

The effects of IMC Weekend School on self-confidence, future perspectives and social connectedness

IMC Weekend School

IMC Weekend School offers a two-and-a-half-year schooling program aimed at pupils between the ages of ten and fourteen. Passionate professionals volunteer to introduce their discipline and to provide the students with tasks that are derived from real life work situations. The students are stimulated to broaden their horizons by positioning themselves in diverse social roles and work situations, and by discussing actualities. Thus the students are encouraged to discover their own possibilities, capabilities, and affinities as to their future role in society.

The aim of IMC Weekend School education is to strengthen students in developing an open, curious, active and involved attitude that will help them reach a higher level of self-determination later in life. The expectation is that extensive self-knowledge, combined with knowledge about roles in society and with the experience of moving in diverse environments will contribute to the ability to make pro-active, better motivated, and more responsible choices for the future. This study focuses on three building blocks for a motivated, self-determined life attitude: self-confidence, future perspectives, and social connectedness.

The study

IMC Weekend School expects her education to increase students' *self-confidence*, to broaden their *future perspectives*, and to enhance their sense of *connectedness with society*. A longitudinal study was conducted investigating whether participation in the Weekend School program indeed leads to growth on these three so-called 'core concepts'. Thus the underlying study did not investigate long term effects, but focused on the two-and-a-half years Weekend School program when students were between ten and fourteen years old. The main research question of this study was:

Do students who attend IMC Weekend School show stronger development on the three core concepts than students with similar backgrounds, i.e. from the same neighborhoods, who did not attend IMC Weekend School?

The study was set up by the Research & Development department of IMC Weekend School and conducted under supervision of methodological sociologist Prof. dr. H.G. van de Werfhorst (University of Amsterdam). Participating in the study were all nine locations of IMC Weekend School (based in seven cities) and all students starting at the Weekend School in 2009. The Weekend School students were compared with a control group, existing of classmates of their regular primary schools not attending the Weekend School program.

Because of the Weekend School program's unique setup and aims, specific instruments were developed in order to measure the expected effects. Earlier research (Van Klaveren et al., *in*

press) concluded that existing, validated, questionnaires were not sufficiently accurate to measure the specific non-cognitive skills stimulated by the Weekend School program. This study was special for its tailor-made instruments, among them the Weekend School Questionnaire (WSQ), developed and tested in the previously mentioned study. Also special were its unusually long duration and its thoroughness: over 700 students from seven different cities were followed longitudinally in five half year intervals.

The first wave of measurements was conducted in October 2009, before was known which of the primary school students would start at the Weekend School. The fifth and final measurement was conducted shortly before the Weekend School diploma ceremony in March 2012. At the start, 887 students participated (298 Weekend School students and 589 students from the control group). At the final wave, 718 students filled in the questionnaires (192 Weekend School students, 65 dropouts, and 461 control group students).

Baseline measurement

Analyses of the student backgrounds revealed that Weekend School students and students from the control group had very similar environmental characteristics. Both groups had similar gender distributions and students from both groups were as often raised by both parents, who were as often born in the Netherlands and spoke Dutch at home as often. Their social capital was also similar (such as meeting with friends, being on MSN, playing outside), as was the degree to which their parents undertook (cultural) activities with them, such as going to the cinema or to the zoo.

There were differences as well. On many of the non-cognitive indicators used in this research, Weekend School students initially scored higher. Moreover, for cultural activities performed on their own, there was a statistically significant difference between the two groups: Weekend School students more frequently read books, visited the library and searched for information on the internet.

Method

This study investigated whether Weekend School students develop stronger on the three core concepts than the control group (their classmates at primary school). For statistical analyses, panel fixed effects models were used to control individual differences between students. These models measured the individual *growth* that Weekend School students and the control group made during the five measurement waves. This study was not about the differences between the two groups, but about the differences in *growth* between the two groups. Initial starting differences were thus made irrelevant, i.e. controlled.

Results

The results are summarized below per core concept. All reported results are statistically significant.

Self-confidence

Weekend School students showed more growth than the control group on the concept 'self-confidence', as measured with six items with the WSQ (items with a 5-point Likert-scale). They showed a stronger growth on 1) the conviction that one succeeds if one does one's best, 2) positive self-perception and 3) satisfaction with oneself. Weekend School students also showed

more growth on the concept 'audacity' (6 items about making responsible decisions in both the academic and the social context). They were more likely to defend classmates who are bullied, and more inclined to ask questions. Moreover, Weekend School students developed themselves more on subjective school performance. They increasingly reported better performance than their classmates and put more effort in schoolwork.

Future perspectives

The 'future perspectives' concept was measured with a broad range of indicators, most of them with open (descriptive) answer categories. On most indicators, Weekend School students showed more growth.

Knowledge about professions. When asked to give a description of professions (varying per wave), the accuracy of the answers of Weekend School students showed more growth than that of the control group. Weekend School students acquired better knowledge about a broad range of professions.

Preferences for professions. When asked about professions that students considered pursuing in the future, Weekend School students mentioned more professions than the control group. No differences were found for the so-called 'typical higher professions', namely 'doctor', 'lawyer' and 'accountant'. Differences were found for other professions: Weekend School students mentioned more 'special higher professions', such as architect, pilot or judge, and more middle class professions, such as teacher, nurse or policeman. This answer pattern reveals that Weekend School students take into account a broader range of professions than the typical three high status professions. No differences were found for expressive/artistic professions, such as actor, DJ or artist.

Reasons for considering a profession. When students were asked about their reasons for considering a certain profession, Weekend School students more often referred to the nature of the profession (e.g. 'doctor, because I want to make people healthy') and less often to its status (e.g. 'money' or 'prestige'). This answer pattern reveals that Weekend School students more often consider options for professions from their own personal motivation than from a societal standard image of what is 'high'.

Talents. On the question 'What are you good at?', Weekend School students gave different answers than non-Weekend School students. They mentioned not more, but different talents: more social skills (e.g. helping people, listening), more specific competences (e.g. reading maps, speaking languages, first aid), and less sport talents.

Linking talents to professions. Weekend School students linked their talents to specific professions as often as the control group students. It seems that the necessary insight to link talents and professional options is not yet acquired at this young age. Further research should reveal if the connection between specific talents and specific professional options indeed will only be made at a later age, and if so, whether Weekend School alumni do this more often than their peers with similar backgrounds.

Future perspectives (WSQ). The WSQ had six items to measure general future perspectives. For example: 'I have enough choice in what I can become later' and 'I like to talk about my future'. In the answers, no differences were found. The general questions of the WSQ thus did not show the differences that are found with the essay questions.

Curiosity. 'Curiosity' was slightly different from the other variables. IMC Weekend School expected students to already score high at the start of the Weekend School program. The program begins when students are ten years old because the Weekend School aims to feed the natural curiosity peaking at that age. Curiosity was included to explore its development but, contrarily to the other indicators, no growth was expected. Eight items in the WSQ measure curiosity (e.g., 'If I see something new, I want to know how it is made'). No significant difference was found between the Weekend School students and the control group.

Social connectedness

'Social connectedness' was measured initially with the WSQ (4 items), focusing on 'social support' and 'network'. No differences were found between both groups. Weekend School students did not experience that people may help them when needed more often. Neither did they experience more practical support from their environment.

In the last two measurement waves, more indicators measuring social connectedness were included. General knowledge was measured with 12 items (varying per wave). The results showed higher growth for Weekend School students on general knowledge. They developed, for example, a larger vocabulary and more knowledge about (world) politics than their peers. Moreover, a validated questionnaire on citizenship (Ten Dam, 2010) became available, of which some indicators were included. The questionnaire items revealed no differences for 'knowledge about democracy'. However, Weekend School students knew better how to deal with differences between people than non-Weekend School students and thus scored higher on 'empathy'. Because general knowledge and dealing with differences between people were only included in the last two waves, these results are methodologically less sound.

Conclusions

This study on the effects of supplementary education on non-cognitive factors is unique in size, duration and content. On all three investigated core concepts, growth was shown. Weekend School students showed more growth compared to control group students in several aspects of (1) self-confidence, including audacity in the academic and social context, (2) future perspectives, in particular growing knowledge about societal possibilities, more specific interest in societal possibilities, and a growing awareness of personal capabilities, and (3) social connectedness, in particular growing general knowledge and growing empathy.

Statistically all differences in growth have to be attributed to the Weekend School intervention. The fact that Weekend School students often had higher starting values than non-Weekend School students is irrelevant to the growth. Nevertheless the question may be raised whether the higher starting values would have led to stronger growth anyway, even without the program. On the conceptual level, it is important to mention that the concepts of investigation (self-confidence, future perspectives and social connectedness) specifically require social interaction. Even if a child is very receptive, strong growth on non-cognitive factors can only manifest itself in a nourishing environment.

Reflection and further research

This study is important because there is hardly any substantial research on the effects of supplementary education on non-cognitive competences. The fact that non-cognitive growth was measured for Weekend School students implies that relevant concepts had been operationalized effectively.

This study offers a foundation for further theory development concerning effective supplementary education. It offers directions for answering the question how (supplementary) education can best prepare students for making better-motivated choices in their education and professional career. Questions that merit further investigation are, for example:

- Is a certain threshold for receptiveness required, or can growth (perhaps with modifications in the program) be realized for all children? If so, how?
- How are these non-cognitive development factors related to each other? Is there an order of development? Are there receptive ages for the different factors? Do they support each other?
- How are these non-cognitive development factors related to the ability to make better motivated choices? Are all of these factors required? Are there more essential preconditions?
- How and when do children link specific talents to specific career possibilities? Is this link indeed only made at a later age? If so, do Weekend School alumni do this more often than their non-Weekend School peers?

For IMC Weekend School the main question exceeds the Weekend School practice: how can supplementary education best be designed to stimulate self-determination in a motivated life attitude? To answer this question, several types of research are required. In particular: (1) conceptual (qualitative) research into the content and the determinants of 'better motivated choices', also outside of the Weekend School practice, (2) continuing longitudinal research among Weekend School participants compared to control groups, aimed at the abovementioned types of questions, (3) research into life courses of Weekend School alumni compared to control groups. Further research should focus on all three types of studies.