

**School2Work: A longitudinal study of the transition from vocational education  
and training to the labour market in the Netherlands.**

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**1. Background School2Work project**

Youth and young adults have a vulnerable labour market position compared to prime-age workers. Globally, the ratio of youth-to-adult unemployment rates has exceeded 2.5 for the last 40 years. The situation is slightly better in the Netherlands, but youth unemployment rates are still about twice those of older workers (OECD, 2008). In periods of economic recession, the relative disadvantage of youth in the labour market tends to rise, which has led to youth unemployment rates exceeding 50% in parts of the US and Europe (Eurostat, 2012; U.S. Bureau of Labour Statistics, 2012). In addition, young workers have to deal more often with precarious forms of employment (ILO, 2012; Kalleberg, 2000; OECD, 2008; Quintini, Martin, & Martin, 2013). Young adults' first years on the labour market are therefore a turbulent and uncertain period in which many of them struggle to find and maintain (good quality) employment.

Yet, the first years in the labour market may be critical for sustainable labour market participation. Even though the long-term career consequences of a precarious start in the labour market remain topic of debate<sup>2</sup>, it is acknowledged that employment (quality) impacts both the well-being and career prospects of young adults (Burgess, Propper, Rees, & Shearer, 2003; de Lange, Gesthuizen, & Wolbers, 2013; Feldman, 1996; Gebel, 2010; Kinicki, Prussia, & Mc-Kee-Ryan, 2000; McKee-Ryan & Harvey, 2011; Ng

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<sup>1</sup> All three authors contributed equally to the data-collection as well as to this project description. Correspondence can be directed to any of the authors. Each author is responsible for a particular part of the joint project (see section 1.3 for details).

<sup>2</sup> There is evidence to suggest that a precarious start in terms of unemployment or having a job in the secondary segment of the labour market has long-lasting negative consequences for young workers (Steijn, Need, & van Gesthuizen, 2006; Burgess, Propper, Rees, & Shearer, 2003). As opposed to this so-called entrapment scenario, flexible employment at labour market entry may also function as a step towards more permanent employment in the further career of young adults (de Graaf-Zijl et al., 2011).

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& Feldman, 2007; Scherer, 2010; Steijn et al., 2006). Hence, both researchers and policy makers have become increasingly interested in predictors of a successful transition into the labour market.

Within the group of adolescent and young adult job seekers, certain groups are more at risk for a vulnerable labour market position. One important marker for unemployment differences is the level of education (de Lange, Gesthuizen, & Wolbers, 2013; Gebel 2010; Burgess, Propper, Rees, & Shearer, 2003). To illustrate, 22.3% of lower educated, 14.8% of middle educated, and 10.6% of higher educated graduates were unemployed in the Netherlands (Statistics Netherlands, 2014). Because of this relatively vulnerable position of lower and middle educated youth, policy makers have devoted special attention to this group (e.g., Ambassador for Youth Unemployment, 2013). Yet, previous scientific work has focused on university graduates, thereby largely neglecting non-collegiate (lower and middle educated) workforce entrants (Kanfer, Wanberg, & Kantrowitz, 2001). This way, little is known about predictors of a successful school-to-work transition among non-university samples.

The aim of the School2Work project was to contribute to a better understanding of predictors of a successful transition from school to the first years in the labour market. The relevant skills and barriers in the school-to-work transition may be different in the current era of boundaryless careers (Major, Turner, & Fletcher, 2006) and for students with different educational levels (de Lange et al., 2013; Kanfer et al., 2001), so the School2Work project contributes knowledge to the academic domain. Simultaneously, it may be informative for policy makers, who aim “to produce better outcomes for youth in the longer run by equipping them with relevant skills and removing barriers to their employment.” (OECD, 2013, p.2).

## **1.1 Vocational education**

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The School2Work projects focuses on youth in secondary vocational education in the Netherlands. This type of training prepares students in more than 700 vocational courses for a wide variety of occupations ranging from, for example, hairdressers and mechanics to nursing assistants and administrative staff.

After primary education, most students enrol in one of three levels: pre-vocational education (VMBO; 50%), senior general vocational education (HAVO; 24%), and pre-university education (VWO; 20%).<sup>3</sup> Students graduating from pre-vocational education typically continue with vocational education (MBO) (Dutch Ministry of Education, Culture, and Science, 2012). Approximately 51% of all students who left the educational system after graduating from post-secondary education in 2012 did so with a vocational education degree (Dutch Ministry of Education, Culture, and Science, 2012). In the labour force, approximately 43% of the labour force holds a vocational education degree (Statistics Netherlands, 2013). In sum, vocational education is the largest educational track in the Netherlands and, consequently, the most frequent preparation for labour market entrance.

Vocational education is offered at four levels and in two learning pathways. Students can follow a school-based pathway (BOL) in which practical training takes up 20% to 60%. Students can also follow a work-based pathway (BBL) in which learning in the classroom is limited to a day per week and practical training takes up more than 60% of the time. Given the close link between school and labour market for students enrolled in a work-based pathway, these students generally experience a smoother school-to-work transition than students enrolled in a school-based pathway. This notion is empirically supported by lower unemployment rates among BBL graduates (12%), compared to BOL graduates (22%) (ROA, 2014). Moreover, BBL graduates are also considered to be

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<sup>3</sup> For a more detailed overview of the educational system in The Netherlands, see <http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx>

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employee instead of (only) student. Accordingly, in the School2Work project we focus on students BOL graduates.

Programs are offered at four levels of training: the assistant level (“niveau 1”; 5%), basic vocational level (25%), full professional level (27%), and specialist level (“niveau 4”; 43%) (The Netherlands Association of VET Colleges, 2010). Graduates can start working or go on to another form of education. Only graduates completing specialist level can continue in higher professional education (HBO). In the School2Work project, we focus on students enrolled in the basic vocational level or higher, since students enrolled in the assistant level are formally not qualified for the labour market according to qualification requirements of the Dutch government (REF). Side projects of the School2Work project focusing on assistant level students have shown that the assistant level indeed consists of students with different characteristics and school-to-work transitions (Baay & Schippers, 2014; Baay & van Pinxteren, 2014). Data collection among this group is not described in the current paper.

## **1.2 Project structure**

The general aim of the School2Work project is to identify factors that explain individual differences in the school-to-work transition and early career of vocational training students. To identify relevant factors that influence young adults’ early career chances, we combine insights from the disciplinary perspectives of psychology, sociology, economics, and institutional and organizational sciences.

While economic theory looks at human capital and supply/demand conditions to explain the job a graduate finds, psychological theories concentrate on personality features (motivation and self-control) to explain which young individuals are better able to make use of the opportunities offered to them in terms of education and other preparations to enter the labour market. The sociological perspective adds the effect of social capital (networks, social contacts), while an institutional approach would focus on

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institutional and legal arrangements (making available information, social security, minimum pay law and services from intermediate organisations like job agencies and UWV) to explain young people's search behaviour and the match between individual capabilities and job requirements. These partial approaches result only in partial answers. The multidisciplinary School2Work project combines these disciplinary insights and aims to identify factors that contribute to a successful school-to-work transition.

In addition to the multidisciplinary perspective, the School2Work project contributes to the literature by examining within-group differences. While most studies have taken a comparative perspective by examining differences between educational groups or countries, within group variation is often disregarded. Hence, the School2Work project contributes to current literature by focusing on differences among young semiskilled workers.

### **1.3 Sub-projects**

The first sub-project (with PB as primary researcher) centres on the question how people in the job-search process can take advantage of who they are. Assets that are studied in this sub-project are both ascribed (e.g., ethnic background) and achieved (proactive coping skills); individual (e.g., self-control, personality) and contextual (e.g., social networks). The common ground in these assets is that prior studies have shed relatively little light on mechanisms through which these factors influence the job-search process. In a set of studies, we borrow from psychological and sociological theories to propose ways through which job-seekers can take advantage of these characteristics.

The second project (with LD as primary researcher) investigates the role of student's resources in facilitating a smooth transition from school to work, taking into account material (parental allowances, wages, savings) as well as immaterial (counselling, information) resources. The role of financial resources, such as unemployment benefits, for labour market outcomes is well-established for adult unemployed job seekers, but, so

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far, little is known about the actual resources available to vocational training students as well as their impact on the labour market entry success.

The third project (with CB as primary researcher) focuses on the interplay between young adults and (training) organizations that employ them. More specifically, this project aims to explain differences in the early career of young vocational graduates by examining the behaviour of employers and young adults themselves. To investigate this issue, various studies are designed to examine elements of this relationship and the impact on the early career of young adults, such as the role of enacted human resource policies, managers' employment decisions and the experiences of young adults in (training) organisations. In contrast to previous work on early careers, both the perspective of employers (i.e., the demand-side of the labour market) and the perspective of young adults (the supply-side of the labour market) are taken into account to explain differences in the attainment of young adults.

## **2. Preparation for data collection**

### **2.1 Study design**

In order to follow school-to-work transitions of young adults, a longitudinal survey was designed. The study started when students were still enrolled in school. After graduation, students could participate up to four times at home. This design enables to examine predictors of school-to-work transition and early career success.

One *a priori* concern was the response rates across the study, which can be especially problematic among lower-educated samples (REF). In the School2Work project, we chose to use computer-based surveys because they have shorter transmitting time, lower delivery cost, more design options, less data entry time and easy participation for frequent computer users (Israel, 2011; Couper, 2000). However, one major concern with these surveys is relatively low response rates. In general, meta-analyses show lower response rates for web-based surveys (33%) compared to traditional mail/phone surveys

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(59%) (Manfrede et al, 2008; Shi & Fan, 2008; Nulty, 2008; Couper, 2000).

Acknowledging that the choice for computer-based surveys would lead to lower response rates, various attempts were made to establish acceptable response rates. As prior studies have shown that response rates are strongly affected by survey design (topics, length, ordering) and delivery (sampling methods, contact delivery modes, invitation designs, incentives) (Fan & Yan, 2010; Shi & Yan, 2008; Porter & Whitcomb, 2003; Cook, Heath & Thompson, 2000), we focused on these aspects.

With regard to the design of the survey, we have focused on comprehensibility of the questionnaire. Previous studies have shown that comprehensibility is important for quality of answers, as participants are discouraged to continue if they have difficulties understanding the questionnaire (Buers et al, 2014; Leeuw, Hox & Huisman, 2003; Tourangeau, Rips & Rasinki, 2000). Given large differences in language proficiency in our sample -varying between CEF A1 to B2 (Onderwijsinspectie, 2013)-, comprehensibility was particularly important. When formulating new items and adjusting existing scales, we built on suggestions from experts in the field (e.g., Bureau of Language of the Expert Centre for Vocational Education; MBO Diensten) and prior work on questionnaire development (e.g., Buers et al, 2014; Tourangeau, Rips & Rasinki, 2000 ). The experts' general advice was to formulate clearly, specifically and neutrally. Additionally, they provided general suggestions on formulating questions and response categories. With regard to the formulation of questions, we were encouraged to: 1) Formulate short and active sentences (10-15 words), 2) Adjust the language level to the target group (level A2- B1) and avoid jargon and abstract concepts (i.e., ask about concrete behaviours), 3) Limit the use of negatively formulated items (e.g., "I do not want others to think I am lazy"), 4) Limit the use of brackets, commas, and bold words, and 5) Start sentences with main concept/ topic. With regard to formulating response categories, we were encouraged to: 1) List answering categories in a logical order and

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formulate them consistent with the question, 2) Aim to cover all possible answers, 3) Ensure that numbering of answer categories is consistent across scales. Besides taking account of these recommendations, pop-up text boxes were used to provide explanations for words potentially unfamiliar to the respondents, such as “disposable income” or “timid”.

Other survey design related issues that influence response rates include questionnaire length and salience of the topic (Fan & Yan, 2010). Hence, efforts were made to limit the questionnaire length by focusing on central concepts and preferring scales with limited numbers of items. Finally, as school-to-work transitions relate to the near future for participants, the project dealt with a salient topic and could be introduced accordingly.

Issues of survey delivery that influence response rates include information before starting the survey (Fan & Yan, 2010) and the graphic layout of the survey (e.g., Dillman & Bowker, 2001; Cooper, 2000). Students were informed that the School2Work project was a collaboration between an academic institute (Utrecht University) and the vocational school. This was based on the notion that people are more willing to participate in studies organized by governmental and non-profit organizations (Fan & Yan, 2010). The main strategy in school to improve cooperation was the personal approach and attention. Researchers and research assistants tried to establish a firm basis for long-term cooperation by explaining the aim of the project and answering students’ questions. They also distributed small sugary treats to make sure that the School2Work project had some positive memory attached to it – and to provide the students with a short-term energy boost which was much needed after half an hour of answering questions. As an incentive to participate in each online wave after graduation, all respondents who finished the questionnaire partook in a lottery, which raffled an iPad as primary prize and several gift certificates as secondary prizes. Efforts were made to

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remind the students of the project also between waves. Between the first and second wave, individual personality profiles including a comparison with the average student's profile of their school were sent to the participants. Regular project updates along with other related information and promotion videos were posted on Facebook and announced via Twitter.

A number of graphic lay-out elements that are known to influence response rates (Fan & Yan, 2010; Couper et al., 2000; Dillman & Bowker, 2001) were addressed in the current project. With regard to ordering effects, we acknowledged that previous studies found mixed support for the use of an indication of progress throughout the questionnaire (REF). Hence, instead of using an indication throughout the questionnaire, we chose to only present the questionnaire structure upfront (e.g., first some questions about you, then about your study, then about your future, and finally some questions about your social network). Also, to address that respondents tend to prefer variation, we alternated between fixed categories (e.g., 1. Strongly disagree, 2. Disagree, 7. Strongly agree) and vertical bars with solely fixed end-points and a continuous scale (e.g., 0. Strongly disagree, 100. Strongly agree). With regard to technical issues involving screen-by-screen or scrolling survey layouts, we realized that many of our respondents fill out the survey on their mobile phone, so we limited scrolling by presenting a maximum of four items below each other.

## **2.2 Testing**

After designing the questionnaire (and before distributing the survey), experts in the field were asked to check the survey on clarity of the questions/response categories and time needed to complete the survey. This group of 'evaluators' consisted of (1) scholarly experts in the field of psychology, economics, sociology and human resource management; (2) researchers employed by the Expert Centre for Vocational Education and (3) teachers in vocational education. They provided comments and additional

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suggestions to adjust the School2Work questionnaires in order to balance scientific requirements (validated scales) and cooperation from our target group (comprehensibly and feasibility).

Furthermore, a pilot study was conducted among 136 vocational students in May, 2011. Based on this pilot study, final changes were made and the final version of the questionnaire was put online.

### **2.3 School2Work questionnaire**

The School2Work questionnaires covered different topics. To study changes in a construct from one period to another, most items were measured at least at two waves; see Table 1 for an overview.

## **3. Procedure and Statistics**

### **3.1 Data collection: Waves and Procedures**

Data for the School2Work project were collected in five waves of interviews that were conducted between October 2011 and December 2014 among students from one vocational training institute (ROC). This school is situated in the centre of the Netherlands and provides training in several hundred different vocations on all four levels of intermediate vocational education. Organised in twelve different colleges, the trainings cover fields as diverse as automotive, beauty and healthcare. In 2011-2012, approximately 10,000 students were enrolled in all school-based vocational training programs on all levels combined in this particular school (ROC Midden Nederland, 2011).

The data collection started in the school year 2011/2012, and all last-year students enrolled in school-based training programs from at least level two were invited to participate in the series of questionnaires over a period of three years, thus covering the last phase of training and the first years of work-life or higher education. In total,

more than 2,000 students filled out at least one of five questionnaires. Figure 1 provides an overview of waves and response information.

The first two questionnaires were completed in school - at the start of the last year of training (T1) and shortly before graduation (T2). The researchers and research assistants made appointments with teachers to visit the students at school during a regular class. After a short introduction on the project and the questionnaire, students completed the digital questionnaires individually; a personal login code was used to allow for matching of the different waves. Students were free to provide contact details to allow invitation to the last three rounds of questionnaires, and the majority of the participants of T1 and/or T2 did (93.6%).

Depending on class size<sup>4</sup>, one or multiple researchers or research assistants were present while students completed the questionnaires to assist them with any difficulties computer-related and otherwise; to clarify issues concerning the questions asked in the questionnaire and to answer questions about the project. Sometimes students needed special assistance such as reading the questions aloud to them to help them stay focused on the task or to overcome general reading difficulties. Often students needed encouragement to continue, as the questionnaires took 35 minutes on average to complete. These first two questionnaires were long as they covered a wide range of topics (see Table 1).

The follow-up questionnaires (T3 to T5) were completed online, since the majority of the students had already finished their training. Consequently, those questionnaires were considerably shorter, covering mainly the current situation of the respondent (see Table 1 for details). Most students had provided contact details with the first two interviews, such as e-mail-addresses, telephone numbers, home addresses, or social media account information (Facebook, Hyves). Initially, invitations for the third,

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<sup>4</sup> The ratio student : researcher was approximately 10 : 1.

fourth and fifth interview were sent out by e-mail. The invitation was repeated in the form of three e-mail reminders sent out over six weeks' time. Respondents who did not respond to the e-mails were approached by phone. During the first online wave (T3), invitations were also repeated in messages via social media and traditional mail, using all the information respondents had previously provided. In addition, the school agreed to send out an invitation in their own name, asking their former students to contribute to the School2Work project by completing the questionnaire. However, while personal invitations through telephone were generally received well by participants – approximately half of the completed questionnaires were filled out after the respondent had been spoken with on the phone-, the other methods proved ineffective and were not employed in wave four and five. In total, 1944 respondents were invited by mail at T3 (1818 at T4), 636 (1034) were contacted by telephone; in addition, 140 letters and 60 social media messages were sent during T3.

Due to the organisation of intermediate vocational education in the Netherlands, the clear set-up of the interview waves - two in-school rounds (T1 at the beginning of the last year, T2 close to graduation) and three after-school rounds of questionnaires (6, 12 and 24 months post-graduation) – were not attained for a large share of the project participants. Intermediate vocational education is organised on an individual basis, so no school-wide graduation date exists. Especially in smaller vocational training programs, each participant graduates as soon as all requirements are completed. Therefore, a number of students had already left school when they were approached for T2 in May, 2012<sup>5</sup>. They were asked to complete the wave-3 questionnaire (167 respondents did). At the time of T3 (December, 2012), those respondents were invited to complete the wave-3 questionnaire again, together with the rest of the panel (107 complied). Conversely, a

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<sup>5</sup> There was a group of students that had not finished their training when approached for T2, but were absent nonetheless for other reasons, such as internships or illness. Those students were invited to complete the wave 2 questionnaire online (by email and in some cases, through their teachers); 206 students complied.

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number of students were still in their original training when they were approached for T3 in December, 2012, those were asked to complete the wave-2 questionnaire (again) instead (139 students). To attain a comparable sample for the before- and after-graduation waves for data analysis, the latest observed pre-graduation questionnaire (wave-2 at either T2, T3 or T4) as well as the first observed post-graduation questionnaire (wave-3 at either T2, T3 or T4) should be combined to produce one wave.

## **3.2 Sample Statistics**

### **3.2.1 Descriptives**

The School2Work panel consists of 2076 individuals, 46% is male and 65% is Dutch (i.e., both parents were born in the Netherlands). Table 2 shows sample statistics.

Participation in the different waves varied considerably. Specifically, 21.6% of the panel (449 respondents) completed all four interviews conducted so far. The largest group (655 students, 31.6%) only filled in one of the questionnaires (T1 or T2); a smaller fraction (27.2%, 565 people) took part in two rounds; and 19.6% (407) participated in three waves. An overview of sample sizes and response rates for each wave is given in Figure 1.

Panel attrition has two main causes: not succeeding to reach participants and participants refusing to participate upon contact. As mentioned, 6.4% did not provide any contact information in the first two rounds and could not be contacted again. Some contact information was no longer accurate at the time of trying to approach respondents (xx%). Of those that should have received an invitation, xx% (T3) and xx% (T4) participated, which compares favourably with response rates usually found in web-based surveys (33% according to REF). The fifth round has not taken place yet (September, 2014), but we will complete the report as data become available. The next section deals with panel attrition analysis, establishing whether attrition has led to bias in the School2Work data.

### **3.2.2 Representativeness**

In order to establish the representativeness of the School2Work panel for the population studied, sample statistics are compared to the characteristics of the overall population of vocational students in the region (Table 2). Overall, the School2Work panel matches the target population closely.

The main concern with panel attrition, apart from sample size considerations, is the risk of biased results due to self-selection in the longitudinal sample of people with certain personal characteristics. To establish the extent to which self-selection bias has occurred in the School2Work project, effect sizes and significance levels were computed for the association between participation in each wave on the one hand, and all major control and outcome variables on the other hand (Table 3). In general, the tests revealed no indication for severe selection bias due to voluntary participation. Even though significance testing revealed several significant relations, these are partly due to the large sample size. All effect sizes were smaller than .20, which is considered a small effect (Cohen, 1992). Effect sizes were largest with personal characteristics, such as ethnicity (.19) and level as well as sector of education (.18). Importantly, status at time of the previous questionnaire (i.e., being unemployed, employed, self-employed, in education, or else) can be ruled out as an important predictor of survey participation as effect sizes do not exceed .11. These relatively low effects sizes between participant characteristics and survey participation suggests that there is no severe self-selection bias in the School2Work data, which makes results better generalizable to the target population of vocational training graduates in the Netherlands.

## **4. Conclusion & Acknowledgements**

The School2Work project conducted a four-year longitudinal survey study among students enrolled in vocational education and training in the Netherlands. Selecting, administrating and collecting data from a panel is always challenging, especially if the

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budget is limited. The challenge becomes profound with this particular population, since response rates are generally lower among young people and those with lower levels of education. Paying close attention to survey design and survey delivery helped us to obtain a unique dataset providing insight into the school-to-work transitions of these young semiskilled workers.

The School2Work research team at Utrecht University (which consists of the three authors of the current paper as well as prof. dr. Joop Schippers, prof. dr. Janneke Plantenga, prof. mr. Frans Pennings, prof. dr. Marcel van Aken, prof. dr. Denise de Ridder, prof. dr. ir. Tanja van der Lippe, prof. dr. Paul Boselie, and prof. dr. Peter Leisink) could never have done this without the help of all the participating students and our cooperation partners.

First, we would like to thank our participants for their time and effort to fill out the questionnaires as well as the teachers who helped carrying out the data collection by making (and keeping) appointments, organising computer space, and motivating students when necessary.

We want to thank a number of people explicitly who contributed considerably with their personal time and effort: Robert Koch, who was enthusiastic from the beginning and laid the groundwork within his organisation – the schooling centre where the data collection was started. Leonard Geluk, chairman of the board of directors of the school, who provided all the institutional support necessary. Peter Taffijn who provided moral and administrative support.

Third, our appreciation goes to Utrecht University's focus area Coordinating Societal Change (CSC) and Stichting Instituut GAK, who provided funding for this intensive project, which enabled us to employ several research assistants to motivate the respondents face-to-face and on the phone.

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## **References**

TO BE ADDED.

Table 1: *Questionnaire topics per wave.*

| Categories  | Waves                                |                 |   |    |    |
|---|--------------------------------------|-----------------|---|----|----|
|   | T1                                   | T2              | T3                                      | T4 | T5 |
| <b>General</b>  | Demographics                         | if absent at T1 |   |    |    |
|   | Socio-economic background            | if absent at T1 |   |    |    |
|   | Living situation                     |                 | x                                       | x  | x  |
|   | Work experience                      | x               |   |    |    |
|   | Big Five Personality<br>Self-control |                 |   |    |    |
| <b>Attitudes<br/>&amp;<br/>Behaviours</b>                   | Work identity                        | x               |   |    |    |
|   | Work motivation                      | x               |   |    |    |
|   | Work norms                           |                 |   |    |    |
|   | Job search                           | x               | x                                       | x  | x  |
|   | Career exploration                   |                 | x                                       | x  | x  |
|   |                                      |                 | Organizational<br>citizenship behaviour | x  | x  |
|   |                                      |                 | Job performance                         | x  | x  |
| <b>Expectations<br/>&amp;<br/>Experiences</b>               | Plans after graduation               | x               |   |    |    |
|   | Career expectations                  |                 | x                                       | x  | x  |
|   | Job and income<br>expectations       |                 | x                                       | x  | x  |
| <b>Resources</b>  | Social network                       | x               | x                                       |    |    |
|   | Income                               | x               | x                                       | x  | x  |
|   | Career guidance                      |                 | x                                       |    |    |
|   | Support at<br>internship/work        |                 | x                                       | x  | x  |
| <b>Career-<br/>&amp;<br/>Labour<br/>market<br/>outcomes</b> |                                      |                 | Labour market<br>situation              | x  | x  |
|   |                                      |                 | Job characteristics                     | x  | x  |
|   |                                      |                 | Career success                          | x  | x  |
|   |                                      |                 | Employability                           | x  | x  |
| <b>Institutional<br/>characteristics</b>                    | Educational                          | x               | x                                       | x  | x  |
|   | Internship/Work                      |                 | x                                       | x  | x  |

Table 2: *Comparison sample- and population statistics.*

|                                   | School2Work sample | Population: school-based vocational students in the region |
|-----------------------------------|--------------------|--|
| <b>Gender:</b> male               | 45.6%              | 47%  |
| <b>Ethnicity:</b>                 |                    |  |
| - Dutch                           | 64.5%              | 65%  |
| - Non-Dutch: 2 <sup>nd</sup> Gen  |                    |  |
| - Non-Dutch: 1 <sup>st</sup> Gen. |                    |  |
| <b>Sector</b>                     |                    |  |
| - Tech                            | 14.6%              |  |
| - Leisure                         | 25.0%              |  |
| - Healthcare                      | 36.0%              |  |
| - Security                        | 6.6%               |  |
| - Business                        | 17.8%              |  |
| <b>Level of training</b>          |                    |  |
| - 2                               | 17.7%              |  |
| - 3                               | 22.9%              |  |
| - 4                               | 59.4%              |  |
| Graduated                         | -                  |  |
| Dropout                           | -                  |  |
| <b>Current sit.</b>               |                    |  |
| - employed                        | -                  |  |
| - education                       | -                  |  |
| - NEET                            | -                  |  |
| - unemployed                      | -                  |  |
| <b>Age (Mean (SD))</b>            |                    |  |

Table 3: *Attrition analyses per wave.*

|                                       | Wave 1 | Wave 2 | Wave 3 | Wave 4 |
|---------------------------------------|--------|--------|--------|--------|
| Age                                   | .05    | .05    | .08    | .04    |
| Parental education                    | .07    | .22*** | .05    | .16*** |
| Ethnic minority (0) / Majority (1)    | .06**  | .05*   | .13*** | .19*** |
| Dropout T-1                           |        |        | .04    | .02    |
| Educational level T-1                 |        |        | .05    | .02    |
| Male (0) /Female (1)                  | .00    | .11*** | .11*** | .06**  |
| NEET T-1                              |        |        | .01    | .04    |
| Having some job T-1                   |        | .01    | .03    | .05    |
| Unemployed T-1                        |        |        | .11    | .07    |
| Western (0) /non-Western minority (1) | .06    | .06    | .04    | .03    |
| Educational level before School2Work  | n/a    | .06    | .11*** | .12*** |
| Educational level School2Work         | .09**  | .13*** | .14*** | .18*** |
| Educational sector School2Work        | .14*** | .18*** | .18*** | .13*** |
| Status T-1                            |        |        | .10*   | .07    |

Note: Values represent Cohen's d estimates.

T-1 refers to the wave before for which wave participation is calculated.

NEET = Not in Education, Employment or Training.

\*\*\* p < .001 \*\* p < .01 \* p < .05

Figure 1: *Overview School2Work data collection waves: participation and response rates.*

