

## **INNOVATION PROJECTS AS AN ELEMENT OF SLOVENIAN SCHOOL PRACTICE MODERNISATION**

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### **Abstract**

Innovation projects are one of the most perspective forms of modernising school practice in Slovenia. Their objective is: to enrich practice with findings from pedagogical theory, to develop an interrupted process of monitoring and reflection on one's own practice, to involve all factors of school classes into the actualisation of training and education, to further specialise in consults, and above all for school children to disseminate both findings and new ideas into new interest areas. In this article we will introduce and present our developed model for innovative school projects in Slovenia.

### **KEY WORDS**

Innovation – project work - action research – participation.

### **INTRODUCTION**

In 1996 Slovenia introduced its new school legislation, and soon thereafter started to reform the school curriculum content. Considering the nature of work linked with the realisation of both the vision and strategic objectives of the school authorities at that time, we can rightfully conclude that ten years ago the »top down« approach was very much emphasised. Nowadays a different development paradigm is in the foreground which focuses on the development and provision of quality in the area of education and training. Thus, allowing schools and teachers to have the capability of making autonomous expert decisions in situations hardly envisaged in advance. History has taught us that new ideas, or novelties, cannot simply be transferred or copied from one environment to another. Rather, we need different and alternative mechanisms for conveying and adopting these novelties which will work in conjunction with tradition and motivation, which are also very important factors. Externally proposed novelties, either offered or enforced, are far more difficult to establish than to maintain in the given new environment. The innovative project process means adapting old approaches and ideas into something new. History has also taught us that you cannot jump the queue without feeling certain consequences. A justified novelty needs time to grow and mature together with the previously established roots. If the union between the old ideas and the new is weak, then the new novelty quickly separates from the old one. The new novel component will accommodate itself in the manner best suited, if its sense and eligibility are confirmed. To achieve a natural and desired partnership between the old (ideas and the new, we need to include the cultural aspect. This offers a possibility of providing the necessary link that maintains the bond between the two ideas. This has been confirmed by Piaget's constructivist theory of equilibration and balance which is based on the assimilation and accommodation of knowledge. If we want to make new knowledge more useful, we have to have this new knowledge firmly established so that certain creative elements do not stir loose prior knowledge, and that creativity can provide a new interpretation or novelty.

The introduction to changes, exclusively according to the strategy of the »top down« model, does not show good results any more. It is important that educational institutions and individuals working in these institutions feel certain changes as being necessary, and decide for these desired changes based on their personal need for change. The most efficient way to merge methods of introducing change into a unified process seems to be through practice. External support and reassurance is a strong contributor to perspective changes, and this encouragement should come from the national level which should share a similar future vision. All unified objectives for the future development of education and training should be derived and supported from this level. This has been supported by many authors such as Fullan, 1991, Elliot, 1991, Darling-Hammond, 1995, and Požarnik, 2005. Effective and sustainable changes in schools demand a change in the organisation's culture. Schools of the future should therefore develop towards the notion as being a learning community. In this type of organisation the culture is more open, acceptable, tolerant, encouraging, co-operative and process oriented, which is based on inner motivation. Furthermore, the greatest likelihood for successful changes is hidden in the fact that novel initiatives come from the place of its implementation. It is probable that schools will be more successful if they decide on desired changes on their own, when deemed necessary. The core of an organisation's culture is based in the central views and beliefs of its constituents who determine how things are perceived and experienced, including their conduct. Beliefs not only influence the teachers' actions and reactions at school, but these beliefs also direct teachers' experiences in decision making and helps to co-determine how teachers interpret given circumstances. When a teacher becomes a thinking practitioner, then can the teacher surpass his content oriented thinking, techniques and teaching method. Attention is directed towards factors which decisively influence the teachers' entire thinking and decision making as well as their behaviour in various circumstances in the class.

The majority of alterations which require a change in both views and beliefs happen through the activity of institution members with notably more success when working in smaller groups. It is widely known that one of the most pleasurable kinds of human activity is in line with one's feelings and emotions which provide energy, only when an individual is capable of this course of action (Ihan, 2005). If teachers do not learn how to benefit from pleasure-giving situations, they will more likely seek rational for certain problems outside their school environment and feel badly about it. There is a reduced teacher satisfaction when providing an infinite number of choices along with the created pressure from »top down«. This blurs the basic truth that a human cannot passively become entirely satisfied externally, but that happiness is born from one's own inner activity.

The more demanding and diverse educational objectives require a shift in the teachers' role: in their thinking, knowledge, behaviour, and attitudes - something we more or less we all know and acknowledge. It can become rather embarrassing when a teacher wants to solidify their new role of at work, implementing this new role in their daily lessons which involve pupils. Here they meet a number of hindrances which are too slow, and that real changes are only too rare (Požarnik, 2005). Scientific literature often get us to think, does a teacher really know how to create: an atmosphere for successful learning, a convenient "learning ecology" where we could create an amiable group climate and trust, gratifying relationships as well as encouraging assignments? Here we can also include suitable changes in social structures with which the education process is carried out (pair work, small groups, etc.), including having resources to adequate equipment and information. When teachers manage to create this kind of learning »environment« as mentioned above, we have more sound and positive results. We are not nearly as often aware of the fact that schools and teachers also need space for their

personal activity and growth; a space where they can try out new ideas, follow this new growth, a place where teachers and schools can implement something new and work with their colleagues, pupils within the school environment. It then becomes a question of how truly independent and encouraging is the space provided, and to what extent is this space limited by various circumstances such as: regulations, curricula, subject borderlines, standards of knowledge, expectations of parents and pupils, all marked out by tradition and fortified habits of colleagues in teachers' staff room.

## **PROJECT AS AN ENCOURAGEMENT TO TEACHERS' CREATIVITY**

From our early childhood to the »third life cycle«, we usually take on larger and/or smaller projects both in our personal and professional lives. This idea we have contrived and are committed to carrying out, and at the same time we look for appropriate means and partners. Are we ready for a long term activity leading to objectives, which is important for us and for our visions if we want it to become a reality, and for which we are prepared to face diverse obstacles? Eventually we will be satisfied, but only by taking on new projects which are successful. It is not surprising that teachers are ready to invest a lot of their creative energies into projects which are attractive and reasonable. Projects represent an opportunity to develop inner motivation and perhaps also more sustainable interests. Such projects represent a welcome change to the daily mundane school routine which is characterised by the number of lessons and subjects taught and imposed upon by external governing bodies, which are not always fully thought out nor connected with educational objectives. During lesson time, the teacher has to constantly redirect his or her attention from one subject matter to another. And towards the end of the assessment period most of the lesson is geared to concentrating almost exclusively on marks and assessments, whereas interests, relationships and cooperation remain in the background.

A typical teacher's routine is no different in our country than abroad, and what we call extraordinary professional isolation is in the process of being phased out and implemented with team work. Usually teachers have too few chances to share their ideas, uncertainties and achievements with others. Teachers who collaborate with other teachers and pupils in planning thematic projects such as "forestry" or "cultural educational path", have the opportunity to present: their home town, their experiences and observations of cultural traditions and the richness of their natural environment, new ways of vocational orientations, various forms of improvement the coexistence among us and nature, the encouragement of mental health and different ways in spending their free-time creatively. Thus the teacher has the possibility to extend this creativity and let it flourish among his pupils. Teachers seldom write up reports as to how pupils start to »blossom« within project work: pupils who are almost never in the foreground or who are not strong learners are generally more easily left out of this process.

Projects can offer a »free« space to schools and teachers, since teachers and schools can select and plan innovative projects freely and completely on their own implementing these projects together with other colleagues and pupils with no time restrictions. Project members can show their conclusive findings to others when the project finishes, and this way »celebrate« the fruits of their labour. There is also the possibility in helping to disseminate their projects. In Slovenian schools, these so called innovative and development projects have already been cultivated; however, it was not done in a spontaneous way and they were much less organised.

Over the years this problem has evolved and has become more systematically organised, so that now Innovative Projects have come to represent one of the most important forms of modernising school practice.

## **PRESENTATION OF THE INNOVATION PROJECT SYSTEM IN SLOVENIA**

The first legal basis defining the problem of modernising school practice through projects emerged in 1997. Later these projects were further developed and complemented, so that today we can consider Innovative Projects to be an important measure in the system for improving school practice. The national conference held in Ljubljana in May 2005 adopted some important resolutions which were obligatory for organisers and for the co-financing of these innovative and development projects. This included the renewed importance of modernising education and training with both models »bottom up« and »top down«. One of the concluding resolutions was to link institutions which work in encouraging school development and financing. It was further agreed that we create a database of evaluators who would not only evaluate the quality of modernisation and assess achievements, but also help interested project participants in the preliminary phase in obtaining adequate methodological approaches. The analysis for innovative achievements so far has pointed to the unexploited use of various research methodologies, which would aid researchers in their own practice as to where the gaps were in the process in modernising education and training.

The essential purpose of directing and encouraging the flow of Innovation Projects is:

- to modernise school practice and to enrich it by acknowledging and using both domestic and foreign pedagogical theory,
- to develop a continuous process of monitoring and reflecting on our own practice through the use of different methodologies,
- to include all lesson factors, and in particular pupils into the actualisation of education and training,
- to disseminate novel findings into a new interest environments,
- to specialise in working with consultants, and with particular focus on how to provide more useful and actual feed back sessions.

The national Education Institute prepares a public call for projects each year in which the Institution defines thematic areas. Among these selected project themes, schools, as responsible organisations for the project implementation, select the themes of interest and prepare the projects completely on their own. These projects can last for as long as one year or even longer. School teachers and external experts work alongside one another in the selected and accepted Innovative Projects, which also happen to be financially supported. The National Education Institute provides advisors, who act as consultants to kindergartens and schools and who offer their expert assistance in the preparation and implementation of projects; at the same time these advisors evaluate the novelties. Education and training organisations define a novelty as a measure where they try to rid imperfections and improve the quality and condition of Innovative Projects. The proposed novelties are ranged according to taxonomic levels (table 1) and show the direction of novelty development. Objectives, expected results and the path in which to reach the expected novelty can be more easily defined. The development level taxonomy can be helpful to consultants and evaluators of novelties, since it helps them to rank the novel proposals received. By ranking them we can determine a more adequate form and method in searching for the most appropriate answer to the proposed research question which is isolated according to the objective and the expected novelty. In this way a consultant is able to carry out a planned, carefully premeditated and

supportive systematic consultation where spontaneity of novel development and improvisation are not limited.

**Table 1: Levels of novelty development**

Level No.	Determination of Each Level	Project activity	Description of Project Activity
1st level	Personal Development of Expert or Pupil	To improve expert knowledge of an individual or group.	The personal development level of expert workers or pupils is subject to the capacity in the selection and realisation of chosen objectives. The objectives have to be in line with interests, capabilities, values and prior knowledge of the individual involved. If we want to teach an expert how to educate a pupil to independently define objectives for personal development for the lifelong learning environment, the expert has to learn these objectives by first.
2nd level	Introduction of »Best Practice«	To inform, use and evaluate cases of »best practice« in a new interest environment.	Introducing cases of »best practice« will be a new procedure for some, while others already know it as a verified didactic method. Project groups working with cases of »best practice« design plans and methods for learning novelties, and at the same time plan, implement and evaluate novelties in their environment.
3rd level	Development of »Best Practice«	To develop and improve cases of »best practice«.	Verifying cases of »best practice«, which have already been tested earlier, are now a part in creating an even more perfect form of the novelty. A project group deals mostly with planning the improvements including the evaluation of success in eliminating weak points during the development »best practice« cases.
4th level	Finding Novelties & Invention.	To discover, create a new education and training element, or to create a new integrity by combining the already existing didactic elements.	A project group looks for, verifies and evaluates new didactic elements new combinations of these elements. The Sternberg taxonomy of creative performance can be used for this purpose.
5th level	Didactic Transformation and Implementation of the	To transform the entire education-training programme model	When an educational institution uncovers that a major part of a didactic element was remodelled, including the philosophy of classes and their extra activities, or when teaching factors in an educational organisation are in strife between the learning needs

	Education and Training Programme.	implemented in each educational institution.	and teaching system (curative), then a project group with the educational institution's leadership plans a modification in the implementation of the actual model regarding classes and their extra activities.
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**Source: Komljanc (2004).** Innovation projects in educational organisations in cooperation with the Slovenian Education Institute and the Ministry of Education and Sport. Ljubljana.

#### Personal development of an expert worker and/or pupil

The personal development level of an expert worker or pupil depends on the capacity of selecting and realising selected objectives. Those objectives have to be in accordance with interests, capabilities, values, and prior knowledge of the individual involved. If pupils are not able to learn the empirically selected objectives and balance them with the attained objectives, they will not be capable of optimizing personal talents or knowledge at higher difficulty levels. In the education and training process, it is important to teach pupils not only to acquire the pre-selected obligatory objectives of a particular education programme, but it is also necessary to teach them to independently determine their own objectives in developing their future careers all for the process of life long learning.

Pupils independently receive and give information needed in order to realise their objectives; they evaluate them and describe their progress on the basis of the diagnosis they perform by themselves and with the help of their teachers-consultants or critical colleagues. Learning in this case is concentrated on the achievement of their own action (Bandura 1991, Moon 2003). It is a kind of a humane control for reasons that the subjects participate, they believe in their own capabilities which have a positive influence on the difficulty in defining learning objectives, they become more prudent, acquire teaching and learning strategies and the power for inspiration and innovation (Sternberg 1999).

#### Introduction to »Best Practices«

A project group or an institution which decides on introducing best practices has to first be acquainted in experiencing all areas pertaining to this subject matter, including the theoretical side when determining cases of best practice. In this way the group finds out an example of a genuine best practice, will therefore know more about the objectives and where the advantages and weak points are within the framework. When this phase is over, the group can then evaluate probable effects in practice. Project method and action research method are both important for encouraging the process of introducing cases of best practice and for evaluating the effects of best practice.

#### Development of »best practice«

Development of best practice is oriented towards the eventual elimination of weak points in Innovative Projects. The objective of a project team is to analyse the education and training process with the intent in identifying the actual model regarding lesson implementation and extra school activities while paying attention to the weak points. The identified weak points represent challenges which can then be compared and linked among themselves. In this way the weak points can be observed from many different perspectives which will in turn increase the value of evaluation. One essential thing to note is in the way the circulation of analyses

are carried out - reflections and influences repeat; yet, there are even more precise goals which lead to the root of the problem. So we can quickly eliminate causes which lead us to making mistakes. Here a group elaborates and verifies the possibilities in implementing the teaching process from the viewpoint of learning and teaching.

### Discovering Novelties & Invention

In order to discover a new pedagogical element or the combination of didactic components, it is necessary to have a large amount of diverse specialised knowledge right from the start. It is equally necessary to have experience in improvising with regard to searching for different creative models and adequate assessment, and in particular to influencing self-assessment. To invent means to create a novelty through contemplating, and the different creative taxonomies help us by allowing space for intuition. An inventor needs different critical colleagues and observers, including people who are willing to try out his novelties in the new and different environments, and with different target groups which would provide the author both spontaneous and diverse perspectives on the experiences of the novelty's impact. An inventor needs help when developing his inner speech and dialogue when working with different participants in education and training and with those who may use his novelty in the future. We can connect project groups on these basic fundamental principles.

### Didactic Transformation and Implementation of the Education and Training Programme

Whenever an education and training institution or the majority of its expert and scientific workers decide on transforming or improving the education and training model, it begins with the novelty development at the fifth level. An institution has the option of starting their project at that particular level; however, it would most than likely happen that some project participants would have to go through the first level, some through the second or third level, whereas some would try the fourth level of novelty development. The fifth level is very complex and within the group there may be dynamic diversity concerning individual or sub-group development. It is quite common for all project participants to support the modernisation and implementation of the existing education model. A foremost question exists: how to accommodate and balance relationships between instructional factors? A group may be faced with a didactic problem of violating or even bypassing the transmissive model (transfer of information from one factor to another) to the transformative model (to carry out a transfiguration – transformation of actual knowledge into referential knowledge) of instructional implementation. For the transformative model we need to change the mechanisms of both teaching and learning processes. The path in the initial phase is considered quite demanding and rather long lasting for many; therefore, it is necessary to take great care along the way in the renewal and maintenance of the transformers' will. A project group should be required to know at all times what the reference objective and expected achievement are, including to whom and the place where they can renew their energy in developing novelties. The school leadership plays an important role as a supporter within this group, while the external support staff has to act as a consultant supplying knowledge and experience.

The main aim in ranking the proposed novelties is to provide ample choice of methods in planning, implementing and evaluating projects as well as incorporating counselling. It is possible to have transfers among the Innovative Project levels: the dynamics and the novelty development process depend on the needs and expectations of the project group members and the leadership of the educational institutions. Keeping in line with the determined novelty

level, it is possible to suggest to project facilitators any changes that may have a more qualitative modernisation towards the education and training tradition. The introduction of novelties is carried out with the help of action research method (Elliot 1991, Marsh 2004), with qualified project leaders who are available throughout the entire project period, even before the projects take off. The Slovenian National Education Institute keeps a register of education and training institutions which are in the process of modernising elements and programmes in education and training, and at the same time proposes yearly measures to the General Education Council of Experts and to the Education Minister.

The findings from the Innovative Projects are eventually shown in a collection of papers which takes place at a yearly conference. Schools and teachers participating in these projects have the opportunity to show their work and exchange experiences with their colleagues from other schools. Partners in projects which last for at least one year are given an award for their work by receiving a certain number of points which they can use towards promotional titles such as mentor, adviser, or councillor.

### **What have the findings shown so far**

Through our monitoring, we have uncovered that there is an increased interest in the number of schools participating in Innovative Projects each year: 111 kindergartens, elementary and secondary schools in the 2005/6 academic year alone – 300 percent in the past three years. Approximately 10 percent of the participating schools delved into modernising professional qualification for employees in education and training, while 28 percent devoted themselves towards the work of the class teacher and class community. The greatest majority, at 62 percent, selected projects by which they modernised and developed ways to a more qualitative learning and teaching.

Innovative Projects and research work linked with these Innovative Projects enable teachers and pupils to detect problems independently, to define assignments and solve them, and to assess results and participate in searching for the most up to date solutions surrounding these problems. Pedagogical communication is one of the fundamental measures of quality development, as it provides an encouraging climate full of trust. Teachers use a number of various approaches which include understanding various needs, interests, motives, cultural aspects and pupils' habits. Action research helps everyone involved in projects to enlighten the complexity of both teaching and learning.

Our findings obtained in the monitoring process of Innovation Projects have validated that the use of imaginative strategies, with respect to teaching and learning, provide a greater possibility in successfully motivating teachers and pupils while influencing the creation of an individual's »inner strength«. Here, the underlined emphasis is on particular components which are connected to certain information and questions pertaining to individual experts and to social and emotional aspects. According to our monitoring, the project approach encourages the key processes for life long learning of teachers and pupils. One of our questions is whether to include in Innovative Projects formal and informal methods of learning concerning different circumstances, where learning is based on the construction and elaboration of information, experiences, understanding and competencies.

Based on our findings and our concluding reports which are prepared by teachers, facilitators and partners, Innovative Projects are more qualitative each year. Project participants are providing a clearer determined theoretical framework, research question which are more



apparent and exhibit defined objectives, and there is considerable progress in the way data is collected and interpreted. This is particularly accurate for those schools and individuals who have been modernising school practice through Innovation Projects for the past several years. We can honestly say that for those involved project participants, they accept changes and make personal decisions according to their personal need for change for personal and profession development.

In the future more attention will have to be paid in determining the exact nature of a headmaster's participation as a formal leader and as a facilitator in Innovative Projects, or as a content leader in the modernisation of school practice. It will also be necessary to continue in providing expert specialists and to further qualifying our pedagogical advisers and consultants.

## CONCLUSION

In the past, innovative pedagogical practice was directed towards searching for forms and methods for transferring information and for obtaining results. The assignments and expectations that teachers had to execute, regarding the particular »formal curriculum«, have nowadays been subdued. Today we have priority approaches which communicate to schools and teachers to help pupils acquire practical knowledge and develop capacities in problem solving and implementing team cooperation. Innovation Projects are among one of the most effective ways in achieving these objectives. Not only are Innovative Projects firmly established in Slovenia, they are becoming even more a part in the systematically organised and carefully planned work towards the modernisation of education and training. By using imaginative strategies in projects along with the help of action research, it is possible to motivate teachers and pupils to work and influence building on their »inner strength«, which has an impact on the entire working culture of schools.

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