School librarian and guided inquiry projects

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Abstract: School librarian's concern is to raise information and reading literacy and in this way contribute to common goal — learning to learn. Research finds out that project based on inquiry activities are successful in this context. They present enrichment for (gifted) pupils and school community. Such projects are led by flexible team of professionals (at least three, better four or more). Among them are the teacher, whose course is connected to a project theme, school librarian, ICT teacher and another professional connected with quality for project final products (language teacher, art teacher etc.). School librarian can take an initiative and coordinates such cooperative work. Pupils also gain communication skills and improve their social intelligence, and there is a lot of cooperation and adjustment in the work process. Good results are evident by higher level of information literacy which is shown by pupils' achievements at competitions, inclusions of project presentations to different local events and connections established through project activities with different partners and involving different stakeholders. A case study of one such project is presented.

Keywords: Information literacy, guided inquiry, holistic approach, project work, gifted pupils

Introduction

Information literacy is a modern concept in LIS, but also in progress and is a complex category. One of the ways to empower pupils with more complex levels of information literacy is through work with gifted pupils, because the effective provision of programs for gifted and talented pupils is not only important for gifted pupils but also for the school in general as a driver of its general improvement and for the nation as a force for its prosperity. The results of effective education is a source for increasing opportunities for all (Freeman &al, 2010), and the provision of programs for gifted pupils is an important component of personalization and equal opportunity in schools. Such programs are more successful when a large number of teachers recognize their responsibility in this area. School librarians can contribute their share, and fulfill his/her mission through project work in collaboration with other teaching professionals. Although there are different definitions about what "gifted" means and much research needs to be done on the phenomenon, the goal of schools is clear: the emphasis should be on providing an environment where gifted and talented pupils can develop their potential.

Gift itself does not guarantee to a higher level of informational literacy; pupils must learn and experience (example the use of founded information for creative writing). They can then more and more successfully use this competence in practical situations. Diversity of information sources, especially those on the internet, presents a special challenge in this process. Guided inquiry is recognised as beneficial approach to teaching and learning and an opportunity for school librarian to create meaningful, inquiry based tasks and assessments (Gordon, 2010; Kuhltau, 2010). The theme can be developed from one or more school subjects. This kind of guidance requires a deep understanding of how learners experience the inquiry process and about how librarians and teachers can facilitate learning through inquiry. It is the way for school librarians and other teachers to teach children a model of the research process and in guiding them through inquiry-based learning activities.

Inquiry based project work

There is a lot of evidence that pupils lack information literacy skills, but there is less evidence about effective pedagogical approach, that would develop these skills (Chu&all, 2011). The existing evidence based research literature shows how effective and powerful collaborative approach is. Practitioners develop models through their reflection and researching. The models are used by other practitioners in different circumstances, so models are modified and adjusted to different situations. Constant reflection of collaborative work makes models sustainable and widely applicable (Yukawa, Harada, 2009). The nature of collaboration between teachers and school librarian is of different intensity and complexity (Montiel-Overall,2005, 2010; Montiel-Overall&Grimes, 2013), but when participants think about their task deeply and they through communication express their task commitment, then projects come to successful ending.

Most competences being developed through the project are not concern (or responsibility) of one particular teacher, but of everyone involved – also a school librarian. Here school librarians have a chance to take an active teaching role in working with teaching colleagues, because an inquiry model is difficult to implement by oneself (Oberg, 2004).

Gifted pupils should learn to cope with feelings of uncertainty (Goodhew, 2009). How can they learn this if not through teamwork in which their mentors also confront similar feelings? Pupils appreciate librarians' (as well as other mentors') help not only in finding information but especially in learning how to analyze and synthesize information to express ideas in their own words (Todd & Kuhlthau, 2005). Pupils cannot be left alone after finding the information: the librarian can guide them toward knowledge creation, knowledge dissemination, knowledge use, and the development of information values.

This article presents a case study of project assignment at a Slovenian primary school. The theme is preserving the cultural and natural heritage of the local community. The project is also a contribution to the educational aims of the school year plan and strategic school plan (school's vision). Project assignments provide pupils (and mentors) opportunities for emotional and social experiences throughout the school year: the dynamics of relationships in team working, experience in public presentations, persistence at work, and a healthy measure of competitiveness among pupils. After successful work they will receive a recognition award. Motivation for this kind of work is not self-evident. We should constantly take care of it. Interests and feelings are psychological energy and essentially influence learning process and quality of knowledge. We want to achieve that pupils see the meaning of their learning activities, so to be more motivated.

One of the ways to achieve this is a project work. This process is very complex, so a school librarian and other teachers join and guide children as a team. One of the models, which describe the roles precisely, was implied and researched in Hong Kong (Chu et al, 2008). Pupils were led by four professionals: the teacher of the project theme, school librarian, ICT (information communication technology) teacher and language teacher. This model was taken into account, when the project, introduced here, was planned. The circumstances were different. In Hong Kong the model was implied and tested widely. Here a school librarian saw the opportunity to test the model on project work, which meant an enrichment activity for the school. In this kind of projects teachers want to find ways to support asking meaningful questions related to actual life. There is enough space for different kinds of pupils' gifts and talents in the whole process lasting all school year.

The other study presented how teachers and librarians learn to collaborate on inquiry-based science lessons that link science, information literacy, and structured English immersion

standards for Latino elementary students (Montiel-Overall, Kim, 2013). This American study has also pointed on teachers' lack of awareness of librarians' role as equal partners.

Procedure

The projects, discussed in this paper, are embedded in wider frames. They were prepared for national competition of research assignments for primary schools and National touristic festival called Tourism and its initiatives. Evaluation of the work and results were done in the form of qualitative and longitudinal study. Interviews with collaborating teachers and the head teacher were conducted, which were triangulated by focus group with pupils. As these projects are not obligatory for the schools and are meant as an enrichment, but voluntary activity, they were good opportunity for realisation of program for gifted pupils. Also teachers participated in this worky voluntary and were more intrinsically motivated.

Endangered Biodiversity of Europe

Slovenia is a small country in which tourism is important economic force. For this reason, Tourism organisations join with National school authorities to invite open applications for new and exciting tourism campaigns. These campaigns are presented every year at a competition festival called »Tourism and its Initiatives«. All primary schools are invited to join and participation is voluntary.

At Primary School Dr. Janez Mencinger there is a tradition of projects in which the theme is preserving cultural and natural heritage of the local community Bohini in order to make all the findings interesting for sustainable tourism. Project outcomes were presented at touristic festivals and other local events. This kind of opportunities connected school to other organisations. The initiative was taken by a school librarian, who saw an opportunity to empower pupils and other school community with information literacy. The theme of the festival is different every year, but it is wide enough that every school can find its own specific topic. After many realised projects, some of them were introduced in research literatury (Repinc&Južnič, 2013, 2010), the school decided to participate in an international project: in EU Comenius project called School multilateral projects. Such projects are financed by EU funds. The coordinator was the school librarian and the team of professionals included also the biology teacher, the ICT teacher and the art teacher. Five countries (Portugal, Turkey, Check Republic, Finland and Slovenia) collaborated in this project with the aim to raise the awareness of ecological questions. There were one week long meetings of pupils and teachers from all five countries in each country. They took place in two school years: from 2011 to 2013. The school prepared staying in »protected« nature for two days. Pupils gathered material, which was later interpreted and outcomes were presented in exhibitions and other public events. Final outcome was the Calendar 2014, where some nice photos and impressions from all events can be seen. There were other common and local outcomes, too. Some outcomes and actions of this kind are: school presentations at different occasions: Earth Day, Europe day, presentations of school and country for pupils and teachers from other countries, articles in local paper, research preparation for long journeys to other countries. The core educational work was done by the four professionals mentioned above, but as the project was complex, also other teachers were involved in the whole process (http://www.osnovna-sola-bohinj.si/index.php/postavka-commenius). Main educators' role was to search and provide opportunities for teaching information literacy in context of the project theme, ICT use for communication and creative modern presentation. The pupils and the teachers learned a lot: they improved different competences: learning about the theme, raising information literacy, improving language skills, knowing different cultures, managing time, skills how to promote school...

Findings

Projects offer meaningful learning experiences for whole school community. Good experiences and results attract also head teacher's attention. So support from school management is increasing from year to year. Being recognised means also that every year more and more teachers are becoming supportive to this kind of work. Children get opportunity to compete on state level. They can present their learning outcomes to others, which is motivating for further work. They can communicate with other pupils from different schools from different parts of the world. Information literacy is important in all phases of the process, not only in the beginning. When looking for opportunities to present the results of one school year's work, one has to be information literate: to find and judge and use the appropriate information. As the theme is connected to the home place, there is always a lot of space for thinking about further sustainable development of it. Pupils are becoming competent to think about their place critically and creatively. Teachers are satisfied that they do not evaluate pupils with numbers. The reword for project work is ranking on competition and recognition on different events and strengthening the bonds with other institutions. So there is more space for intrinsic motivation. Teachers had a chance to use and teach also other competencies they have, not just those connected strictly to the subject they teach. Research literature about project work and connected areas (team work, information iteracy, learning opportunities, models) is very stimulating, helpfull especially to the project leader or coordinator.

Evaluation and discussion

From the school librarian's point of view the most important goal is improving information literacy gained mostly in the beginning part, when inquiry based activities are important. It means teaching children a model of research process and guiding them through it. Here children formulate questions, investigate widely and then build new understandings, meanings and knowledge. That knowledge is new to the children and may be used to answer a question, to develop a solution, or to support a position or point of view. The knowledge is presented to others and may result in some sort of action (Oberg, 2004). The emphasise (from a librarian's point of view) is on thinking about information and using information within a problem-solving perspective. Learning from information is not a routine or standardized task, and it involves the affective as well as the cognitive domains. It is embedded into learning about concrete theme, which in this case was connected to science and biology. Also teachers of the subjects teach pupils how to investigate and research and here both educators try to collaborate to achieve learning goals (Subramaniam&al, 2013).

Through the process children develop emotionally and improve their social intelligence. They need to be helped to recognize as natural the waves of optimism and frustration that accompany complex learning (Kuhltau, 2004). They are becoming aware of phenomena like library anxiety and information overload. Children experience different feelings, thoughts, and actions at each phase of the project. This calls for different kinds of teachers and school librarian's (mentor) involvement – support. And in the end when a librarian and other teachers talk to children, they can help them see things from new perspective, make connections between previous and new knowledge, and see patterns of their learning.

It is very welcome that the assignment is a part of a bigger project. So it has more chances to be presented in different situations. Pupils are more motivated this way. High achievement is only reached when the right opportunities are in place and when pupils are confident and motivated enough to respond to them. Successful presentations are strong motivation for similar work in the next school year. Analysis of focus groups, done with involved gifted

children, shows that they want to be part of similar activity also in the next opportunity. It was most difficult to motivate children the first year, when we did not have necessary experiences.

Not only involved gifted pupils benefit from the project. Presentations at school (and elsewhere) are interesting and educational also for other pupils. Some of them identify with this kind of work; they want to read the whole assignment and they may want to take an active role at school project the following year.

Managing time is an important competence gained through the project. More time is needed in early stages of the process for exploration, for building content knowledge, for developing a personal interpretation. Another thing is to be persistent at work; so that the whole activity is brought to a meaningful conclusion.

In the final part more artistic dimensions of children's creativity come to forefront. Their creations attract attention of their school mates, commissions at competitions, visitors of exhibitions, tourists...

Teachers learn from each other and also from pupils a lot. Here also the school librarian has the opportunity to show what is meant by information literacy; it can be said that he himself is improving in this competence through the process.

The whole activity connects school with local and also distant environment. This communication is becoming deeper every year.

Conclusion

Evaluation of the work is very important. Research findings provide further motivation, guidance, and input to better future work (Južnič, Urbanija, 2003).

This kind of project is a good opportunity for a school librarian to take an active role with other teachers in school, because an inquiry model is difficult to implement fully. There is more space for creative and imaginative learning experiences; teachers (and a librarian) share norms and values that promote children's learning. The aim is to develop children's abilities to monitor and adjust their own performance and to become more self-reliant learners; to learn to cope with problems that may not have a clear solution, to deal with challenges to understandings and to shape their search for solutions, now and in the future.

As already said the school librarian's motive to take part in a project like the presented one is also promoting informational literacy. Information literacy is a focus of many studies nowadays. It concerns a school librarian and all other teachers. The benefits of teaching for informational literacy extend far beyond constructing knowledge and developing strategies for information seeking and use. Rather, pupils seem to develop personally and socially on a wide range of fronts that affect ability to benefit from responsive learning environments (Moore, 2005). Implementing Inquiry activities is recognised wider, in many areas of human (social) activities. »Complexity theorists believe that what defines successful leaders in situations of great complexity is not the quality of decisiveness, but the quality of inquiry« (Kania, J, Kramer, M., 2013). »Collective impact efforts, however, sharpen a community's collective vision. Having a shared understanding of the problem and an appropriately framed common agenda increases the likelihood that communities will see relevant opportunities as they emerge. The novelty of working with people from different sectors brings a fresh perspective that encourages creativity and intensifies effort« (ibid). This paper tried to show one way of how a school librarian has given its share to the community's vision. Success depends on understanding of collaboration in team work. If there is intensive collaboration in

one's primary institution, then there are fewer difficulties to further collaboration outside of school.

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