CURRICULUM DEVELOPMENT CONSIDERING FORMAL, NON-FORMAL AND INFORMAL EDUCATION

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Abstract. *Curriculum development for general comprehensive and also vocational schools needs consideration of the context, in which availability of non-formal and informal education (extracurricular activities=EA) plays an important role forming a meaningful whole with formal education. This pilot study attempted to find out what motivates students (aged 13–15) for participation and teachers organizing/supervising these activities. The methods used for data collection were questionnaires for students (n=258), focus groups of students (n=4), and interviews with teachers (n=8) which provided preliminary data for comprehension of the meaning of EA. The data were processed statistically and by content analysis. The results highlighted several important issues which should be considered when selecting and organizing the content for designing subject syllabi for formal learning specified in national curricula (NC) under changed learning environments, especially considering those created by ICT. Students mentioned the following factors: development of students' self-awareness about ones abilities, acquisition of new knowledge a and skills, but also new friends and wider social contacts, new experience and satisfaction with creative work. The teachers mentioned students' additional knowledge and skills they can use in their formal studies at school and engagement in activities widening their cultural horizons. EA can also provide material for decision-making for students' potential choices for future education.*
Keywords: formal, non-formal, informal education, curriculum development, informed decision making, self-awareness, creativity.

Introduction

Considering the perennial process of national curriculum (NC) development for general comprehensive schools in rapidly changing social, political and cultural environments and ever-increasing amount of knowledge, the very concept of education has become an issue of wide debates. In addition to traditional schooling at different educational institutions, usually specified as formal education, two more concepts – those of non-formal and informal education have

come to the foreground and gained increasing attention for educational policy making, especially after the so-called PISA shock in several European countries (e.g. Germany, Austria, Switzerland, Denmark et al).

However, researchers have paid a lot of attention to the above mentioned terms at different times. George Jones published in 1935 already his "Extra-curriculum activities in relation to the curriculum", specifying potential support these activities can offer to the mandated curriculum. The research problem for educators responsible for designing national curricula today is, how much the influences of informal and non-formal educational (EA) or additional influences of hidden curriculum should be considered when organizing general education for all the population under the circumstances/context of a particular society. Should the bold statement by Romi & Schmida (2009), according to which non-formal education should be considered a major educational force in the postmodern era, be taken as decisive for organizing education, especially considering new and widely used ICT environments?

Interdependence between formal, non-formal and informal education

Coombs and Ahmed characterized in 1974 three different types of learning as follows: informal education is "the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment"; non-formal education is "any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children". And finally, the formal education is characterized as "the institutionalized, chronologically graded and hierarchically structured educational system, spanning lower primary school and the upper reaches of the university" (Coombs &Ahmed, 1974: 8). However, analyses and definitions presented by Melnick & Botez (2014: 214–215) can be considered more modern and generalizing the multitude of existing terms.

Accordingly, "formal education corresponds to a system, organized educational model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology. Formal education has a well-defined set of features specified by the state" (*ibid*), as it provides systematized knowledge in specialized institutions (schools of different type); students are introduced into the framework of intellectually organized work and schools have to report achievement by exams, etc. Educational effects are projected and positive in character (*ibid*). Non-formal education provides special knowledge, where formative-educative influences correlate with those from the extra school environment, as they are generally

realized outside the school institution, valorizing and making available local possibilities and resources to people of different age groups interested in these activities; educational effects are also projected and positive. Informal education usually does not correspond to organized, systematic or regular activities following a curriculum; activities are decided on the spot and they remain unreported, but still generating interest towards knowledge and providing opportunities for establishing social contacts for spending leisure time. Museum visits, concerts, competitions, media programs, films, festivals, youth clubs and manifestations, meeting interesting people, *etc.* – all events of that kind can provide experience to learn from. Educational effects are non-projected, but can be both positive and negative. (Melnic & Botez, 2014:114–115)

It can be concluded that all additional activities to learning at schools according to specified NC (often specified as extracurricular activities (EA), sometimes also complemented by so-called hidden curriculum, exercised by media and other social processes) have been carefully analysed and considered potentially influential for improvement of students' academic achievement in many countries (BMBF 2003; Mangold & Messerli, 2005; Schupbach, 2015, etc). There have also been several psychological studies related to diverse issues of students' personality development and the above mentioned three types of education (La Belle, 1982; Mahoney, et al 2002; Hansen, Larson, & Dworkin, 2003; Hansen, Skorupski & Arrington 2010; Ivaniushina & Aleksandrov, 2015). When recognizing education as a life-long experience specified by Hilda Taba in 1932 already as a dynamic process "from being to becoming" (Taba, 1932: 218), we also have to accept the fact that the personality of any individual is formed indeed by all the influences and experiences gained, starting with home and kindergarten, but also when participating in formal, non-formal and informal learning activities. All these three forms of education can contribute to humanization, socialization and culturing of young people as well as cohesion and sustainability of a society. For specification of EA there are issues to be monitored and studied, and namely: availability of opportunities for students to participate in non-formal and informal educational activities; participation rate; participants' motivation to be involved in these activities and potential contribution of these activities to development of students personality and desired skills.

Some data can be found in national statistics and there are surveys characterizing the amount of students participating in non-formal and informal educational activities. In Sweden, about 75 percent of pupils aged fourteen are involved in structured extracurricular activities; in Australia the participation rate among school children aged twelve to sixteen is 91 percent (Blomfield & Barber, 2009). In Estonia boys are usually less keen on participating in non-formal education than girls, but in 2017 65 % of boys reported to be involved in some sport activities, whereas the percentage of girls playing sports was only 38 (Valk,

2017: 200). Availability of multiple data characterizing students EA can provide valuable information for curriculum designers, how to use its potential. Researchers have already found a lot of meaningful input to be considered, when designing or updating national curricula. Bloomfield & Barber (2009) have highlighted acquisition of social skills, when participating in non-formal and informal educational activities. Among the most important skills that are developed in particular during extracurricular activities Hansen et al. (2003) identify time management, persistence in achieving goals, independence, ability to build relationships and interact with adults, and an ability to work on a team. Schuepbach (2014) has analysed, how extracurricular activities (allday schools/Alltagsschulen as a special form of non-formal education organized at schools) and their quality on primary school-age students' achievement in mathematics in Switzerland. EA have attracted attention of educationists in many countries especially in the relationship within their social context.

Our pilot project has focused on the participants' motivation to be involved in EA and potential contribution of these activities to their studies at school, personality development and socialization. The influence of EA on students' development and academic achievement has not been researched so far. Data characterizing the role of EA in education can greatly contribute to informed decision-making about NC and organization of studies.

Methods and data collection

According to Walker & Evers „knowledge about human activities always remain subjective", as „reality", at least "social reality", which is being researched, is a construct itself, as it has been constructed/created as a result of human activity. (1997, 226–227) Edelman *et al* (2012, 74–79) highlight as equals both, text documents and transcriptions of interviews as opportunities for qualitative analyse methods for researching „social phenomena" and for drawing conclusions.

When collecting data for this study questionnaires and interviews have been used (Cannell & Kahn, 1968; Harris & Brown, 2010). For collection of data from compulsory school students semi-structured questionnaires were used as a widely known and neutral methods especially for the reason that students are accustomed to that when providing feedback about different issues in their everyday school life. (Oppenheim, 1992; Fife-Schaw, 2001) More flexible semi-structured interviews were used with teachers as they allow to better comprehend through their use of language also their competence in the field studied. (Gomm, 2004) As we carried out a pilot study, focus group interviews with students were added to their questionnaires, using the same questions (Patton, 2002; Krueger & Casey,

2009) with the aim to specify the research questions and specify the tasks for the main project in future.

The material collected from students with questionnaires (258) and interviews in focus groups (4) was coded for an analysis, considering the questions asked and accordingly, three (3) main criteria were established. Sub-criteria (8) were specified considering the main tendencies that appeared in the analysis of the data. The answers provided by teachers' interviews (8) were analysed using the same criteria. Some examples of manifested values the teachers have considered relevant for organising their extra-curricular work have been added.

Results and discussion

Results of the analysis will be presented by criteria and sub-criteria as follows. Opinions of students have been marked with G=girl or B =boy, followed by their grade number; F denotes focus group opinions and T that of teachers)

1. Participation in hobby groups and other EA

a. Participate/do not participate

There were only 11 students, who were not involved in any EA (boys, grades 7–8), there were also 10 students who had marked their participation in too many fields (5–6), which seems unrealistic considering the time available. The majority of students play sports and make music (in many different fields). Surprisingly there were really few students reporting language studies (which used to be really popular a decade ago); only 1 student mentioned learning Spanish (as she wants to talk to her new relatives), 2 students (from a Russian medium school) report learning additionally the state language Estonian, 7 students did not specify, which languages they were learning.

b. Participate in one or more EA group

About 60 % attend EA in more than one group, but many consider singing in a school choir an EA group as well, although in many Estonian medium school it is a compulsory school subject. All EA fields (sport, art, robotics, theatre, learning languages, choir singing, learning to play musical instruments, musicking in ensembles and bands, other EA) have been mentioned, under the field "Other EA" photography, woodcarving, media, ballroom dancing, robotics, maths, sudoku, *etc*. have been mentioned. Several students mentioned among EA having private teachers supporting them for successful studies at school.

c. Participate in hobby groups of different EA fields or the same field

It can be said that the combination of EA activities of e.g. different sport events and that of music-art-theatre was often reported, about 40 %. Approximately the same amount of students reported participation in different hobby groups in the same field – e.g. singing in a choir, playing an instrument,

acting in a drama studio or dancing (mainly folk dance groups). In most cases such EA groups worked at schools (mainly at Estonian medium schools); there were also several studios and private clubs (doing karate, ballroom dancing, body building, art studios, etc.) mainly mentioned by students of Russian medium schools.

2. Reasons for attending EA groups
a. EA activities are interesting

This was the main answer (ca 80 %) given by students of all participating in the survey schools. Sometimes the students just said: "I just like it", "It is different from school routines". Maybe they have not specified their motivation more precisely. However, there were answers describing quite clear aims of respondents: *I sing in the school choir, because I want to go to our National Song Festival* (Celebrations) (6, G); *I attend the drama studio, because I want to become an actor* (8, G), sport (football) – *I want to be strong and deft, so that I can stand up for myself; I can travel a lot with the team; I can find new friends there.* (F, 9, B).

In addition to arousing students' interest in some kind of EA, teachers have highlighted the opportunity to spend one's afterschool time involved in some meaningful/useful activity (T 1, 4, 7); a chance to represent one's school (T, 2, 3); to develop students talents/potential with the aim to make it a future career or a long term hobby. (T, 7, 8).

b. Just spending leisure/free time

Ca 10 respondents could not specify their more clear reason/motivation, saying: *You have to do something in your free time.* (9, G); *I have nothing else to do* (7, B); *I do not want to sit at home all day, etc.* (7, G). *I sit a lot in the Internet, but sometimes I want to talk to real people. Then I go to the music club and I can play the drums there (9, B).*

c. Following somebody's example or desire

To follow an idol's example or encouragement/invitation of friends (10 %), often attending EA as parents have told them to do so (especially in music and sports). About 30 % of respondents say that choir singing is usually recommended by friends: *I get more friends from among students of parallel grades* (4, G); *because my friends also sing in this choir* (7, G); *my good friends just dragged me there* (7, B); *very cool people attend this group/studio* (7, G); *parents tell me to attend trainings, so that I could be healthier and physically stronger* (6, B); *achievement of senior students of our school is a great example for me* (F, 9, B); *all our family has been singing and playing an instrument, we (parents) expect the same from you.(8, G)*

3. Influence of EA on studies at school
a. EA support studies

One third of respondents highlight the positive influence of EA on a particular school subject – e.g. music or physical education (most often mentioned subjects). Sometimes those students singing in choirs get good marks for their music education, especially, if the EA are organised by the same teacher at school.

When talking about sports, students say: *it makes you stronger* (8, B); *keeps you fit* (4, G); *makes you mobilize all your skills and capabilities* (4, B); *I want to be healthy* (4, G); *it motivates me also for learning other subjects better; it helps me to achieve at school as well* (4, B); *it helps to reduce school stress* (5, B); *I can use all my unnecessary energy in trainings and after that I can better focus on other things that I have to do* (6, G); *sport makes my brain fresh* (7, B); *sport teaches, how to work in a team* (5, B); *all we do during trainings helps to survive at school and get everything done for a satisfactory „3" at least* (F, 9, B); *I can better plan my time, so I can manage and get things done in time* (F, 8, B). An extraordinary answer was: *prizes at some competitions are really quite high* (7, B, sports, about golf).

About other hobby groups offering EA the following has been mentioned: *it broadens your horizons* (4, G, music; F, 9, B); *it makes you feel well/satisfied* (5, B, dancing); *I am quite good and skilled at arts and in art lessons I also do well; it helps me also at math to draw graphs. I am good at music, too. It is really pleasant to talk to our hobby group teacher. I have also got some additional good marks for EA, especially in music* (8, G); *robotics teaches you, how to invent and become smart, maybe I will be engineer one day* (6, G); *math circle (hobby group) makes me smarter than other students are* (7, B, math); *I want to make it my future job* (7, G, arts); *it develops my memory and my sense of discipline* (F, 8, B, music).

Teachers said unanimously that everything they do or make in EA comes along into subject lessons at school and broadens students' horizons in different fields of knowledge and skills. *EA provides opportunities to maximize one's efforts not with an aim to get an excellent mark, but for positive emotions, achievement and experience.* (T 4, 7); *EA develop cooperative skills and discipline* (T 5, 8); *children involved in EA can much better plan their time and adequately assess their capabilities and those of others, calculate time needed for doing something; they are more willing to express their ideas and discuss things; they ask good questions; their world outlook is much wider and more adequate than that of students not playing sports or participating in any other EA. They know already quite precisely, what they want to do and/or achieve.* (T 2).

b. EA does not support studies at school

However, about two thirds of respondents fail to see potential support of EA, or they have not bothered to word them clearly. They mainly take EA as an opportunity to spend their free time. Quite often the answers were laconic: *I don't*

know; does not support very much; or no answer was given.

Teachers' opinions about values they promote by EA for students and for themselves have offered interesting insights. They have mostly highlighted positive aspects when organising EA. They are sincerely happy about their students achievement/performance, be it competitions, school concerts or exhibitions of students' work. They also mentioned that they can develop honesty, empathy and joint responsibility (T 3, 4, 7); the value of offering help and support and also receiving it from team-mates (T 1, 2); promote motivation and show personal example that can be followed (T 8). Sometimes socially problematic or neglected children can be helped back to the "right path".

I am really happy to have developed contacts, which survive long after schoolyears. Years pass, but they still follow the principle "back to my own school". They come to school events, and if invited for help, they are always there. (T 6)

Conclusion and recommendations

This pilot study has shown that EA can have a meaningful influence on students' personality development, especially on their increasing self-awareness. EA can greatly contribute to their academic achievement and acquisition of social and cultural skills. Considering the increasing widening of learning environments, both real and virtual, availability of EA should be made wider and involvement of all students in formal and non-formal educational activities should be, if possible, supported. Everything learnt and experienced in EA comes into the classroom enriching the atmosphere of learning and general motivation for achievement. EA are also more flexible than learning activities in formal education. Perhaps in the 21st century, meaningful and mutually supportive bridges can be built between formal, informal and non-formal educational experiences, which could also contribute to design of NC as well as to individual aspirations of learners in their multifaceted development. EU Council Recommendations on Key Competences of January 2018 clearly highlight the need to combine formal with non-formal and informal learning and recognise results of all learning experience, which makes research in this field particularly meaningful for the future.

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