The arts course CKV1 and cultural participation in the Netherlands

Ineke Nagel a,*, Marie-Louise Damen b, Folkert Haanstra b

a Department Social Research Methodology, VU University Amsterdam, De Boelelaan 1081, 1081 HV Amsterdam, The Netherlands
b Utrecht University, The Netherlands

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Abstract

In 1999, the arts course CKV1 (in Dutch) was introduced at middle and higher levels of secondary education in the Netherlands. CKV1, which can be translated as ‘Cultural and Artistic Education’, aims to encourage cultural participation among adolescents by compelling them to attend theatre performances, concerts, museums, exhibitions, etc. This article examines whether enrolment in the course affects cultural participation and attitudes towards the arts 2–6 years after the students have completed the course. Data were used on three cohorts of secondary school students who took part in a classroom interview at the age of 14–17, and who participated in follow-up surveys 2, 4 and 6 years later. The eldest cohort was interviewed just before CKV1 was introduced to the secondary school curriculum and the two youngest cohorts were interviewed once the course was underway. Furthermore, being a panel study, the dataset contains observations of cultural participation before, during and after enrolment in CKV1. The results demonstrate that CKV1 neither affects the students’ cultural participation nor their attitude towards the arts 2–6 years after they have completed the course. The absence of effects applies equally to students who have culturally active and culturally non-active parents.

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1. Introduction

Is it possible to change patterns of cultural participation in a society by introducing a compulsory arts course to the secondary school curriculum? Since 1999, students at middle and higher levels of secondary education in the Netherlands must attend cultural events – such as visits to museums, exhibitions, theatre performances, concerts or films – as part of the arts course

* Corresponding author.
E-mail address: FA.Nagel@fsw.vu.nl (I. Nagel).
“Culturele en Kunstzinnige Vorming I” (CKV1, in Dutch), which can be translated as “Cultural and Artistic Education”. Never before in the history of Dutch secondary arts education has actual attendance at cultural events played such a central part in the arts curriculum. In this article, we examine whether the introduction of the arts course CKV1 has led to an increase in cultural participation among its students.

The introduction of the CKV1 course in secondary education forms part of a larger policy plan by the Dutch government that responded to concerns about the decrease in cultural participation among Dutch youngsters. Indeed, attendance at traditional high culture events has declined among recent generations in the Netherlands (van Eijck and Knulst, 2005). By implementing CKV1 in secondary education, the Dutch Ministry of Education, Culture and Science intended to provide an incentive for young people to take part in cultural events. Furthermore, students are provided with 22-euro vouchers, which they can use to pay the entrance fees for the cultural institutions. At the same time, cultural institutions were asked to reconsider their programmes and anticipate the expected increase in the number of adolescent visitors.

CKV1 has cultural participation at its core, as students should engage in and experience culture (Haanstra et al., 2002). The cultural activities seek to provide a mixture of different art disciplines. Art history is important, but is auxiliary to cultural participation. In contrast with previous art courses, knowledge of art and culture is not merely taught by rote learning of historical facts and figures relating to art, but by a thematic approach that stipulates the interrelationships between the different art disciplines. Furthermore, practical art activities carried out by students form a small part of the course and are merely meant to support the preparation and “digestion” of cultural activities, but are no longer an end in themselves. The formal purpose of the course is to enable students to make their own choices from the available range of cultural events. Therefore, the precise cultural events are not prescribed by the school, but are chosen by the students themselves in consultation with their teachers, and are preferably attended individually or in small groups. In line with the philosophy of encouraging individual choices, these cultural activities are not limited to highbrow culture, but may include popular culture as well.

The CKV1 course is offered in the fourth year of secondary education and in part of the fifth, when students are on average between 15 and 17 years old. The required amount of cultural activities varies with the level of schooling, i.e. 6 at the middle (HAVO) level (senior general secondary education) and 10 at the higher, pre-university education (VWO) level. The exact duration of the course depends upon the educational level (longer at the higher level), the preference of the school (some schools wish to use a more extended period of 2 years) and the individual progress of the students.

Previous programmes of in-school arts education have been found to increase cultural participation persistently (Kracman, 1996; Kraaykamp, 2003), although it must be noted that the effects of specific in-school arts education programmes were small when compared with the influence of cultural socialisation by parents and the educational level achieved (Ranshuysen and Ganzeboom, 1993; Nagel et al., 1997). CKV1 will not necessarily lead to similar outcomes, as the content and didactics of CKV1 differ significantly from the previous arts education programmes in the Dutch secondary school system. Nevertheless, the focus on actual attendance at cultural events, which is similar to the intended outcome, would lead one to expect positive effects of CKV1 upon future cultural participation. This expectation is supported by the finding that CKV1 has worked out as intended: during enrolment, participation in highbrow culture turns out to be significantly higher among CKV1 students than among comparable students who are not enrolled (Damen et al., 2010), even though the cultural activities that form part of CKV1
could be a mixture of highbrow and popular culture. However, 3 years after the introduction of CKV1 in 1999, no increase in cultural participation was found among the (minority) of CKV1 students who had completed CKV1 by then (Ganzeboom et al., 2003; Haanstra et al., 2002).

The contribution of this article is not just to determine the lasting effects of this particular arts education programme. The case of CKV1 allows us to devise stronger arguments on the causal effect of arts education upon future cultural participation in general. Many art courses are attended optionally and therefore attract participants motivated by their existing interest in the arts. By contrast, CKV1 is compulsory. It is also imposed upon those who would not have chosen the course if that were possible. This feature of CKV1 enables us to study the effects of arts education without the confounding effect of an early interest in the arts, and thus optimally control the selection mechanisms that are usually present in studies of arts education.

Whether CKV1 succeeds in encouraging future cultural participation is the empirical question that will be answered in this paper. However, determining the effects of CKV1 upon cultural participation permits not only to address policymakers’ concern about future audiences of cultural institutions. Sociologists should also be interested in the introduction of a course, with its supply of vouchers and appeal to cultural institutions, that provides the possibility to alter existing social inequalities regarding cultural participation. CKV1, with its emphasis on attending cultural events, may be regarded as a way to inculcate a lifestyle characteristic of the higher social status groups into adolescents who are not all familiar with cultural participation due to their home background.

As a marker of social status, cultural participation is assumed to play a role in the persistence of social inequalities. Cultural participation, as a distinctive feature of the higher social status groups, is seen as a way by which social status groups recognise each other and as a strategy used for inclusion and exclusion (Lamont and Lareau, 1988). Therefore, to gain access to these social status groups (the cultural elite, in particular), it seems important to become acquainted with the “right” tastes (DiMaggio and Useem, 1978, p. 144) and to be able to participate in high-culture activities (DiMaggio and Mohr, 1985).

In the scholarly literature, a debate is underway as to what the “right” taste is, i.e. what kind of activities constitute an elite lifestyle, and it is doubted whether high culture is still important as a status marker. Since Peterson (1992), a number of studies have suggested that it is no longer just high culture participation that is indicative of a high status lifestyle. Instead, the ability to combine highbrow and popular culture in an omnivorous lifestyle would have become the more relevant demarcation line between higher and lower social status groups (Chan and Goldthorpe, 2007; Peterson, 1997, 2005; Peterson and Kern, 1996; Vander Stichele and Laermans, 2006; van Eijsck, 1999, 2001; van Eijsck and Knulst, 2005; Warde et al., 2008). Indeed, highbrow cultural activities appear to be increasingly combined with popular culture (Peterson and Kern, 1996; van Eijsck, 2001; Vander Stichele and Laermans, 2006), and participation in traditional highbrow culture is decreasing among recent cohorts (DiMaggio and Mukhtar, 2004; van Eijsck and Knulst, 2005).

However, this does not mean that high culture has lost its salience as a marker of high social status. Popular culture may not be rejected (anymore) by the higher social status groups (Bourdieu, 1984), but the ability to participate in high-culture activities still seems to be the main distinction between the (omnivorous) lifestyle of the higher social status groups and the lifestyles of the lower status groups. Moreover, although the decrease in cultural participation among younger generations may suggest there is “no more need for snobbism” (van Eijsck and Knulst, 2005, p. 527), high culture seems to have kept its meaning as a status marker. DiMaggio and Mukhtar (2004) find the same or even stronger trends for middle-brow activities in the United
States and conclude that the results do not support the “meltdown scenario” (p. 189), by which the role of arts as cultural capital would be devaluing. In addition, highbrow cultural participation is still characterised by significant differences according to social background (Katz-Gerro, 2002; van Eijck and Knulst, 2005) and family of origin (De Vries, 2006; Nagel and Ganzeboom, 2002), even among younger cohorts (Van Wel et al., 2006), and these differences are much more overriding than social inequalities in popular culture (Damen et al., 2010). Finally, cultural resources (still) seem to play a role in status attainment: more highly educated people more often come from families in which cultural participation is common (Aschaffenburg and Maas, 1997; Crook, 1997; Ganzeboom and Nagel, 2007; De Graaf and De Graaf, 2002; De Graaf et al., 2000; Niehof, 1997). Therefore, with regard to social inequalities in status attainment it is relevant to study the enduring effects of CKV1 upon participation in highbrow culture.

To study the effects of CKV1, we use a panel dataset of three cohorts of secondary school students who took part in a classroom interview at age 14–17 and who participated in a follow-up survey 2, 4 and 6 years later (Ganzeboom and Nagel, 1998–2002, 2004). The variable of interest is cultural participation, i.e. the frequency of attending highbrow culture, but we also study the attitude towards art. Not only is it interesting to study whether attitudes may change as a consequence of education, but here we also use it as a validation of the effects upon cultural participation, as it can be expected that cultural participation is accompanied by a positive attitude towards the arts. Our study therefore answers the following research questions:

- Does enrolment in the CKV1 course lead to a more frequent participation in highbrow culture and to a more positive attitude towards the arts in the long term, i.e. 1–6 years following completion of the course?
- Do the effects of enrolment in CKV1 depend upon cultural socialisation by the parental family? If so, does enrolment in the course reinforce or weaken the differences in cultural participation and attitude towards the arts, resulting from differences in cultural socialisation by the parental family?

2. Hypotheses

Two models explaining the role of cultural resources on status attainment can be differentiated, which can also be applied to the acquirement of cultural resources: the cultural reproduction model and the cultural mobility model (Aschaffenburg and Maas, 1997; DiMaggio, 1982; Nagel, 2009). According to the cultural reproduction model (Bourdieu and Passeron, 2000 [1970]), cultural participation can only be acquired during long processes of cultural socialisation in the parental family, and never adequately be learned elsewhere, especially not at school. Therefore, arts education, including CKV1, would not encourage cultural participation or, at best, would only have a significant effect upon the students who have already been familiarised with cultural participation by their parents. The cultural reproduction model is in line with the “persistence hypothesis” (Miller and Sears, 1986) or the enduring family socialisation model (Lau et al., 1990) as formulated in the literature on stability and change in value formation. These models assume that values are formed during childhood, and, accordingly, the parental family is regarded as the main, if not the only, socialising agent whose influence would always dominate all other influences. In his study on tastes in classical music, De Jager (1967) argues that the family would owe its overriding influence not just to long and continuous socialisation processes during children’s upbringing, but also to the early age at which it starts, before other influences possibly have taken effect. Other socialising agents, such
as school teachers and peers, could only exert their influence later, and, as a consequence, have to interfere in taste patterns that have already been developed. Therefore, ‘primary socialisation’ by the family would have a dominant and lasting effect over all other, ‘secondary socialisation’ that is experienced later on (De Jager, 1967).

 According to the cultural mobility model (DiMaggio, 1982, p. 190), obtaining the necessary cultural competence is not exclusively connected to the parental family. Cultural resources are important in the status attainment process, but could be gained elsewhere, e.g. at school. School may serve as a route to social mobility for students who are unfamiliar, owing to their family background, with highbrow culture. This model would not only expect arts education to persistently affect cultural participation, but also to have a stronger effect upon students from the least culturally active families. In particular, students who are unfamiliar with highbrow culture owing to their social background could use CKV1 to compensate for their lack of cultural competence. The cultural mobility model accords with the socialisation model of “lifelong openness” (Lau et al., 1990; Miller and Sears, 1986), in which each stage of life would have its own important socialisation agents who exert their influence on people’s attitudes and behaviour and may override the influences that are experienced during previous life stages. Indeed, in childhood, the parents may be the main socialising agents, but when the child grows older, peers and the school environment become increasingly influential. According to the “age stability thesis” (Glenn, 1980), adolescents and young adults in particular would be susceptible to influences from others and capable of change. Although this line of socialisation theory does not necessarily predict lasting effects of secondary schooling, it does assume more fluidity in taste patterns and cultural behaviour, thereby leaving open an influence of secondary arts education.

 The cultural reproduction model, which stresses the importance of early family socialisation, receives support by the (mainly Dutch) empirical evidence for a strong intergenerational transmission of cultural participation (e.g. De Haan and Knulst, 2000; De Vries, 2006; Nagel and Ganzeboom, 2002; van Eijck, 1996). Generally, the home climate appears to be as important as the educational level, but research that estimates the influences of family and school by examining the similarities between siblings and schoolmates, finds the family to be three times more important than (secondary) schooling (Nagel and Ganzeboom, 2002). On the other hand, educational level is the other major determinant of cultural participation (De Vries, 2006; DiMaggio and Useem, 1978; Katz and Gurevitch, 1976), and this is more in keeping with the cultural mobility model. However, family background, and in particular parents’ cultural participation, is not available in all these studies, implying that the effect of education could be overestimated due to the relation between parents’ cultural participation and education. Therefore, the question remains whether the effect of education could be interpreted as cultural mobility. Nagel (2009) found that about half of the differences in cultural participation among young adults already existed in adolescence and therefore could not have emerged during schooling. However, cultural participation partly developed during the educational career, thereby indicating a causal effect of education. Other studies on the effects of art education (Kraaykamp, 2003; Kracman, 1996; Nagel et al., 1997; Ranshuysen and Ganzeboom, 1993) also support the cultural mobility model, although the effects are somewhat minimal.

3. Data and design

To answer the research questions, we used the panel study of the Youth and Culture dataset (Ganzeboom and Nagel, 1998–2002, 2004). In 1998, 2000, and 2001, 3897 students from 72 secondary schools in 14 municipalities of the Netherlands took part in the initial wave of data
collection. The eldest cohort (1998) was interviewed just before CKV1 was introduced; the two youngest cohorts (2000 and 2001) were interviewed after its take-off. As the original data collection was designed to evaluate a policy experiment in eight medium-sized towns in the Netherlands, the data collection in 1998 began in these towns. In 2000, the data collection was supplemented with two large cities and four smaller municipalities. The schools within these towns were randomly selected. When selecting the additional schools in 2000, it was decided not to select schools in the same area as the original schools. A further *gymnasium* (grammar school: pre-university education with Latin and Greek) was also included.

The samples of classes within the schools were stratified by educational level and school year. It was decided beforehand to include school years 3, 4 and 5 for all types of secondary education (with students’ ages ranging from 14 to 17). When several classes within a level-school year combination existed, the particular class to be interviewed was drawn at random. On average, students of three classes per school filled out a questionnaire on their participation in cultural activities and their attitude towards the arts.

Students who took part in the classroom survey at school were re-interviewed 1 or 2 years later. In 2000, the 1998 cohort was re-interviewed using a postal questionnaire. In 2002 and 2004, the students of all three cohorts received a questionnaire by postal mail, comprising, by and large, the same questions as those of the first classroom survey. The response of the second follow-up waves was 58%, and 45% and 47% of the third and the fourth waves, respectively. The data also include a telephone interview that was held previously among the 1998 cohort in March 1999 (originally to evaluate the aforementioned policy experiment). In addition, one of the parents (fathers and mothers selected at random) was asked to participate in the study. In 2000, the parents of cohort 1998, and in 2002, the parents of cohorts 2000 and 2001, were sent a questionnaire containing items on their cultural participation and their social background. In total, 54% of the parents (of all 3897 students) responded. The data suffer from some selective panel dropout (Ganzeboom and Nagel, 2007). This is partly due to the research design with an almost 100% response rate during the first wave, but with the usual non-response during follow-up waves. By controlling for parents’ cultural participation, the level of education, and the age of the respondents, we assume that we have captured the potentially biasing effects of non-response as much as we can.

The sample encompasses participants in the CKV1 course, as well as students who had not (yet) taken the course. In fact, participants of the CKV1 course can be contrasted with several comparison groups. One important comparison group is the eldest cohort that was interviewed in 1998, 1 year before the general introduction of the course in 1999. Although some schools in our sample introduced the new subject a year earlier than the other schools, i.e. in 1998, a considerable number of students of the fourth and fifth school years of the 1998 cohort belonged to the last generation who were never enrolled in CKV1. As these students have attended the same schools as those of the two youngest cohorts, the three cohorts are highly comparable.

Another comparison group comprises the students of the lowest level of secondary education (VMBO). The majority have never been enrolled in the subject, because at these schools, the subject was only introduced in 2003, which is outside of the range of the sample (except for three schools covered by the data, which offered CKV1 in 2000 and 2001 on an experimental basis). We included students of the lowest level of secondary education in the analyses because some of them may actually follow CKV1, as they continued their secondary education at higher levels and may consequently have followed the subject later on.

In addition, because of the longitudinal design, students were observed at different stages of their enrolment in CKV1, enabling us to compare the students’ cultural participation and their
attitudes before, during and after taking up the course. This is a real advantage of the panel data, because by making within-person comparisons the individual differences are held constant, which in turn leads to more precise estimates of changes in behaviour and attitudes as a result of enrolment in CKV1 (Fitzmaurice et al., 2004, p. 165).

To distinguish the respondents who have never been enrolled in CKV1 from those who were observed before being enrolled in the subject, we need information on their future behaviour (otherwise it may not be clear whether those who were not enrolled when observed in the classroom would follow the course in the future or not). Therefore, those respondents who had participated in at least one of the subsequent waves of the research project in 2000, 2002, or 2004 (therefore with at least two observations in the panel data) were included in the analyses. As the long-term effects of CKV1 are based upon observations from later waves, the selection only affects the size of the comparison groups originating from the observations at the first classroom interview. The resulting panel data comprises 7933 observations of 2556 respondents, who were at the first wave in 280 classes in 67 schools.

4. Construction of variables

Cultural participation is indicated by five items on the frequency of attending cultural events in the last 12 months: theatre performance, cabaret, classical concert, ballet and museum. We adopted the items from the questionnaires of the Dutch Cultural Planning Office (SCP, for instance, 1999), which have proven to be reliable indicators of participation in highbrow culture (van Eijck et al., 2002). More or less the same indicators for highbrow culture are used in literature (Bourdieu, 1984 [1979]; Ganzeboom, 1982; Peterson and Kern, 1996; Vander Stichele and Laermans, 2006; van Eijck, 1999). The internal consistency of the items varied between 0.41 and 0.62 (Table 1). Although the reliability is only moderate, factor analysis revealed that the items do measure a singular concept. An index of cultural participation was computed as the mean of the percentile rank scores of the individual items (corrected for differences in the number of observations between respondents). The resulting dependent variable ranges from approximately 33 to 100. The number indicates the percentage that participates less in cultural activities than the respondent, and thus measures the respondent’s relative position concerning his/her cultural participation. Next to the rather clear interpretation, the use of the percentile scores has the advantage of (partly) correcting the characteristically skewed distribution of participation in highbrow culture. In addition, as a standardisation method, percentile rank scores also correct the varying popularity of the items.

The attitude towards art is an index based upon ten items, which proved to be a highly reliable scale (Table 1). The index was also calculated as the mean of percentile scores of the individual items, which were all coded in such a way that a higher score indicated a more positive attitude. The index ranges from 0 to 100.

Cultural participation by the parents is included in order to study its interactions with CKV1. The index of parents’ cultural participation is based upon seven items in the parents’ questionnaire, which are the same items as the index of students’ cultural participation (theatre, cabaret, classical concert, ballet and museum) and two additional items on pop concerts and cinema (Table 1). Factor analysis revealed that the seven items indicate one underlying dimension, representing a reliable scale (Cronbach’s α: 0.70). Missing values owing to non-response by the parents have been replaced by means of the so-called “hot deck nearest neighbour” imputation (Little and Rubin, 1987). The index of parents’ cultural participation was calculated as the mean of percentile scores of the individual items, again ranked into a percentile
For interpretation purposes, the index was centered and recoded to range between 0 and 0.5.

The Dutch educational system distinguishes between four streams of secondary education: VMBO (lower vocational education), HAVO (senior general secondary education), VWO (pre-university education), and *gymnasium* (grammar school) (see Fig. 1). CKV1 is offered at HAVO and VWO level. The educational level of a *gymnasium* is similar to that of pre-university education (both prepare pupils for university); the difference being that at least one classical language is required as an examination subject. *Gymnasium* students do not receive CKV1, but a classical variant of it (known as KCV), which is less intensive and requires fewer cultural activities. Students at the lower vocational education (VMBO) level do not receive CKV1 either. However, because a less intensive variant of CKV1 (CKV-VMBO) was going to be introduced at the lower level of secondary education in 2003, some schools in the Youth and Culture dataset experimented with this variant earlier. Consequently, some students in our sample followed this variant of the course.

Table 2 presents the descriptive statistics of the independent variables. In the analyses, we take into account the level of secondary education because it is related to enrolment in CKV1. Students are differentiated according to the four levels of secondary education described above. The same applies to the observations of the follow-up waves, when students have increasingly completed their secondary education and have continued their educational career or have left the

<table>
<thead>
<tr>
<th>Cultural participation (% attendance)</th>
<th>Classroom interviews</th>
<th>Follow-up interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre performance</td>
<td>20.8 43.3 43.4 21.4 31.3 32.0 27.4 32.8</td>
<td></td>
</tr>
<tr>
<td>Cabaret</td>
<td>11.0 24.0 24.8 12.5 20.3 28.9 36.1 31.4</td>
<td></td>
</tr>
<tr>
<td>Classical concert</td>
<td>9.8 12.6 13.5 7.0 9.4 12.0 12.2 30.6</td>
<td></td>
</tr>
<tr>
<td>Ballet</td>
<td>5.0 10.7 9.6 4.3 8.9 9.7 8.2 13.8</td>
<td></td>
</tr>
<tr>
<td>Museum</td>
<td>53.8 74.0 68.8 54.6 51.5 55.8 50.3 66.0</td>
<td></td>
</tr>
<tr>
<td>Pop concert</td>
<td>0.60 0.50 0.58 0.41 0.60 0.62 0.56 0.70</td>
<td></td>
</tr>
<tr>
<td>Cinema</td>
<td>50.1 69.0</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td>0.60 0.50 0.58 0.41 0.60 0.62 0.56 0.70</td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Secondary educational level, enrollment in CKV1, birth year in successive waves (%).

<table>
<thead>
<tr>
<th>Educational level:</th>
<th>Initial classroom interviews</th>
<th>Follow-up interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower vocational (VMBO)</td>
<td>36.9</td>
<td>17.4</td>
</tr>
<tr>
<td>Senior general (HAVO)</td>
<td>29.2</td>
<td>36.1</td>
</tr>
<tr>
<td>Pre-university (VWO)</td>
<td>22.6</td>
<td>37.5</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>11.3</td>
<td>9.0</td>
</tr>
<tr>
<td>Completed secondary education</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CKV1: stages of enrolment</td>
<td>67.2</td>
<td>28.7</td>
</tr>
<tr>
<td>Never enrolled at all</td>
<td>84.2</td>
<td>60.5</td>
</tr>
<tr>
<td>Not yet enrolled in this variant</td>
<td>15.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Currently enrolled</td>
<td>0</td>
<td>30.8</td>
</tr>
<tr>
<td>Enrolled in the past</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CKV1 senior general (CKV1-HAVO)</td>
<td>86.2</td>
<td>69.4</td>
</tr>
<tr>
<td>Never enrolled in this variant</td>
<td>13.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Not yet enrolled</td>
<td>0</td>
<td>19.3</td>
</tr>
<tr>
<td>Currently enrolled</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>1199</td>
<td>621</td>
</tr>
</tbody>
</table>

school system. For these students, we used either their highest completed level of secondary education, or else, when this information was missing, their educational level at the first classroom interview.

The long-term effects of CKV1 are based upon the observations following completion of secondary schooling, and we must therefore compare these with the observations of comparison groups at the same stage of their educational career. We therefore estimated the effects of secondary education separately for the stages before and after completion of secondary schooling, by including interaction variables between education and an indicator for completion of secondary schooling (0–1). The latter is based upon whether the respondent was still at school, and, if so, upon his/her current level of education: secondary or tertiary. Missing information (<1% of the observations) was coded as 0 (still at school).

Enrolment in CKV1 was based upon a single item\(^1\) stating whether or not the student was enrolled in CKV1, or one of its variants, and if so, whether he or she was currently enrolled, or whether he or she had completed the CKV1 course. For the classroom interviews and the follow-up interview that was held in March 1999, we used a positive answer to this question as an indicator of current enrolment in the subject. Furthermore, as enrolment in (one of the variants of) CKV1 – yes or no – should be the same for all students in one class, we used the fact that students were interviewed in classes to improve the reliability of the measure of current enrolment in CKV1 at the time of the classroom interviews. The measure was constructed as the rounded class mean of the individual reports on enrolment.

In subsequent waves, individual educational careers and enrolment in CKV1 are likely to diverge. Therefore, enrolment in CKV1 during follow-up waves was mainly based upon individual reports.\(^2\) In the event of any inconsistencies (less than 1% of all CKV1 career patterns), we took the answer given shortly after having been enrolled in the course to be more reliable than the one given at a later stage.

As cultural participation is based upon the frequency of attending cultural events during the past 12 months, these questions may refer to a period when the respondent was still enrolled in the subject. We therefore considered enrolment in CKV1 of respondents who were still in secondary school as current enrolment, even when they reported having completed CKV1. The answer that the respondent had completed CKV1 was only interpreted as past enrolment if secondary education had also been completed. This minimises the risk of establishing long-term effects upon students who have completed CKV1 for too short a time frame. Although this was not a problem for the attitude towards the arts, for the purpose of consistency we used the same distinction between present and past enrolment.

Having determined current or past enrolment for each observation, the long-term effects of enrolment in CKV1 were analysed by creating three variables (as in Nagel, 2004, p. 132). The first variable indicates whether a student had ever been enrolled in CKV1, a second variable indicates whether the enrolment in CKV1 is in the present or not, and the third one indicates the enrolment in CKV1 without a distinction between the present and past enrolment. When these three variables are included in the analyses, the effect of ever having been enrolled in the course indicates the cultural participation or the attitude before enrolment in the course, compared with those who have never been enrolled in the subject.

\(^{1}\) Except for March 1999, when enrolment was determined by interviews with teachers.

\(^{2}\) Except for missing values, which are replaced by the class mean, thereby assuming that classes by-and-large follow the same school careers.
and can be used to identify selection effects. The effects of current enrolment indicate the
cultural participation of students who are currently enrolled, compared with the cultural
participation before and after enrolment. The long-term effects of CKV1 can be read from the
effects of the remaining variables that indicate the difference between cultural participation
before and after enrolment in the course.

In order to gain an understanding of enrolment in the distinct variants of CKV1 and the
subsequent stages of enrolment, the variables indicating current and past enrolment in CKV1
were interacted with the level of secondary education. In the analyses, we concentrate upon the
effects of CKV1 at senior general secondary (HAVO) and pre-university (VWO) education
levels. Enrolment in the other two variants (at lower vocational education (VMBO) and
gymnasium level) is controlled in the analyses, but the effects have not been reported.

Finally, we take into account year of birth, wave and gender. The students reported their year
of birth and this represents differences within the waves between older and younger secondary
school students. We use eleven dummy variables to indicate the time of measurement for each
separate cohort, thereby capturing both the differences between cohorts and changes over time in
order to make sure that the long-term effects were not caused by period or cohort effects. A
continuous time variable was calculated as the number of months since the classroom survey was
held and varied between 0 and 75 (for the 1998 cohort in December 2004, 75 months passed since
their first classroom interview in September 1998). Lastly, the selected sample consisted of 51%
females.

5. Method

To test the hypotheses, we use hierarchical linear models, which take into account the
mutually dependency of observations within persons, classes and schools (Snijders and Bosker,
1999). The observations of students within classes and classes within schools are considered as
random samples from populations of classes and schools, and consequently, random variability is
estimated at every level. In longitudinal data, the variances of cultural participation for each wave
and the covariances of cultural participation across waves cannot be assumed to be constant. To
allow variances and covariances to vary across the waves, we included a time variable with
random slopes at individual and class levels (Snijders and Bosker, 1999, p. 171). The models
were estimated by MLwiN 2.10 beta 5 (Rasbash et al., 2008).

In the case of cultural participation, the best fit was provided by the model with random
intercepts at school, class, individual and time levels, a random slope for the time since the
classroom survey at individual and class level and a random slope for the squared value of
the time since the classroom survey at the individual level. With regard to the attitude towards the
arts, the best-fitting model had random intercepts at school, class, individual and time levels, and
random slopes at the individual level or the time since the classroom survey was conducted and
its squared value. As our main interest is in the fixed effects, the random effects are not reported,
but are available upon request.

6. Results

Table 3 presents the effects of enrolment in CKV1 upon cultural participation and the attitude
towards the arts. To facilitate the interpretation of these effects, Fig. 2 illustrates the effects of the
three stages of enrolment in CKV1 taught at senior general secondary education level upon
cultural participation (CKV1-HAVO).
The effects of ever having been enrolled in the course represent the selection effects: differences in the cultural participation between students of CKV1 before enrolment in the course and those who have never been enrolled in the course, but who are at the same stage in their educational career. Students of CKV1 at senior general secondary education level were slightly
less (−0.144 percentile points) culturally active than their fellow students at senior general secondary education level (although the difference is not significant) before enrolling in the course. We find no significant effects of the pre-university variant of CKV1 before enrolment either (Table 3, first column), which accords with our expectations. As the course is compulsory, we did not expect differences in cultural participation beforehand other than those relating to the participant’s level of education (which the model takes into account).

The effect of current enrolment in CKV1 indicates the increase in cultural participation by CKV1 students at the time of taking the course, over and above their cultural participation before and after following the course. Senior general secondary CKV1 (CKV1-HAVO) students are (−0.144 + 5.831 + 1.348) 7.035 percentile points more culturally active than the other senior general secondary education students during secondary schooling, 5.831 percentile points of which are owing to current enrolment in the course. Furthermore, being enrolled in CKV1 at pre-university education level leads to a similar increase in cultural participation.

The long-term effects of CKV1 can be observed from the effects of “past and current enrolment”. As the model considers the effects of selection and current enrolment, these effects indicate changes in the students’ cultural participation between the period before and after enrolment in CKV1, compared to the changes in the cultural participation by the comparison group. Students of CKV1 at senior general secondary education level are 1.348 percentile points more culturally active than they were before, compared to the changes in cultural participation by others who have also attended senior general secondary education and completed secondary schooling. The resulting t-value of 1.46 does not warrant the conclusion that CKV1 at senior general secondary education level causes persistent effects upon cultural participation. Enrolment in the other main variant of CKV1, the one taught at pre-university level (CKV1-VWO), does not cause any significant effects in the long term either.

The model includes the effects of secondary education, estimated separately for the period before and after completion of secondary schooling, as potentially confounding variables of different stages of enrolment in CKV1. The main effects of education demonstrate significant educational differences in cultural participation during secondary schooling. A higher educational level is associated with more frequent cultural participation, which increases strongly as we move from pre-university education (VWO) to gymnasium. The interaction
effects between education and the indicator for having completed secondary schooling reveal that the effect of secondary education tends to increase over time: the differences between gymnasium students and those of other types of education increase. The other coefficients confirm previous findings in relation to cultural socialisation by the parental family as a main determinant of cultural participation. Students of the least and the most culturally active parents differ by approximately eleven percentile points in their cultural participation. Finally, we notice a slightly higher cultural participation among girls.

The second column of Table 3 displays the effects of CKV1 upon attitudes towards art. If we turn to the long-term effects, represented by the “current or past” variables, neither CKV1 variants appears to be associated with a more positive attitude 1–6 years following completion of the course. CKV1 students did not develop a more positive attitude towards the arts when compared with others who had undergone the same secondary schooling and were at the same stage in their educational career. In addition, the effects of current enrolment in CKV1 show that the attitude did not even change at the time the students were actually following the course.

The effects of secondary education demonstrate that students at pre-university education (VWO) and gymnasium level are the most positive about art, whereas we find no differences between students of senior general secondary (HAVO) and lower vocational secondary education (VMBO). The attitude of students of middle and higher secondary education becomes even more positive once they have completed secondary education compared with students of lower vocational secondary education (VMBO). Furthermore, parents’ cultural participation is an important determinant of their children’s attitude towards the arts. However, in contrast with cultural participation, it is certainly not the main determinant. Differences between boys and girls are larger, with girls thinking about art in a far more positive manner than boys. The attitudes also become significantly more positive with age.

Table 4 examines the extent to which the effects of CKV1 apply equally to students of different levels of cultural socialisation by the parents. Again, all three stages of CKV1 have to be taken into account, even in the interactions with control variables. The interactions between parents’ culture and “current or past enrolment” in CKV1 indicate whether the long-term effects of CKV1 differ between the students from culturally active and less culturally active families. These effects (2.535 and $-0.679$) are not significant, either for cultural participation or for attitudes towards art. The absence of long-term effects of CKV1, listed in Table 3, therefore applies equally to students of culturally active and culturally inactive families.

The same holds for the attitude towards art, but here we notice a positive interaction between current enrolment in CKV1 and parental cultural participation. The attitudes of students at senior general secondary education (HAVO) level were affected more strongly by CKV1 at the time they were enrolled when their parents were culturally active. Students in this variant of CKV1 of less culturally active parents were not influenced in their attitudes towards the arts.

Another interesting finding is that the effects of education and cultural socialisation reinforce one another as far as cultural participation is concerned. The effects of education upon cultural participation are much stronger for students with culturally active parents than for those from culturally inactive families. The interactions between parents’ culture and the level of secondary education demonstrate that the difference between VMBO and gymnasium students is 1.801 ($8.068 + 12.535 \times -0.5$) for those with the least culturally active parents ($-0.5$), and 14.336 ($8.068 + 12.535 \times 0.5$) for those with the most culturally active parents ($0.5$). The rate of change does not depend upon cultural socialisation however, as can be read from the three-way interaction with completion of secondary education. With regard to attitudes towards art, there is no clear interaction between education and cultural socialisation.
### Table 4

Cultural participation and attitude towards the arts – interaction between variants of CKV1 and parents’ cultural participation: maximum likelihood estimates of the hierarchical linear model (unstandardised coefficients and standard errors).

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Cultural participation</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enrolment in CKV1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ever CKV1 (HA V0)</td>
<td>-0.588</td>
<td>0.787</td>
</tr>
<tr>
<td>Ever CKV1 (VWO)</td>
<td>-0.539</td>
<td>0.945</td>
</tr>
<tr>
<td>Currently CKV1 (HA V0)</td>
<td>5.593</td>
<td>1.070*</td>
</tr>
<tr>
<td>Currently CKV1 (VWO)</td>
<td>5.091</td>
<td>1.148*</td>
</tr>
<tr>
<td>Currently or past CKV1 (HA V0)</td>
<td>1.275</td>
<td>1.039</td>
</tr>
<tr>
<td>Currently or past CKV1 (VWO)</td>
<td>2.147</td>
<td>1.235</td>
</tr>
<tr>
<td><strong>Secondary level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower vocational (VMBO)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senior general (HA V0)</td>
<td>2.467</td>
<td>0.891*</td>
</tr>
<tr>
<td>Pre-university (VWO)</td>
<td>4.724</td>
<td>0.954*</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>8.068</td>
<td>1.247*</td>
</tr>
<tr>
<td>Completed secondary education</td>
<td>-0.686</td>
<td>0.738</td>
</tr>
<tr>
<td><strong>Secondary educ. level × completed sec. education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower vocational (VMBO)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senior general (HA V0)</td>
<td>1.169</td>
<td>1.018</td>
</tr>
<tr>
<td>Pre-university (VWO)</td>
<td>1.001</td>
<td>1.208</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>3.298</td>
<td>1.595*</td>
</tr>
<tr>
<td>Parents’ cultural participation (−0.50 to 0.50)</td>
<td>3.317</td>
<td>2.072*</td>
</tr>
<tr>
<td>Birth year (1980 = 0)</td>
<td>-0.333</td>
<td>0.229</td>
</tr>
<tr>
<td><strong>Parents’ culture × CKV1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents’ culture × never CKV1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Parents’ culture × ever CKV1 (HA V0)</td>
<td>-1.649</td>
<td>2.221</td>
</tr>
<tr>
<td>Parents’ culture × ever CKV1 (VWO)</td>
<td>2.106</td>
<td>2.659</td>
</tr>
<tr>
<td>Parents’ culture × current CKV1 (HA V0)</td>
<td>1.299</td>
<td>2.907</td>
</tr>
<tr>
<td>Parents’ culture × current CKV1 (VWO)</td>
<td>-0.977</td>
<td>3.354</td>
</tr>
<tr>
<td>Parents’ culture × current or past CKV1 (HA V0)</td>
<td>2.535</td>
<td>2.869</td>
</tr>
<tr>
<td>Parents’ culture × current or past CKV1 (VWO)</td>
<td>-0.679</td>
<td>3.597</td>
</tr>
<tr>
<td><strong>Parents’ culture × secondary educational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower vocational (VMBO)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senior general (HA V0)</td>
<td>5.367</td>
<td>2.221*</td>
</tr>
<tr>
<td>Pre-university (VWO)</td>
<td>5.723</td>
<td>2.404*</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>12.535</td>
<td>2.356*</td>
</tr>
<tr>
<td>Parents’ culture × completed secondary education</td>
<td>1.066</td>
<td>1.572</td>
</tr>
<tr>
<td><strong>Parents’ culture × sec. education × completed sec. ed.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower vocational (VMBO)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senior general (HA V0)</td>
<td>1.466</td>
<td>2.304</td>
</tr>
<tr>
<td>Pre-university (VWO)</td>
<td>0.370</td>
<td>2.957</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>-0.038</td>
<td>2.701</td>
</tr>
<tr>
<td>Parents’ culture × birth year (1980 = 0)</td>
<td>0.580</td>
<td>0.469</td>
</tr>
<tr>
<td>Female</td>
<td>2.085</td>
<td>0.347*</td>
</tr>
<tr>
<td><strong>Time: cohort 1998</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 1998</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>March 1999</td>
<td>0.014</td>
<td>0.431</td>
</tr>
</tbody>
</table>
CKV1 does not persistently affect cultural participation by those who have followed the course. Following completion of secondary education, those who were enrolled in the course were just as culturally active as those who attended a secondary school of the same level but did not follow the course. The absence of effects applies equally to students of culturally active and culturally inactive families, and CKV1 therefore neither reduces nor reinforces the existing social inequalities in that respect. Moreover, enrolment in CKV1 does not lead to long-term changes in attitudes towards the arts.

Enrolment in CKV1 at middle and higher levels of secondary education does encourage cultural participation at the time when students are enrolled in the subject. The subject therefore succeeds in its purpose to provide an incentive to adolescents’ highbrow cultural participation, but it is only a temporary effect. These findings replicate the results of a study previously carried out on the short-term effects of CKV1 (Damen et al., 2010), and also previous analyses on some of these data (Haanstra et al., 2002). The temporary change in cultural participation is hardly accompanied by a change in attitude. We only found positive effects for students at senior general secondary education (HAVO) level who are familiar with highbrow culture due to their family. Overall, we may conclude that the evidence is not convincing with regard to the hypothesis that CKV1 would succeed in (temporarily) changing students’ attitudes towards the arts.

The absence of (lasting) effects of CKV1 fits the cultural reproduction model, according to which highbrow cultural participation cannot be learned in school. The result that effects of CKV1 do not depend – either positively or negatively – upon familiarity with highbrow culture gained through socialisation in the parental family neither supports the cultural reproduction model nor the cultural mobility model. The main conclusion has to be that arts education does not play much of a part in the social inequalities within cultural participation and attitudes towards the arts. This result is in line with previous studies on the impact of specific in-school arts education programmes, in which the effects of arts education were found to be minor (yet
significant) in comparison with those of family and education (Nagel et al., 1997; Ranshuysen and Ganzeboom, 1993).

Our findings confirm the significant influence of parents’ cultural participation and educational level found in previous studies (De Haan and Knulst, 2000; De Vries, 2006; DiMaggio and Useem, 1978; Katz and Gurevitch, 1976; Nagel and Ganzeboom, 2002; van Eijck, 1996). An unanticipated outcome of this study is the positive interaction between education and parents’ cultural participation, which is clearly in line with the cultural reproduction model: those who are already in a favourable position due to the cultural activities of their parents take most advantage of their school education as far as their cultural participation is concerned.

We find more significant effects of secondary education upon cultural participation and attitudes towards the arts once secondary education has been completed. Although students of lower, middle and higher secondary education already show differences when they are at secondary school, these differences become more pronounced as soon as they have completed their secondary education. This may to a certain extent reflect the differences in further education undertaken after secondary school. However, these differences are not fully present in secondary education, but partly arise during the individual’s educational career, pointing to an increasing effect of education upon cultural participation during the period from adolescence to young adulthood (cf. Nagel and Ganzeboom, 2002).

Why did we not find any effects of CKV1 in the longer term? Previous programmes of Dutch in-school arts education have been found to persistently increase cultural participation, though the effects of specific in-school arts education programmes are usually minor (Nagel and Ganzeboom, 2002; Nagel et al., 1997; Ranshuysen and Ganzeboom, 1993).

First of all, in the aforementioned studies, the effects of arts education were determined following a longer time span between the art course and the measurement of cultural participation (at least 5 years following completion of arts education or (much) longer) than is the case here. In this study, the maximum period since enrolment in CKV1 is 6 years, and for many respondents, the time since enrolment is even less. The effects of arts education possibly take some time to develop and the effects of CKV1 may not have become apparent yet. The only way to find out is to follow these cohorts for even longer and to see how the cultural careers of former CKV1 students and their schoolmates develop. Previous studies on the effects of arts education, however, do not indicate that the effects of arts education would only emerge after some time. Effects of in-school arts education have been found to be most significant shortly after the course had been completed and then demonstrated a decrease over time (Nagel, 2004).

The absence of effects could also have a methodological base. In previous studies, enrolment in arts education is (in most cases) measured retrospectively, relying on the memory of the respondents (Kraaykamp, 2003; Kracman, 1996; Ranshuysen and Ganzeboom, 1993). If cultural participants can better remember the art lessons they followed, this may lead to positively biased results, and, as a consequence, to an overestimation of the effects of arts education. By contrast, in this study, for the majority of the respondents enrolment in CKV1 was determined at the time of enrolment, which resulted in a reliable measure of who was enrolled in CKV1 and who was not. The absence of effects may therefore simply represent the real state of affairs, whereas the previously found effects may be due to measurement errors.

Furthermore, enrolment in art courses is often optional, especially in the upper stage of secondary education. A comparison between arts students and their schoolmates is therefore often impaired by self-selection bias: those who are already involved in the arts will take up the art course. The effects of the course may thus (partly) result from existing differences in cultural participation. Although multivariate techniques make it possible to take into account the
indicators of earlier cultural interest, one always runs the risk of selection bias owing to unmeasured characteristics, and therefore of an overestimation of the effects of arts education. The case of the compulsory course CKV1 has no selection bias other than the selection by the secondary educational level, which is a characteristic of what reliable and valid measures are available. Indeed, our analyses revealed no selection effects of CKV1. Therefore, once again, the absence of effects may just represent the actual situation, whereas the previously found effects were due to selection bias.

Nevertheless, the absence of effects of CKV1 could also be explained by its distinctive features compared to other (Dutch) arts education programmes. First of all, previously found effects were limited to one art discipline only: music lessons were shown to have effects upon later participation in music, visual art lessons on later participation in the visual arts, and so on.

CKV1 concerns all the different art forms, however, but very limited time is allotted to each of them. This means that the “treatment” for each of the disciplines is rather weak. Furthermore, in contrast to students of other arts subjects, CKV-1 students undertake few practical activities (such as studio art, singing, dancing, etc.). The core of the subject is cultural visits and reflection on these visits. This raises the question whether a curriculum in which cultural visits and students’ own art activities are balanced will be more effective. Another important point is the student-oriented teaching methodology of CKV1. Students’ cultural activities are not meant to be limited to a series of compulsory pre-structured class visits. Indeed, the majority of teachers are quite liberal in accepting students’ individual preferences. Students thus tend to choose cultural activities according to their existing preferences and are not likely to broaden preferences or to develop new behaviour. A final problem in attaining the goal of change in cultural consumption could be that the CKV1 students are aged 16 or 17 years. Adolescence could be a difficult period for pedagogical intervention in relation to aesthetic preferences. A developmental perspective on arts education suggests that a subject such as CKV1 should start at an earlier age in order to be more influential (e.g. Gardner, 1990; cf. De Jager, 1967).

As CKV1 differs in most of these respects from existing art courses, it is difficult to attribute the absence of effects to one or more of these. This would require a more systematic comparison between art courses or treatments of CKV1 that differ in the aforementioned characteristics.

The difference between no effect and minor effects may have major policy implications. For instance, minor effects of CKV1 may still lead to a noteworthy increase in the attendance of cultural events. Therefore, as far as policy implications are concerned, a more thorough examination of what features of CKV1 cause the absence of its effects upon future cultural participation would be beneficial. An initial step in this direction would be to compare the schools (and teachers) in their handling of CKV1. As said before, schools were given considerable freedom to determine the content and didactics of the course, which may have resulted in different treatments of CKV1. Before changing CKV1, it should be studied which treatments are more or less effective in encouraging future cultural participation.

With regard to social inequalities in cultural participation, we have learned (once again) that arts education does not play much of a role in determining cultural participation. The impact of in-school arts education is of minor importance when compared with the main determinants of cultural participation, i.e. parents’ culture and educational level. This conclusion also offers some insight into the effects of educational level, since we have in fact removed one possible explanation for the strong effects of education generally found in research on cultural participation, including the present study. The large differences in cultural participation between
higher and lower-educated individuals have not emerged because the higher-educated individuals have learned about art in school. They originate from somewhere else and are a puzzle that remains to be solved in future research.

Acknowledgements

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Ganzeboom, H., Nagel, I., 2004 [p.i.]. Youth and Culture. A Multi-actor Panel Study [machinereadable datafiles]. VU University, Amsterdam [producer], to be archived.

3 A conclusion that was also drawn by Ranshuysen and Ganzeboom (1993).


Ineke Nagel is assistant professor at the Department of Research Methodology at the VU University in Amsterdam. As a member of the research program Social Inequalities over the Life Course, she studies how cultural participation develops over the life course, in particular how family and school affect these developments.

Marie-Louise Damen is a PhD candidate in sociology at the Interuniversity Center for Social Science Theory and Methodology (ICS), Utrecht University, the Netherlands. Her research interests are mainly in sociology of education, cultural participation and arts education.

Folkert Haanstra is professor of arts education at the Amsterdam School of the Arts. He holds the special chair for Cultural Education and Cultural Participation at the Utrecht University. He studied psychology and Fine Art in Groningen and he has carried out research into arts education in primary and secondary education and in museum education and community centres. His dissertation study concerned the effects of art education on visual-spatial ability and aesthetic perception.