker competences in ICT. The measures to increase the visit rate are described above.

The questionnaire research conducted under IR 4 showed that interviewed teachers from non-pilot schools evaluate the benefits of this output as the lowest compared to other activities and outputs of the project. This could reflect their lack of acquaintance with this output.

The average session-duration in the evaluation period increased to more than 5 minutes as opposed to approx. 3 minutes in the previous evaluation period and approx. 3 minutes for the whole time of PU 21 operation. 40 s. (Figure 4). Pageviews were 45 % of all PU 21 pageviews in the evaluation period. Pageviews are substantially higher compared to the previous evaluation period (2020), while the number of users slightly decreased, however, the dwell time increased considerably as well as the number of pages per 1 session related to it. In the evaluation period, there was also a considerable decrease in bounce rate (from 56.6 % to 45.6 %) with an immediate bounce rate of approx. 52.4% over the whole monitored period. Figure 2 also shows the increase in users of PU21 – from 1,926 users in 2019 to 9,633 users in 2021, with a total number of users of nearly 18 thousand over the whole period of operation of the instrument. Similar values were also recorded for new users – in 2019, approx. 1.9 thou., in 2021 nearly 9 thou., a total of nearly 18 thou. Finally, page traffic should be noted as well. With approx. 2.4 thou. visits in 2019, the number of visits increased to nearly 10 thou. in 2021. The total number of visits for the whole period of operating the instrument amounts to 25 thou. The foregoing statistics shows that there is growing use of the PU 21 instrument. Based on the above-stated, the instrument has found its target group of users who repeatedly return to visit and use it.

A review of articles and resources for the specific topic was prepared by the Beneficiary for each competence in the instrument, visualized in the instrument alone. It made the instrument more attractive for teachers who do not necessarily need to fill in the profile and want to learn more about the specific topic. It should also be noted that the instrument can be filled in anonymously.

1. 1. 2019 • 15. 12. 2019

87,S

1. 1. 2020 - 15. 12. 2020

Figure 4 Use of Profil Učitel21 in selected periods of its operation Profil Učitel21 – 2019 All users 100% Users Overview Users ٠ 100 50 Febr 2019 March 2019 April 2019 May 2019 June 2019 July 2019 August 2019 September 2019 October 2019 November 2019 December 2019 New Visitor Users | New users Visits 1 926 1 866 2385 Page views No of pages per 1 session No of sessions per user 7 261 1,24 3,04 de. الليب Average session duration Real bounce rate ιí 57,02 % 00:02:37 السلما Profil Učitel21 – 2020 Visitors All users 100% Users Overview

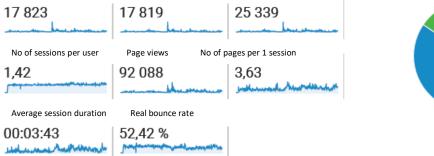
Users 600 400 200 1

Febr 2020 March 2020 April 2020 May 2020 June 2020 July 2020 August 2020 September 2020 October 2020 November 2020 December 2020

Users	New users	Visits	New Visitor Returning Visitor
9 888	9 763	12 757	12,5%
No of sessions per user	Page views No of pa	ges per 1 session	
1,29	41 537	3,26	
Average session duration	Real bounce rate	handroom with an and the set	87,5%
00:03:08	56,56 %		

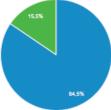
Evaluation of individual system projects supported by PO 3 OP RDE-II Part II: Evaluation area C – Evaluation of the project PPUČ

Profil Učitel21 2021			
Visitors			
All users 100% Users			1. 1. 2021 - 30. 9. 2021
Overview			
Users			
	Mula	mm	man Mar
Febr 2021 March 2021 A	pril 2021 May 2021 June 20	21 July 2021 August 2021 September 20201	October 2021 November 2021 December 2021
Users	New users	Visits	New Visitor Returning Visitor
6 033	5 9 5 8	9 831	22%
webraulunwhallow makes	mahamenonethether	an manufalling and the	
No of sessions per user	Page views	No of pages per 1 session	
1,63	42 251	4,30	78%
Average session duration	Real bounce rate		
00:04:47	45,59 %		
Profil Učitel21 – for tl Přehled publika	ne whole period of o	operation	
All users 100% Users			1. 9. 2019 - 30. 9. 2021
Overview			
Users			
600		1	
400			
200		h du l l	hard and the second
	-man Murramon	2021	Martin Marson and Martin
			New Visitor Returning Visitor
Users	New users	Visits	
17 823	17 819	25 339	15,5%



1,42

ملمها



All users +0.00 % page	geviews		1. 12. 20 Compare with the v	20 - 30. 9. 2021 1: 1. 12. 2019 - 30. 9. 2020 value:		
1.12.2020 - 30.9.2021: 1.12.2019 - 30.9.2020: 2 000	 Pageviews Pageviews 					
1000 Jan 2021 Febr 2021 March 2021 April 2021 May 2021 July 2021 August 2021 September 20201 October 2021						
Pageviews	Unique pageviews	Average time on page	Real bounce rate	% of exits		
32,64 % 43 397 vs. 32 719	21,39 % 23 053 vs. 18 991	6,13 % 00:01:27 vs. 00:01:22	-19,26 % 46,13 % vs. 57,14 %	-25,13 % 23,58 % vs. 31,49 %		

Profil Učitel21 – comparison of two time periods (1.12.2020-30.9.2021 and 1.12.2019-30.9.2020) Přehled

The real bounce rate = rate of single-page sessions without interaction (downloading a file, posting a form, viewing a video, etc.) in all sessions. The percentage of exits is monitored only on selected pages. Source: internal data of the PPUČ project, 2019 and 2020

Conclusions and evaluation

A detailed evaluation showed that the rate of visits to EMA is rather low. It should also be noted that with this type of instrument, success cannot be generally measured only according to continuous growth in users and visits. EMA is used as an ad hoc instrument for introducing new sources of information and if teachers find a connected storage, they directly enter it on their next visit. There is no reason to go through the metasystem (EMU). Users return only if they wish to post a reputation or opinion on the specific material or if they are looking for different sources of information. The integration of EMA into the new landing page of the Methodology Portal RVP.CZ by the project team is positively evaluated. Now, users can also search on the portal in EMA with a high probability that they will find materials created by NPI ČR as well as other partners. Finally, MŠMT evaluates the instrument as a suitable "rating" system for the quality of educational materials and it plans to work with it in the future.

As to the Profil Učitel21 instrument, the foregoing statistics prove increasing use of this instrument. Based on the above-stated, the instrument has found a target group of users who repeatedly return to visit and use it. MŠMT finds the instrument suitable for the self-development of teachers.

EQ C.1 To what extent do the management and implementation of the PPUČ project conform to the project application

C.1.9: Is the "University Students" target group (future pedagogical workers) involved in the project according to the project plan?

The methodological and technological support (KA 5 and KA 6) is aimed in the project at active teachers from practice as well as future pedagogues in pre-gradual preparation. This target group of the project is expected to use the project outputs and participate in the community of practice at the same time.

We also expect support of this TG in the creation of the Reputation system content and other innovated modules of the Methodology Portal RVP.CZ, including use of the portal's innovated services.

Compared to the situation reflected in the previous interim reports, there has been a significant development in integrating this target group into the PPUČ project implementation initiated by the Beneficiary in IR 3, which continued in the current evaluated period as well. The Beneficiary managed to create a communication channel with university students and increase their involvement in the project. Cooperation with departments of pedagogy at selected universities continued as well. In spring 2021, a campaign was launched by the Beneficiary - spring events of the communities of practice targeted at future teachers. The Beneficiary successfully met its plan to develop an anthology containing contributions from students and the PPUČ project team during the evaluated period. They were developed in collaboration with the Faculty of Education, Charles University (Primary Education Department). Students from this department worked on the contents of the anthology in their workshops.

The Beneficiary assumes that university students as future education workers will participate in creating the content of the Reputation system and use the Profil Učitele 21 instrument as well. University students, or VOŠ and SPgŠ schools, are anticipated to use the innovated services of the Methodology Portal RVP.CZ.

Finally, it should be noted that the PPUČ project had no defined metrics for the involvement of university students.

Detailed information is provided in the Appendix to IR 2.

Conclusions and evaluation

As follows from the above, "university students" is not the main target group of the project. The Beneficiary managed to create a communication channel with university students and increase their involvement in the project as was anticipated during the process of the application preparation. The anthology of "27 ideas for the development of reading, digital and mathematical literacy in the 1st - 5th years of elementary school" was completed outside the scope of expectations in cooperation with female students of the 5th year of teaching for the 1st - 5th years of elementary school at Pre-primary and Primary Education of the Faculty of Pedagogy of Charles University in June 2021.

EQ C.2: To what extent do the key stakeholders consider (significant) output/activities in the project to be beneficial/well applicable, and why?

This EQ was evaluated upon the developed case studies in a selected sample of nine schools involved in the project. The director, school coordinator and one educationalist representing each school were invited to an interview. This Interim Report ascertained the expectations of schools from project outputs and alterations thereto against the previous survey in IR 1, IR 2, and IR 3. Since the project is generally over, the impact of the projects on schools can already be observed now under this IR.

Evaluation of this EQ was further carried out based on the questionnaire research among participants of the communities of practice, summer school, expert panel mini-conferences, final conference, users of the Methodology Portal RVP.CZ, as well as telephone interviews with representatives of organisations active in education, research and consultancy, representatives of workers popularizing science and curriculum reform and representatives of the professional public. The objective of the research for this IR 4 was to establish how the expectations found out in the questionnaire research in IR 1 were fulfilled

The project aims to support education worker competences in developing reading, mathematical and digital pre/literacy (base literacy) in pre-school and elementary school education. The question of how specifically objectives are achieved in individual literacy can be answered as follows. There is no metrics set up to measure the impact of PPUČ "specific products" on the modifications to teaching, impacts are considered as a whole. Impacts and PPUČ project results could be measured using questionnaire research among students (before and after the application of basic literacy knowledge). The topic exceeds the possibilities of the evaluation. Accordingly, impacts are measured through the questionnaire research among teachers or in the form of case studies at involved schools. Literacy is not a compulsory part of school practice, hence, the work proceeds in the mode of management of opportunities and "moods" of teachers.

The impact/achievement of the development of literacy in pre-school and elementary school education according to the individual PPUČ project outputs is evaluated in Appendix 1.

Case studies

The PPUČ project brought inspiration, new methods, findings about new trends and offered an opportunity for self-development in the field of reading, mathematical and digital literacy as well as the implementation of high-quality workshops, mini-conferences and summer school for all schools involved in the case studies. School directors expect they can find high-quality materials here for possible changes to the school education programme and access to good methodological materials on introducing literacy in teaching. Teachers were given a site where they can find useful materials which have been tested in practice and are practical.

The interviewed schools frequently used the PPUČ project activities to use methodical support in introducing literacy into teaching. The PPUČ project team and its regional literacy coordinators were identified as the most important and very positively appreciated source of inspiration and methodological support. Last but not least, the summer school and literacy workshops organized within the PPUČ project were found to be beneficial as well. Methodical support was always provided to selected staff members/school workers in this way, who transferred the information to other educators at their schools. Most frequently, representatives of the interviewed schools (i.e., directors, coordinators, education workers) stated they obtained methodological support for introducing literacy into education from their peers teaching the same subject at the specific level of education, school management and school coordinators.

Generally, respondents actively use or at least have experience with approximately half of all the project outputs. The other half of the project outputs is either unknown to them or not relevant for them.

A detailed evaluation of the benefits of individual outputs/activities in the project by school representatives addressed under implementation of the case studies is shown below.

- Expert panels
 - Most stakeholders stated that venue availability is the main problem and limitation on their attendance at expert panels. This problem was partly eliminated during the Covid-19 pandemic since most expert panels were held online. Some expert panels were held offline when the existing epidemiological measures were favourable.
 - Generally, school representatives welcome the fact that expert panels represent a source of inspiration, sharing of experience and provide a platform for meeting and exchanging experience with other school representatives.
- Summer school¹⁵
 - The Summer school is continuously evaluated very positively by all school representatives who have attended it. Participants like this way of training, the quality of the lecturers, organization of the summer school, and the opportunity to meet teachers from other schools.
 - Positive responses have been received on the organisation of the summer school outside the school year which gives teachers enough space for a conceptual and uninterrupted focus on their development.
- Communities of practice
 - Schools identified the same problems regarding the communities of practice as with expert panels, i.e., availability of the venue and capacity. Similarly as with expert panels, the problem was partly resolved by the transition to online form.

¹⁵ joint meetings of school and regional coordinators (in 2020, it focused on preparation of workshops within the final conference)

- Communities of practice have received positive evaluation by most schools. The main positive benefits are mainly seen in networking with other schools focused on a specific literacy, obtaining inspiration and motivation for improvement of teaching and obtaining experience and feedback from practice on methodological materials.
- Final conference of the PPUČ project
 - Its benefits consisted in establishing/deepening cooperation between schools and experts, transfer and sharing of information and answering of questions. The conference was a twoday individual event, and was very well rated.
- Sets of expected learning outcomes in mathematical, reading and digital literacy (OVU)
 - They frequently received a positive response and were integrated into each preparation for teaching.
- Overview study with recommendations
 - The first of the outputs known and used by less than half of respondents, but those who use it find it beneficial. It should be noted, though, that the overview study with recommendations was completed in the final version in autumn 2021.
- Overview study with references and examples of good practice
 - Another output known and used by less than half of respondents, but those who use it find it beneficial. It should be noted, though, that the overview study with recommendations was completed in the final version in autumn 2021.
- Guidebook for innovation of ŠVP at elementary schools with instructions for good practice in working with literacy in the school.
 - Another output known and used by less than half of respondents, but those who use it find it beneficial, especially during the pandemic. It should be noted, though, that the overview study with recommendations was completed in the final version in autumn 2021. Still, the round table with MŠMT, representatives of ČŠI and NPI ČR professionals was held in July 2021 to discuss the work outputs. A printout of the draft study was presented at the final conference held in August 2021 for those who are interested in reading it.
- School and regional literacy coordinator
 - A large number of schools welcome the role of school or regional literacy coordinators.
 - Apart from the positive benefits considering the transfer of information and materials about the PPUČ project and literacy for the involved schools and teachers, schools appreciate the personal attitude of coordinators and their flexibility and enthusiasm for the cause.
 - The big fluctuation in regional coordinators was criticised in several cases. It is a problem in one region though.
- Consultation centre activities
 - Respondents' answers show that this was the least used project output.
 - Only two of all respondents know about it, both rate it positively.
- Reputation system (EMA)
 - All addressed (pilot) schools regularly use this output, only passively as a source of materials or evaluation of uploaded materials though, as they do not upload their own materials.
 - Teachers positively assess the system as a source of high-quality and rated teaching materials to teach literacy.
 - Teachers who use the instrument more frequently and are better acquainted with it (active users) evaluate it very positively.

- Teacher Profile 21
 - Most of the addressed (pilot) schools stated they actively use the instrument on a regular basis and positively evaluate the fact that it contributes to their self-development in the field of literacy.
 - Some teachers stated they have not yet acquainted themselves with it, but are planning to do so.
 - Active users (teachers who more frequently use the instrument) appreciate it very positively as an ideal instrument for self-reflexion and self-development.
- Transformation of the user environment on the Methodology Portal RVP
 - Respondents find the transformation of the user environment on the Methodology Portal beneficial. They needed some time to get used to it.
- 35 educational online lessons on RVP.CZ
 - Another output known and used by less than half of respondents, but those who use it find it beneficial.

Controlled telephone interviews with selected target groups

Computer-assisted telephone interviewing (CATI) of representatives of the professional public (4 persons), educational, research and consulting organisations (3 persons) and representatives of workers popularizing science and curriculum reform (3 persons) were used to establish to what extent key stakeholders find output/activities in the project to be beneficial/well applicable.

Generally, respondents actively use or at least have experience with approximately a third of all project outputs. There is a great variance, though. One respondent could express an opinion only on one of the project outputs while others assessed nearly all of the outputs.

The most beneficial project outputs according to respondents are shown below: sets of expected learning outcomes (OVU), online educational lessons on RVP.CZ, publications with activities for 1st -5th years and 6th – 9th years of elementary schools and pre-school education, translation of the European Framework for the Digital Competences of Educators, DIGCOMPEDU, and five-minute videos from the YouTube channel Gramotnosti.pro. Expert panel mini-conferences, communities of practice and the final conference are very positively rated as well.

No negative assessment was received in this survey at all. If respondents are acquainted with the project outputs and rate them, they give a very positive response. The only exceptions are the Profil Učitel 21 and Reputation system EMA instruments. They received a very positive response from half of respondents, with one or two moderately negative ratings.

A detailed rating of the benefits of individual outputs/activities in the project by representatives of the "professional public" is shown below:

- Very positively rated project outputs with a high number of ratings (by more than half of respondents)
 - sets of expected learning outcomes (OVU),
 - publications with activities for the 1st -5th years and 6th 9th years of elementary schools and pre-school education,
 - translation of the European framework of teachers' digital competences, DIGCOMPEDU,
 - expert panels,
 - final conference,
 - transformation of the user environment on the Methodology Portal RVP.

- Very positively rated project outputs with a medium number of ratings (by a third up to half of respondents)
 - educational online lessons on RVP.CZ,
 - Profil Učitel 21,
 - Reputation system (EMA),
 - map of literacy,
 - guidebook for ŠVP innovation,
 - overview study with references and examples of good practice from the Czech Republic and abroad,
 - communities of practice,
 - five-minute videos from the YouTube channel Gramotnosti.pro,
 - activities of the school centres of literacy,
 - NPI consultation centre.
- Very positively rated project outputs with a low number of ratings (by less than half of respondents)
 - TIO project,
 - methodological material for template implementation,
 - overview study with recommendations,
 - anthology of activities created by students of the Faculty of Pedagogy,
 - blog contributions on Gramotnosti.pro.
- Others:
 - Methodological support material Teacher developing literacy only one rating.
 - Summer school no ratings.

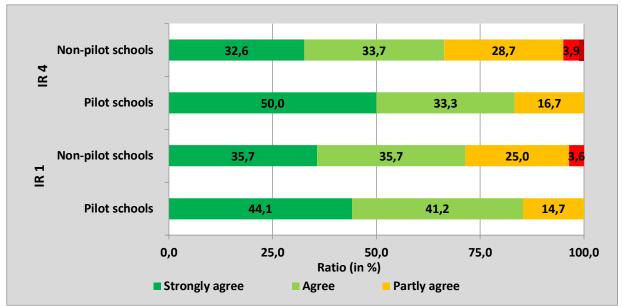
Questionnaire research

This EQ was further evaluated in the questionnaire research of participants of the communities of practice, summer school, final conference and users of the Methodology Portal RVP.CZ. Their expectations from the main outputs/activities in the project were investigated in Round one of the survey implemented under IR 1 as well as their rating of the benefits of these outputs/activities. The next round of the survey carried out under IR 4 looked into how the established expectations were fulfilled.

Chart 4 shows the application of the knowledge obtained in practice by respondents from pilot and non-pilot schools. The positive finding is that only 4 % of respondents from non-pilot schools under Round 1 and 2 of the survey stated that they rather do not apply the knowledge or do not apply it all. Pilot schools showed a higher number of knowledge applications in practice than non-pilot ones. As can be generally observed, the degree of application of knowledge in the teaching context is high. It should be noted that pilot schools tend to apply it more than in the previous round of the survey and non-pilot schools apply it either in the same frequency or a little less. There were no respondents from pilot schools in either round of the survey that stated they do not apply them or do not apply them at all.

As to the manner of application of the obtained knowledge into teaching practice - incorporating the knowledge into teaching and sharing of information with peers prevailed. Some respondents stated that they incorporate the observations into school education programmes and topical teaching plans.

A very low number of respondents gave reasons for not applying the knowledge into teaching (6 respondents in total).





Note: Question: Do you apply the obtained knowledge (i.e., the know-how to develop the concepts of basic literacy for nursery and elementary schools) in practice? Choose one option.

Source: Own calculation based on the questionnaire research conducted in 2019 and 2021. Number of respondents in 2019: total = 62, Npilot = 34, Nnon-pilot = 28. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (86 respondents in total stated they did not know whether their school was involved in the project).

More than 97 % of respondents from pilot schools implemented modified or new activities to develop one of the literacies at their school from 2018/2019 (Chart 5). More than two-thirds of respondents from non-pilot schools did so as well. Only about 3 % of respondents from pilot schools stated they had not carried out any alterations. More than a third of respondents from non-pilot schools did not make any alterations. The second round of the survey showed a distinct decline in the number of respondents from pilot schools who implemented the adapted or new activities to develop literacy. Non-pilot schools showed the opposite trend.

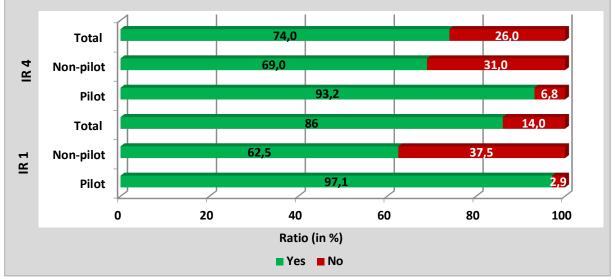


Chart 5 Implementation of modified or new activities to develop literacy from school year 2018/2019 (response rate in %)

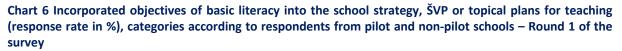
Note: Question: (only for teachers and directors of nursery and elementary schools): Have you implemented at your school any modified or new activities to develop mathematical (ML) or reading (RL) or digital literacy (DL) since school year 2018/2019?

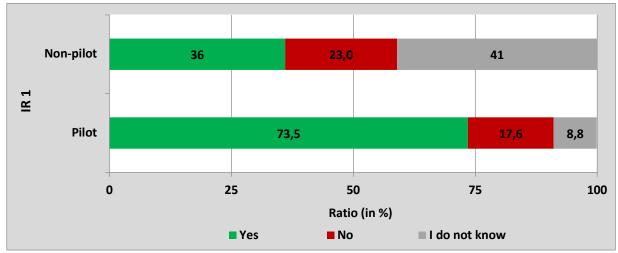
Source: Own calculation based on the questionnaire research conducted in 2019. Number of respondents in 2019: total = 50, Npilot = 34, Nnon-pilot = 16. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total of 86 respondents stated they did not know whether their school was involved in the project).

Nearly three-quarters of respondents from pilot schools in Round 1 of the survey stated they had incorporated the objectives of basic literacy into the school strategy or SEP or topical plans for teaching (Chart 5). 18 % of respondents from pilot schools had not incorporated them, 9 % of respondents did not know. On the other hand, less than 38 % of respondents from non-pilot schools had incorporated the objectives of basic literacy and less than a quarter of these respondents had not incorporated them. Nearly 44 % of respondents from non-pilot schools were not sure whether the objectives had been incorporated.

Round 2 of the survey linked to the above-stated and looked into what documents the objectives of basic literacy had been incorporated into (ML, RL, DL). The responses show that they have been mostly incorporated into the school education programmes (49.6 % of responses), topical teaching plans (33.5 %), later reflected in the school strategy (16.6 %).

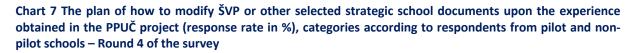
Respondents who stated in Round 2 of the survey they had not incorporated the objectives of basic literacy into the school strategy or ŠVP or topical plans for teaching, or they do not know, were asked whether they intended to modify the ŠVP or selected strategic school documents and topical plans for teaching by 2021 to strengthen the practice of basic literacy in their schools. Nearly 40 % of them did not know either. More than 42 % were planning to do this, approx. 18 % of respondents had no plans to do so (Chart 7). As to the category of schools, the best answers were received from respondents from pilot schools, where more than two-thirds planned to incorporate the objectives of basic literacy into the school strategy / ŠVP / TPV. Respondents gave no response to the question of why they were not planning to incorporate the objectives of basic literacy into the school strategy or SEP or topical plans for teaching.

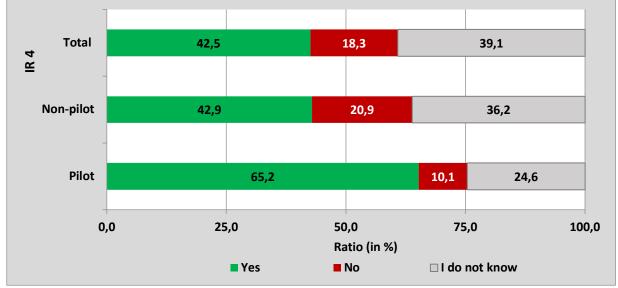




Note: Question: Have you incorporated the objectives of basic literacy (ML, RL, DL) into the school strategy, SEP or topical plans for teaching?

Source: Own calculation based on the questionnaire research conducted in 2019. Number of respondents in 2019: total = 56, Npilot = 34, Nnon-pilot = 16. In 2021, the question was not asked.





Note: Question: Do you plan to modify the School Educational Programme (ŠVP) or selected strategic school documents and topical plans for teaching in the near future based on the experience obtained in the PPUČ project in order to strengthen the practice of basic literacy in your school?

Source: Own calculation based on the questionnaire research conducted in 2021: Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total of 86 respondents stated they did not know whether their school was involved in the project).

Transfer of experience and information is one of the basic characteristics of the project. The transfer proceeds both on a personal level (by attending communities of practice or expert panels; meeting of coordinators, etc.) and concept project outputs and online technological support on the Methodology Portal RVP.CZ.

Round 1 of the survey established that participants most often expect sharing of experience and obtaining inspiration (Chart 8) at joint offline events for teachers of nursery/elementary schools and the professional public. Some respondents stated they expected a deepening of their knowledge and self-development. Respondents would also like to obtain specific inspiration on how to introduce literacy in teaching at such meetings. They find meetings with teachers from other schools beneficial.

In Round 2 of the survey, respondents marked (for communities of practice and summer school) as their main expectations - inspiration, sharing of experience and meeting other peers / stakeholders (Table 2). This corresponds with the expectations established in Round 1 of the survey. Expectations from expert panel mini-conferences and the final conference were ascertained outside the scope of Round 1 and 2. For both offline events, the prevailing responses were to get inspiration and sharing with teachers. The expectations from the conference were to get a summary of the project.

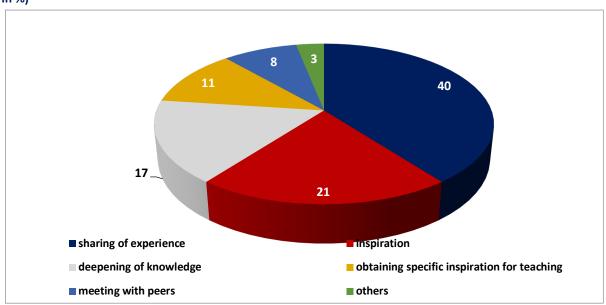


Chart 8 Expectations from joint offline events of teachers of ES/NS and the professional public (response rate in %)

Note: Question: What are your expectations from: a) communities of practice, b) summer school? Source: Own calculation based on the questionnaire research conducted in 2019. Number of respondents in 2019: total = 62, Npilot = 34, Nnon-pilot = 28.

Table 2 Expectations from joint offline events of ES/NS teachers and the professional public (response rate in %)

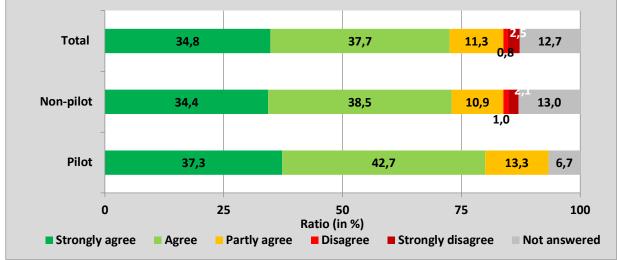
	Response rate (in %)				
Expectations from offline event	Communities of practice	Summer school	Final conference	Expert panel mini-conference	
Obtaining inspiration, ideas, examples of good practice	66	60	42	66	
Sharing of experience, meetings with other teachers and stakeholders	34	40	32	34	
Project summary			25		

Note: Question: What were your expectations from the communities of practice / summer school / final conference / expert panel mini-conference?

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total of 86 respondents stated they did not know whether their school was involved in the project).

Respondents were asked whether their expectations of the identified expectations were fulfilled. The resulting answers are shown in Chart 9. The positive finding is that positive answers prevail, negative ones are only marginal, in both interviewed categories and group of respondents as a whole.

Chart 9 Fulfilment of expectations (response rate in %), categories according to respondents from pilot and non-pilot schools



Note: Question: Have your expectations been fulfilled?

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total of 86 respondents stated they did not know whether their school was involved in the project).

Respondents from pilot schools were asked how they personally evaluate the contribution of current outputs/activities in the project. The outputs/activities in the project were rated very positively in Round 1 of the survey. Respondents find the summer school the most beneficial as well as educational materials for the development of basic literacy for individual levels of education and methodological supporting materials for the Project implementation Template OP RDE generated within the project. On the other hand, they find the translation of the European framework of teachers' digital competences, DIGCOMPEDU, and the NÚV consultation centre (online consulting on literacies in practice schools) the least beneficial.

Respondents from non-pilot schools evaluated the contribution of the current outputs/activities in the project more critically than respondents from pilot schools in Round 1 of the survey. They find joint offline events, i.e. the summer school, followed by meetings of the communities of practice, the most beneficial. They also find the methodological support materials for implementation of the OP VVV project templates beneficial as well as the material Teacher developing literacies. The NÚV consultation centre (online consulting on literacies in school practice) is found the least beneficial by respondents.

Round 1 of the survey also looked into the expected benefits of future outputs/activities in the project from respondents from pilot and non-pilot schools (evaluation on a scale of 1-5 (1 = most beneficial, 5 = least beneficial). Pilot school respondents expected the most from survey studies, followed by innovated manuals for ŠVP generation with the instructions for good practice of working with literacy. The lowest expectations are related to the EMA.RVP.CZ online application, user environment transformation of the Methodology Portal RVP and the Teacher Profile 21 online application on the same portal. Respondents from non-pilot schools had more modest expectations. They expected the most from the innovated Manuals for ŠVP generation with instructions for good practice of working with literacy at school and the least from the EMA.RVP.CZ online application – similarly as respondents from pilot schools.

Following up the previous questions identified in Round 1 of the survey in 2019, Round 2 of the survey in 2021 focused on the real benefits of the project outputs and activities. Table 3 shows an overview of the three most and least useful outputs/activities for all respondents according to individual categories. Charts 10, 11 and 12 show the evaluation of all activities and outputs for individual categories. The evaluation of the benefits shows mostly a positive response to all individual activities and outputs of the PPUČ project.

Category	the 3 most beneficial	the 3 least beneficial
Respondents from pilot schools	 publications containing ideas for activities for basic literacy for individual levels of education generated in the project (specific teaching activities for pre- school education, 1st - 5th years and 6th - 9th years of ES); 35 educational online lessons on RVP.CZ for introduction to mathematical, reading or digital literacy in practice of the specific branch of the teacher (education modules); transformation of the user environment on the Methodology Portal RVP (personalised services, greater opportunity for collections) 	 methodological support material for implementation of OP RDE project templates Profil Učitel 21 online application on the Methodology Portal EMA.RVP.CZ online application (reputation system and rated methodological materials)
Respondents from non- pilot schools	 publications containing ideas for activities for basic literacy for individual levels of education generated in the project (specific teaching activities for pre- 	 NPI ČR consultation centre (online consultation about literacy in school practice)

Table 3 Evaluation of benefits of outputs/activities in the project by respondents – according to individual	
categories	

Evaluation of individual system projects supported by PO 3 OP RDE-II Part II: Evaluation area C – Evaluation of the project PPUČ

	school education, , $1^{st}-5^{th}$ years and $6^{th}-9^{th}$ years	Profil Učitel 21 online application on the
	of ES);	Methodology Portal
	 expert panel mini-conference 	• EMA.RVP.CZ online application (reputation system
	 final conference of the project 	and rated methodological materials)
Respondents in total	 publications containing ideas for activities for basic literacy for individual levels of education generated in the project (specific teaching activities for pre- school education, 1st – 5th years and 6th – 9th years of ES); 35 educational online lessons on RVP.CZ for introduction to mathematical, reading or digital literacy in practice of the specific branch of the teacher (education modules); final conference of the project 	digital competences, DIGCOMPEDU • Profil Učitel 21 online application on the

Note: Question: What were your expectations from the communities of practice / summer school / final conference / expert panel mini-conference?

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 182 (Total of 86 respondents stated they did not know whether their school was involved in the project).

Chart 10 Evaluation of the benefits of outputs/activities in the project from respondents from pilot schools (response rate in percent)

Five-minute videos from the YouTube channel Gramotnosti.pro život	22		46	17
transformation of the user environment on the Methodology Portal RVP (personalised				1/
	38		56	
EMA.RVP.CZ online application (reputation system and rated methodological materials)		54	22	17
Profil Učitel 21 online application on the Methodology Portal	43	8	35	12 6
translation of the European framework of teachers' digital competences DIGCOMPEDU	37		26	34
Map of literacy	40		45	11
an overview study with references and examples of good practice (some examples of -		50	31	17
an overview study with recommendations (examples of specific measures for schools	4	19	35	14
Guidebook for innovation of SEP at elementary schools with instructions for good	38		50	10
work of literacy school centres and the model of their dissemination and development	32		45	18
PPUČ final conference		78		9 13
summer school (joint meetings of literacy coordinators, teachers of pilot schools and		64		30
work of regional literacy coordinators in pilot schools	4	18	33	15
work of school literacy coordinators in pilot schools to encourage peer-to-peer		57	26	13
expert panel mini-conference		51	36	11
meetings and outputs from communities of practice		59		30 <mark>9</mark>
NPI ČR consultation centre (online consultation about literacy in school practice)	29		37	32
methodological support material Teacher developing literacies	33		55	1
methodological support material for implementation of OP RDE project templates	30		52	12
Magazine of activities generated by teaching students on PedF UK	23	4	8	30
TIO project – methodological material to support development of digital literacy in		60	2	4 13
publications containing ideas for activities for basic literacy for individual levels of		52	4	1
blog contributions in the campaign Literacy for life/We teach in context	33		37	27
sets of expected learning outcomes in mathematical, reading and digital literacy (OVU)		54	3	5 7
educational online 35 lessons on RVP.CZ for introduction in mathematical, reading or	4	7	5	1
+				
0	_	25	50 n ratio (in %	75

Note: Question: How do you rate your personal benefit from the outputs/activities in the project: (rate on a scale of 1-5, 1 = most beneficial for me, 5 = least useful for me, 0 = l cannot assess). Rating on a scale of 1-5, 1 = most useful, 5 = least useful, with the rate of individual categories

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 192.

Evaluation of outputs/activitie			
Respondents from non-pilot	schools	40	
transformation of the user environment on the Methodology Portal RVP (personalised	45		9
	31	40	20 7
EMA.RVP.CZ online application (reputation system and rated methodological materials)	31	41	20
Profil Učitel 21 online application on the Methodology Portal	39	34	17 7
translation of the European framework of teachers' digital competences DIGCOMPEDU	40	40	9 7
Map of literacy	33	41	19
an overview study with references and examples of good practice (some examples of	44	37	16
an overview study with recommendations (examples of specific measures for schools	35	43	12 6
Guidebook for innovation of SEP at elementary schools with instructions for good	41	41	14
work of literacy school centres and the model of their dissemination and development	37	33	22
PPUČ final conference	69		22 7
summer school (common meetings of literacy coordinators, teachers of pilot schools	63	2	1 13
work of regional literacy coordinators in pilot schools	49	30	15
work of school literacy coordinators in pilot schools to encourage peer-to-peer	41	31	22
expert panel mini-conference	48	39	11
meetings and outputs from communities of practice	49	33	14
NPI ČR consultation centre (online consultation about literacy in school practice)	27	35 2	25 💻
methodological support material Teacher developing literacies	37	43	17
methodological support material for implementation of OP RDE project templates	29	40	26
magazine of activities generated by teaching students at PedF UK	32	40	22
- TIO project – methodological material to support development of digital literacy in	49	29	17
publications containing ideas for activities for basic literacy for individual levels of	50	39	8
blog contributions in the campaign Literacy for life/We teach in context	29	39	24 5
sets of expected learning outcomes in mathematical, reading and digital literacy (OVU)	45	41	11
educational online 35 lessons on RVP.CZ for introduction in mathematical, reading or	35	43	19
0	25		75
	Evalua	tion ratio (in %	5)

Note: Question: How do you rate your personal benefit from the outputs/activities in the project: (rate on a scale of 1-5, 1 = most useful for me, 5 = least useful for me, 0 = l cannot assess). Rating on a scale of 1-5, 1 = most useful, 5 = least useful, with the rate of individual categories

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 192.

Respondents in total	I		
Five-minute videos from the YouTube channel Gramotnosti.pro život	41	43	11
transformation of the user environment on the Methodology Portal RVP (personalised	32	46	15 5
EMA.RVP.CZ online application (reputation system and rated methodological materials)	40	32	19 6
Profil Učitel 21 online application on the Methodology Portal	39	36	14 7
translation of the European framework of teachers' digital competences DIGCOMPEDU	38	32	18 5
Map of literacy	35	42	16 5
an overview study with references and examples of good practice (some examples of	43	36	18
an overview study with recommendations (examples of specific measures for schools	40	40	14
Guidebook for innovation of SEP at elementary schools with instructions for good	38	44	13 2
work of literacy school centres and the model of their dissemination and development	35	40	17 7
PPUČ final conference	65		20 12
summer school (common meetings of literacy coordinators, teachers of pilot schools	56	25	12 8
work of regional literacy coordinators in pilot schools	47	33	15 8
work of school literacy coordinators in pilot schools to encourage peer-to-peer	45	31	17
expert panel mini-conference	46	38	11 1
meetings and outputs from communities of practice	49	35	12
NPI ČR consultation centre (online consultation about literacy in school practice)	30	38	23
methodological support material Teacher developing literacies	36	46	16
methodological support material for implementation of OP RDE project templates	30	45	20
magazine of activities generated by teaching students on PedF UK	28	46	23
TIO project – methodological material to support development of digital literacy in	50	28	17
publications containing ideas for activities for basic literacy for individual levels of	49	41	8
blog contributions in the campaign Literacy for life/We teach in context	30	41	23 8
sets of expected learning outcomes in mathematical, reading and digital literacy (OVU)	47	37	12
educational online 35 lessons on RVP.CZ for introduction in mathematical, reading or	40	46	12
0	25	50	75 2
0			
	Evalua	ation ratio (in %	0)

Chart 12 Evaluation of the benefits of output/activities in the project from all respondents

Note: Question: How do you rate your personal benefit from the outputs/activities in the project: (rate on a scale of 1-5, 1 = most useful for me, 5 = least useful for me, 0 = l cannot assess). Rating on a scale of 1-5, 1 = most useful, 5 = least useful, with the rate of individual categories

Source: Own calculation based on the questionnaire research conducted in 2021. Number of respondents in 2021 total = 353. Npilot = 75, Nnon-pilot = 192.

Under this EQ, the investigation focused on how respondents use the Methodology Portal (those who answered "strongly agree" or "agree"). The portal is most often used to get inspiration (in teaching and self-education), view videos and webinars and the source of materials. Respondents also mentioned other ways of using the materials - search for information, authorship of articles, materials, videos, etc. and using online applications. The survey also identified reasons for not using the Methodology Portal RVP.CZ. The main reasons for not using sharing good practice under on-line activities in Round 2 of the survey were shortage of time for studying new things, lack of acquaintance with this option of sharing. However, the number of responses was marginal. Evaluation of this question was impossible to assess in Round 1 of the survey due to the low number of respondents.

The CAWI evaluation is shown in Appendix to IR 2.

Conclusions and evaluation

Generally, all activities and individual project outputs were positively rated by most schools in both rounds of the survey.

EQ C.3: How is cooperation proceeding with other relevant projects and what common outcomes have been achieved?

Desk research was used to establish the standard for the analysis of the cooperation with other relevant projects and common outputs, as well as observation at the final conference of the PPUČ project and structured interviews. The obtained information was used as a framework in which structured interviews were held with delegated representatives of relevant projects, specially selected projects SYPO and APIV B (for the reports, see Appendix 2 to the IR).

All systemic projects must cooperate with each other, the PPUČ project also complies with this obligation by means of KA 2 Cooperation.

The survey established the following findings:

- Cooperation between the projects takes a similar form, scope and frequency as demonstrated under the previous IR 1, IR 2 and IR 3).
- The main feature of cooperation is expert panel attendance, sharing materials and outputs of individual projects.
- The closest cooperation is still to be found with SYPO, APIV B and SRP/MAP projects.
- After the merger of the NIDV and NÚV, the SRP and SYPO projects became "internal", which improved the cooperation.
- There is ongoing cooperation with the IPs SYPO methodological rooms (e.g., national mathematics room) and KIM network, with presenting PPUČ outputs to literacies for these rooms (PPUČ team members regularly attend national rooms).
- PPUČ representatives took part in national mathematics and informatics staff rooms under cooperation with SYPO.
- The cooperation with IPo MAP implementers continues (meetings organised for common topics for cooperation, information sent on EMA for the Beneficiary of IPo MAP in collaboration with IPs SRP).
- The PPUČ team used the information from the P-KAP project obtained from linkedIN groups at Edusítě (Edunetworks) and it regularly sent information from groups focusing on literacy and digital competences.
- To develop EDUSÍTĚ (edunetworks) and joint cooperation, the PPUČ project team met the P-KAP team and offered synergy for further cooperation. Cooperation with the P-KAP project proceeds in the form of participation of PPUČ project team members in P-KAP methodological networks in the field of mathematical, reading and digital competences.
- PPUČ team members were invited by IPs SRP to eleven meetings of IPo MAP beneficiaries, where breaking news in the project was presented as well as the outputs in digital literacy and more specific presentation of the EMA system.
- A pilot study for archiving selected project outputs in the IPs SRP knowledge database proceeded across the IPs NPI projects. The PPUČ project outputs are available at https://hledej.npicr.cz/gramotnosti-pro-zivotppuc/
- MŠMT representatives stated that one of the crucial factors influencing effective cooperation between individual IPs or IPo projects is their willingness, interest and sufficient motivation to cooperate.

- They think that cooperation between projects could be better organised in the future so that they better complement each other and build on each other already at the stage of preparing an application to link the activities.
- No barriers were identified to cooperation in any of the cooperating projects.
- Cooperation depends on correctly set up periodical mutual information exchange and promotion of project outputs at suitable opportunities.
- The Beneficiary was in regular contact with EMA system partners.
- PPUČ team members attended the following events: AISIS conference for NS in the call ISDV2 OP RDE, Proposal for monitoring Indicators of education strategy 2030+ (workshop, Deloitte), expert panels of the APIV-A and P-KAP projects, expert seminar of ÚVRV – Curriculum modification across Europe: Review of the frameworks prior to Covid and after Covid, final conference on DL (Digigigram) "Support for digital literacy development."

The links between individual system projects and the PPUČ project are shown in the Table below.

Conclusions and evaluation

The Beneficiary's activities in the field of cooperation with other relevant projects are found to be above standard, exceeding the framework of the project application. The way of cooperation set up by the PPUČ project team is found exemplary for other projects. Further positive development has been noted since IR 3.

Table 4 Cooperation between projects

		ΑΡΙΥ Β	SYPO	MAP ΙΙ	КЅН	SRP	Support for development of digital literacy (PedF UK) and Support for development of computer science thinking (PRIM)
PPUČ	Characteristics of mutual cooperation	 Cooperation at the level of mutual participation in expert panels, cooperation between both projects; Cooperation in sharing good practice (e.g. webinar preparation, creation and implementation); Cooperation in project worker meetings in order to inform each other about the current progress of the projects; Continuous consultation about online teacher training. 	 Sharing of information and outputs (particularly to avoid duplications); Preparation and follow-up on the PPUČ project outputs; PPUČ representatives prepare underlying documentation for regional network of ICT methodologists; 	• Coordination of cooperation with the regional project;	 Sharing of information Mutual cooperation in preparing underlying documentation for conferences; Participation and reading papers at expert panels; 	 Participation in educational events for IPo MAP beneficiaries; Preparation of underlying documentation for compulsory work groups of mathematical and reading literacy for IPo MAP 2 beneficiaries; Sharing of information and outputs. 	 Sharing of information and mutual cooperation; Participation in expert panels.
	Perceived barriers	Not strictly identified barriers – a barrier can be perceived in a different focus and form of expert panels.	Not identified	Not identified	Not identified	Not identified	Not identified

Note: There is still cooperation proceeding with the projects Support of pre-literacy in pre-school education, Enhanced quality of students' education, development of key competences, areas of education and literacy, both projects are implemented by the Faculty of Education, Charles University.

EQ C.4: What were the unintended impacts of the PPUČ project?

General approach to solutions

This question focuses on identifying positive and negative unintended impacts in the evaluated projects based on the evaluation principle - mapping of the whole intervention (using intervention logic) and a description of the causal chains which led to the unplanned impacts.

The solution to the evaluation question is based on combining desk research and field research. The "Process tracing method" will be used for the evaluation.

Resolution procedure

The procedure for evaluation of the evaluation question is described in the following steps:

1) Identification of unintended impacts of the PPUČ project

A list of unintended impacts identified upon so far implemented field research is given below.

Unintended impacts of the PPUČ project

- Significant increase in cooperation at the involved schools, either cooperation and implementation of common projects of the whole school, different classes, 1st -5th years and 6th - 9th years of elementary school, nursery and elementary schools, school grades and/or teachers.
- Creation of the school community pilot ones which are anticipated to continue cooperation.
- Strengthened relationships between teachers and other project stakeholders at the final conference by way of the accompanying programme ("well-being of teachers").
- Interconnection between information systems via the SRP project outputs fulfilment of the knowledge database HLEDEJ.NPI.CZ.
- Influence on the form and content of regular meetings of the IPs projects with MŠMT representatives.
- The project focus and its overall grasp was assessed by educators as very beneficial, however, it poses considerable time requirements to study all outputs, integration into project activities and partially also administrative acts associated with involvement.
- Teachers also positively evaluated meeting experts in practice who took part in many project activities in regions.
- The professional erudition and human approach of individual staff members of NPI ČR (Beneficiary) were very positively evaluated, which significantly increased the involvement of individual target groups in the project and interest in literacy generally.
- Finally, teachers mentioned recognition of the needed FEPW in digital literacy.

2) Use of basic concepts of the process tracing method

In the next step, fundamental concepts of the process tracing method are used: the concept of the causal mechanism and its testing upon empirical evidence. As to the use of the causal mechanism concept, it is a form of causal chain mapping for individual unintended impacts.

a) map of causal events for unintended impacts

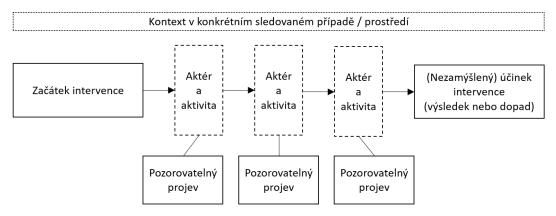
The causal chain in process tracing fundamentally differs from causal chains commonly used for models of the theory of change. In the theory of change, the main perspective is the axis "inputs - activities - outputs - results - impacts". In process tracing, the main presumption is that a change is always caused by stakeholders and their activities, so the consequential chain must monitor how the activities of

various stakeholders influence other stakeholders who respond, by which they affect other stakeholders, etc. The causal chain ends at the point where a change happens (effect/impact), and the ambition of process tracing is to explain it. Below, you can find how a map (scheme) of causal chains for identified unintended impacts will be developed.

General scheme of a causal mechanism (example):

We will define the following general schemes of a causal mechanism (chain) based on the above stated, which is only an illustrative example at this moment (scheme 1).

Scheme 1 Basic scheme – Template



Kontext v konkrétním sledovaném případě/prostředí – Context in a specific monitored event/environment Začátek intervence – Beginning of intervention

Aktér a aktivita – Stakeholder and activity

(Nezamýšený) účinek intervence (Výsledek nebo dopad) – (Unintended) effect of the intervention (result or impact) Pozorovatelný jev - Observable event

b) empirical evidence

Clarification of the cause behind the occurrence of the specific unintended impact will be supported with evidence from field research and will be further verified in the following surveys (hypothesis testing).

Data collection for providing empirical evidence is based on the continuous collection of information from the implemented and planned field research.

c) causal tests (testing causal mechanisms/chains)

Methodological procedure:

The following phases can be distinguished for testing of evidence within the process tracing method:

- 1) Brainstorming for possible empirical evidence to support individual intermediate steps in a causal chain.
- 2) Selection of the most appropriate evidence to be collected and tested (according to already implemented and planned surveys and attainable data).
- 3) Testing comes in the last step. We pose two questions for each tested piece of evidence:
 - a. Is the presence of a specific empirical trace necessary for confirming the specific causal chain link? (If so, and we manage to provide evidence that such evidence does not exist, we will seriously undermine or completely invalidate the specific link of the causal chain)
 - b. Is the presence of a specific empirical trace sufficient to confirm the specific causal chain link? (If so, and we manage to substantiate the empirical trace, we will strongly support or definitively confirm the specific link of the causal chain).

Practical testing of evidence is governed by this logic, however, within the application it is not usually desirable to use expert terms such as theoretical certainty or sufficient condition. The main objective is to provide convincing arguments whether the found evidence (and final effect) might arise through a different mechanism, or whether it actually very probably arose through the tested mechanism.

Assumptions and limits of the process tracing method

The process tracing method presumes the possibility to respond flexibly to the need to collect various types of evidence, particularly if the objective is to evaluate not only causal chains following from the theory of change, but also unintended impacts of the intervention.

The main limit to the process tracing method is the time necessary for the processing. This follows from the necessity to frequently combine various sources of data and carefully assess their quality and importance for the tested causal chain. This means in practice that it is usually impossible to test a large number of causal chains, but it is appropriate to use process tracing only for several selected effects (impacts).

Evaluation in individual target groups

Target group	Data source	Anticipated date /deadline of survey
Representatives of the PPUČ project team	Interviews with representatives of the PPUČ project team	Continuously (Interim reports, Final report)
Relevant responsible MŠMT department	Interviews with MŠMT representatives - relevant responsible department	Continuously (Interim reports, Final report)
Relevant target groups of the project	Survey among educationalists of the involved schools, members of the communities of practice, academic public, staff popularizing science and curriculum reform, representatives of organisations active in education, cooperating projects	Continuously (Interim reports, Final report)

Unintended impacts will be monitored and evaluated in the following target groups.

Further procedure for dealing with evaluation questions (FR)

A synthesis of knowledge identified under all interim reports will be developed under the Final Report.

5 Conclusions and recommendations

Main conclusions from the project management and implementation:

- Conformity of the project management and implementation to the project application
- The evaluator evaluates the scope, standard and quality of the implementation of key activities as conforming to the project application. The project is being implemented according to the management documentation and simultaneously, its implementation is being monitored on a regular basis. The project implementation team identifies potential risks of the project and responds to them with corresponding measures. Good project management is also demonstrated by the low number of changes conducted inside the project (related to the span of the project).

• Participation of the "university students" target group

- The Beneficiary managed to involve this target group in the PPUČ project implementation much more under IR 3, compared to the situation reflected in the previous interim reports and continued also in the follow-up evaluated period.
- The Beneficiary managed to create a communication channel with university students and increase their involvement in the project. Teaching students at the Faculty of Education, Charles University (Primary Education Department) created an anthology outside the scope of the project in their seminars, which contains "27 ideas for the development of reading, digital and mathematical literacy in the 1st 5th years of elementary school".
- Risks jeopardizing project implementation and achievement of objectives, and barriers to implementing the project
- According to the evaluator, the established risks do not jeopardize the project implementation or the achievement of its objectives. Similarly, no material barriers to implementing the project have been identified. As can be observed from the available findings from the qualitative and quantitative research and information collected about the project implementation process, the implementing team took adequate actions to overcome current barriers and risks which have emerged in the implementation and none of the so far identified barriers should have a negative impact on the implementation or delivery of the planned outputs and project objectives.
- Project evaluation activities
- The internal evaluation is found to correspond and conveniently link to the implemented project activities. It is conveniently integrated into project activities and its outputs are used and reflected in the consequential project implementation.
- In the evaluated period of IR 3, the project team was extended by an internal evaluator there were 2 staff members working part time. The evaluator thinks that the measure had a positive influence on the project. In the evaluated period of IR 4, one of the two part-time workers terminated his employment (for personal reasons). This situation had no negative impact on the project implementation.
- The implementer is monitoring the use and impacts of all its products (analytics and behaviour of users for the website, for online/offline events it is the participants' feedback, meetings of the implementation team to reflect the activities with the target group).
- The internal evaluator helps activity managers and task leaders by consulting with them the right form and content of the questions for the target group.
- The self-evaluation report is developed once a year. Online focus groups were newly organised to generate the self-evaluation report, which reflected the following topics: risk management; opportunities; current measures.

Main conclusions following from the conducted research

The primary objective of the research was to establish the outputs/activities in the project from individual target groups. Observations established under the survey (CATI – schools involved in the project and the three selected target groups "professional public"¹⁶) will be filled in after the completion of the survey.

Main conclusions following from the evaluation of cooperation with other relevant projects and results of this cooperation

- Although the cooperation was specified rather broadly in the call, the PPUČ project team did very well.
- The Beneficiary's activities in cooperation with other relevant projects are found to be above standard and set an example for other projects.
- This relates primarily to the successful cooperation with the SYPO project as well as SRP and APIV-B.
- Cooperation between the projects was affected by the existing epidemiological situation (COVID-19) which prevented the implementation of some offline events, but encouraged cooperation with other projects. The cooperation consisted in using PPUČ project materials focused on digital literacy and using materials published on the Methodology Portal of RVP.CZ.
- The newly established organisation NPI ČR (National Pedagogical Institute of the Czech Republic) stabilized its operations in the monitored period, which encouraged cooperation and communication between projects.
- The interviews identified one recommendation concerning cooperation between the projects of the NPI ČR to better set up cooperation between the projects in the future so that they can better complement each other and work together even from the point of view of preparation of applications in the way that the activities link mutually as much as possible.

Main conclusions following from the evaluation of unintended impacts of the PPUČ project

- The conducted research identified several observations concerning unintended impacts of the project.
- Two new unintended impacts were identified in a group interview with the Beneficiary. They consisted in:
 - Strengthened relationships between teachers and other project stakeholders at the final conference by way of the accompanying programme ("well-being of teachers").
 - Interconnection between the information systems via the SRP project output fulfilment of the knowledge database HLEDEJ.NPI.CZ.
- Greater emphasis was placed on the unintended impact considerable expansion of cooperation in the involved schools based on the interviews conducted at schools involved in the project compared to IR 3 cooperation and the implementation of joint projects of the whole school, different classes, 1st 5th years and 6th 9th years of ES, nursery and elementary schools, school grades or teachers.
- One unintended impact arose in the interview with an MŠMT representative creation of the community of schools – pilot schools, where cooperation is expected to continue.

The following recommendations were made based on the results and observations from the conducted survey. They are not intended for further phases of the project implementation, as was

¹⁶ CS: Professional public, persons popularizing science and curriculum reform, persons working in educational, research and consulting organisations

the case with the previous interim reports, but they are focused on sustainability and project outputs (See the Table below).

Table 5 Recommendations

Number	Name of recommendation	Description	Context of recommendation (link to the findings and conclusions)
1)	Maintain usability of PPUČ project outputs	The sustainability of the PPUČ project outputs has been ensured. To make sure the outputs will be actively used by the target groups, the evaluator recommends focusing on the activities which encourage further use of the outputs (such as PR). Such activities will be under the responsibility of NPI ČR / MŠMT.	Link to the findings obtained in C.1.2, C.1.6, C.1.7 and C.1.8.
2)	High-quality project team	The quality of individual implementation team members has been verified during the implementation of the PPUČ project. It would be desirable to retain them for other activities – either for another project or for the regular work for NPI ČR /MŠMT.	Link to the findings obtained from C.1.2.
3)	Maintenance and development of the community of active schools / teachers	A community of schools and pedagogical workers sharing similar ideas and enthusiasm for the development of literacy was established under the project implementation. The schools are expected to continue cooperation which will need support and development from MŠMT / NPI ČR.	Link to the findings obtained from C.4.
4)	Setting up cooperation between the NPI ČR projects	Cooperation between projects could be better organised in the future so that they better complement each other and interact – already at the stage of preparing an application in the way that the activities can build on each other.	Link to the findings obtained from C.3.

6 Evaluation of incorporated recommendations from the previous report

The evaluation of the incorporated recommendations from the previous report is shown in the table below.

Table 6 Evaluation of incorporated recommendations from the IR 1 IR 2 and IR	3
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Number	Name of recommendation	Evaluation of incorporation
1)	Improve comprehensibility of conceptual outputs for teachers	No survey conducted under IR 4 revealed any incomprehensible concept outputs for teachers, which shows that the recommendation has been incorporated. Greater comprehensibility for practice can also result from the growing experience in the PPUČ project and reviewed project outputs. On the other hand, users of the outputs are gradually improving their expertise so professional texts are no longer a problem for them.
2)	Project's optional activities	The Beneficiary accepted the recommendations and limited optional project activities during its implementation.
3)	Greater involvement of university students in the project	The Beneficiary accepted the recommendations and encouraged the involvement of this target group in the project activities, especially under IR 3 and IR 4 (see the focus of the communities of practice, magazine of activities developed by teaching students,)
4)	Higher number of addressed education workers	Under IR 1, the PPUČ project implementation team and some respondents stated that dissemination of literacy among education workers is sometimes more complicated, i.e., it is influenced by the individual interest of teachers, the attitude of the school management and the different pace of each school, affecting the transfer of knowledge in the field of literacy. Every school is active in a different way and the transfer of information and materials is provided particularly by the activity of a school coordinator (in the case of pilot schools) and influenced by teachers' interest. As may be observed under IR 3, such statements or opinions have no longer been mentioned by the representatives of the addressed schools. The observation has also been confirmed under IR 4.
5)	Literacy exceeding the branch domain	In IR 1, school representatives and some representatives of other target groups perceived individual literacy as branch literacy, i.e., that mathematical literacy is a domain of mathematics, etc. The PPUČ implementation team carries out all its PR activities (general character of the Gramotnosti.pro campaign) based on this recommendation. It should be noted that under IR 3, such statements or opinions have no longer been mentioned by the representatives of the addressed schools.

Number	Name of recommendation	Evaluation of incorporation
		As can be observed, representatives of the addressed schools have not mentioned such statements or opinions under IR 3 at all. The observation has also been confirmed in IR 4.
6)	Coordination of cooperation between projects by the MŠMT	Cooperation between the projects was positively influenced by the merger between NÚV and NIDV to form the new institution - NPI ČR. It involves projects implemented directly by NPI ČR.
7)	Implementation of measures leading to a higher visit rate of the EMA portal and Učitel21 profile	The measures proposed and carried out by the Beneficiary to strengthen the use of the project outputs were quite successful. Currently, the Profil Učitel 21 instrument is being increasingly used. The measures are being taken for the EMA portal as well. EMA has been integrated into the new home page of the Methodology Portal RVP.CZ since September 2021. It should be noted however that most teachers do not consider self- education as being an integral part of their work, which is perceived as a significant general limit. Accordingly, such instruments can be probably used only by active teachers who represent units of tens of percent.

7 List of sources and literature

Application for a grant for the PPUČ project, including all appendices and applications for change Reports on the implementation of the project

Data and information about the project in MS2014+

Information about project activities on the website and in other presentations by the implementer (NPI $\check{C}R$)

Outputs from the internal evaluation of the project

Supplemental documentation from the implementer (NPI ČR)

Call in OP RDE System Projects I

LIST OF ABBREVIATIONS

CATI	Method of data collection – Computer Assisted Telephone Interviewing
CAWI	Method of data collection – Computer Assisted Web Interviewing
СР	Travel order
TG	Target group
EQ	Evaluation question
GDI	Group Depth Interview
IDI	Individual Depth Interview
КА	Key Activity in the Project
MŠMT	Ministry of Education, Youth and Sport
Ν	Number
NAÚ	National Accreditation Bureau for Higher Education
NIDV	National Institute for Further Education
NPI ČR	National Institute for Education of the Czech Republic (institute for further training of
	education workers)
NÚV	National Institute for Education
OP RDE	Operational Programme Research, Development and Education
IR	Interim Report
PA	Priority Axis
PP	Education worker
PPUČ	Support of Teacher's Work
PE	Pre-school education
RKG	Regional Literacy coordinator (role in the project, DPČ personnel)
MA	Managing authority
СР	Communities of practice
ŠKG	School literacy coordinator (role in the project, DPP worker)
ZoR	Implementation report
PE	Primary education

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