#### **Underachievers:**

## A study on switching from TTO Athenaeum to Dutch HAVO

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## Introduction

The research school is one of 127 secondary schools in the Netherlands that currently offers TTO¹. In April 2011, the school's TTO program was assessed by the European Platform² and received favorable reviews. Nonetheless, the research school has identified a serious concern: a significant percentage of students that enroll in the TTO Athenaeum³ stream, graduate from secondary school in the Dutch HAVO stream (that is, they switch from TTO to the Dutch stream, and they drop an academic level over the course of their secondary school career). In some years, this percentage has been as high as 30 per cent. The management of the research school and its TTO team would like to see an improvement in completion rates in the TTO Athenaeum stream. They have requested the research team to further investigate the matter in order to determine the causes of the high rate of switching (from the TTO to the Dutch stream) in combination with a level change (from Athenaeum to HAVO).

#### Relevance

Research on TTO education in the Netherlands is still limited. In the area of switching, only two studies have been conducted to date on the causes of switching from the TTO to the Dutch stream (Delver, Dieleman, Schuitemaker & Welberg, 2010; Salfrais, Verheijen & Zijlstra, 2011). No studies have been done as to why students switch from the TTO to the Dutch stream, in combination with a drop in academic levels, from Athenaeum to HAVO. This research attempts to answer that question, as well as to serve as a stepping stone for future investigation. The results will be relevant for the research school in question, as well as for other TTO schools that may be facing similar challenges<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> TTO or *Tweetaalig Onderwijs* is the Dutch term for Bilingual education. Please see the sub-section on TTO Education in the Netherlands in the Theoretical Framework (page 2).

<sup>&</sup>lt;sup>2</sup> The European Platform coordinates bilingual education in the Netherlands, on behalf of the Ministry of Education. The main goal of the European Platform is to provide all pupils in primary and secondary school in the Netherlands with a foundation based on internationalization.

<sup>&</sup>lt;sup>3</sup> The Athenaeum stream of secondary school is a six-year pre-university stream.

### Theoretical framework

This research focuses on two main issues: switching from the TTO to the Dutch stream, as well as dropping academic levels from Athenaeum to HAVO. A survey of the academic literature conducted on switching from the TTO to the Dutch stream, in combination with a drop in academic levels from Athenaeum to HAVO, revealed no direct results. Thus, a dichotomy was made in the first instance, between the two types of switching, language and academic level, in an attempt to draw on the theoretical underpinnings of related research in either area.

A significant amount of research has been done on TTO education in the Netherlands from which lessons can be drawn for this study. Research on switching from the TTO to the Dutch stream, however, is still limited. Nonetheless, the two existing studies do serve as a valuable starting point for investigation. With regard to dropping academic levels from Athenaeum to HAVO, lessons can be drawn from substantial research done on this subject in the Netherlands (De Boer, Goris & Noordink, 2003; van der Weij, 2010).

### TTO education in the Netherlands

TTO education was introduced in the Netherlands in 1989. In TTO programs, approximately half of the non-language subjects such as chemistry and geography are taught in a language other than the mother tongue, in this case Dutch. In the Netherlands, this second language is predominantly English. In these classes, teachers and students use English exclusively in order to increase students' language proficiency.

One important component of TTO is the application of Content and Language Integrated Learning (CLIL) techniques by teachers. In addition to merely teaching in a second language, CLIL aims to motivate students to learn in that language, exposing them to a rich source of inputs; using scaffolding techniques to enhance comprehension among learners; introducing several types of active teaching strategies; and promoting output production (Dale, van der Es & Tanner, 2010).

Teachers play a key role in accommodating the needs of learners as learning a second language has major pedagogical implications (Dakun, 2006). By offering interactive lessons with a clear focus on content and language learning goals, teachers can make the process of learning a second language more efficient and rewarding to

<sup>&</sup>lt;sup>4</sup> According to the European Platform, switching and dropping down is an issue faced by other TTO schools in the Netherlands, yet the magnitude of the problem is not known.

learners. When teachers fail to foster this process of language learning continuously and explicitly, learners become less motivated as they don't see the meaning of particular activities (Krashen, 2003).

# Switching from the TTO to the Dutch Stream

In recent years, the issue of switching from the TTO to the Dutch stream has received increased attention in TTO schools in the Netherlands. Studies have been commissioned by TTO schools to explore this phenomenon. What underlies high rates of switching? One quantitative and one qualitative study have been conducted on switching within the same academic level in two secondary schools in the Netherlands (Delver et al., 2010; Salfrais et al., 2011).

Delver et al. (2010) studied two groups of HAVO students: those in TTO and those that had switched to the Dutch stream. Of the HAVO students that switched from the TTO to the Dutch stream, low academic achievement was cited as the primary cause of switching. Lack of motivation, however, was signaled as the most likely factor underpinning this poor performance. These students went to class unprepared; they did not participate in class; and they felt overlooked by their teachers (Delver et al., 2010). Delver et al. (2010) recommended that further research be carried out in the area of motivation among Athenaeum level students, in order to determine whether or not similar patterns would emerge.

Salfrais et al. (2011) followed up on that recommendation. Their qualitative research targeted students who had voluntarily switched from the TTO to the Dutch stream at the Athenaeum level of another high school. The 12 respondents pointed to two main factors that were influential in their decision to switch to the Dutch stream: study experience and study achievement (Salfrais et al., 2011). Students felt that continuing in the TTO program would be too much work; they stated that they were lazy and slack at school; and that they didn't receive any gratification from the TTO program. One of the recommendations of the study was that "Further research could give a more nuanced insight into whether a reason such as being lazy and slacking at school is maybe more important than this research shows'. Similar to Delver et al. (2010), Salfrais et al. (2011) suggest a need for further investigation on the effect of students' motivation on switching.

## Motivation

A great wealth of research exists on the effects of motivation in education. The main schools of thought include the behavioral, socio-cultural, humanistic and cognitive

approaches to motivation. Given that the target group of this research is teenagers, who are in the process of self-discovery, striving for freedom and independence, both the humanistic and cognitive theories are applicable.

The humanistic approach to motivation emphasizes intrinsic sources of motivation such as a person's desire for 'self-actualization' (Maslow 1968, as cited in Woolfolk, Hughes & Walkup, 2008), and the need for 'self-determination' (Deci, Eghrari, Patrick & Leone, 1994). Motivation is defined by this school of thought as the fostering of peoples' inner resources including their sense of competence, self-esteem, autonomy and self-actualization (Woolfolk et al., 2008).

Another approach to motivation that is relevant to this research is the cognitive approach. Like the humanistic approach, the main focus of cognitive theorists is intrinsic motivation. Teenagers are no longer children who may act in certain ways because they have been previously rewarded or punished for similar behavior, as the behavioral approach suggests. Instead, they behave according to such elements as plans, goals and expectations (Woolfolk et al., 2008). Woolfolk et al. (2008) and Deci et al. (1994) argue that some students may set performance goals for themselves that are lower than their actual capability in order to avoid the shame of failure. These students hold an 'entity view of ability'. They believe that their ability is unchangeable and thus, rather than risk performing poorly, they set less challenging goals for themselves. They are extrinsically motivated by grades and are uninterested in the learning content itself.

The Expectancy D7 Value Theory (Tollefson 2000, as cited in Woolfolk et al., 2008), also falls under the cognitive approach to motivation, where motivation is seen as the product of an individual's 'Expectation' of reaching a goal, and the 'Value' of that goal to him/her. If a student's expectation of reaching a goal is non-existent due to lack of self-esteem, or due to a belief that the work will be too difficult, the motivation (intrinsic) will also be zero. If, on the other hand, the student sees no value in reaching a set goal, the motivation (extrinsic) would also be zero.

# Dropping down from Athenaeum to HAVO

In 2003, the Stichting Leerplanontwikkeling (SLO) researched the reasons behind students' decision to drop down from Athenaeum to HAVO that occurs most frequently in the fourth year of high school. The outcomes revealed a great rift between the demands made on students in the junior years of high school (first three years) as compared to the senior years. The junior years resemble primary school, in that students still receive a formidable amount of guidance from their teachers, and independence is not fostered. On

the contrary, the senior years place higher demands on students, requiring them to plan effectively and work independently. Moreover, the content of the lessons is more rigorous in the senior years, requiring students to apply knowledge and not simply to reproduce it. The research shows that some students are ill-prepared for this transition and drop down an academic level, either because they are unable to meet the new challenges or because they are not willing to make the extra effort required of them in the senior years. These outcomes were further confirmed by a study conducted in 2010 by van der Weij at a secondary school in Utrecht.

## **Research questions**

The discussions at the research school, underpinned by the theoretical framework presented above, lead the research team to formulate the following main research question:

What are the causes of the high switching rate from TTO Athenaeum to Dutch HAVO, from the perspective of students?

In order to be able to answer this question, a distinction has been made between the switch from the TTO to the Dutch stream, and the drop down from Athenaeum to HAVO. The following sub-questions have been formulated in order to gain insight into the main research question:

- A) What role did motivation or lack there of, play in students' decision to switch from the TTO to the Dutch stream, as well as from Athenaeum to HAVO?
- B) How did students, experience the academic transition from the junior years (Year 1-3) to the senior years of high school and did this transition play a role in their decision to switch from the TTO to the Dutch stream and to drop down from Athenaeum to HAVO?
- C) Finally, what other factors played a significant role in the decision to switch from the TTO to the Dutch stream and to drop down from Athenaeum to HAVO?

# **Expectations/Hypotheses**

- 1. The high rate of switching from TTO Athenaeum to Dutch HAVO is highly influenced by both extrinsic as intrinsic motivational factors. The following may hold true:
- -In order to avoid low educational achievement or failure, students lower their performance goals (Woolfolk et al., 2008), by switching back to their native language or changing

academic levels.

- Students do not expect to be able to succeed in TTO Athenaeum due to low self-esteem or preconceived notions that the level of difficulty in TTO Athenaeum surpasses their own level (Expectancy D7 Value Theory).
- Students do not recognize the added value of staying in TTO Athenaeum.
- Students anticipate disadvantages of staying in the TTO stream, such as extra effort needed to meet the goals and the risks incurred in the case of failure.
- 2. Students experience a difficult transition between their junior and senior years of high school due to higher demands placed upon them academically, and this had a major impact on their decision to switch and drop down (de Boer et al., 2003; van der Weij, 2010).
- 3. External factors such as the role of teachers, mentors, parents and peers had a role to play in the decision of students to switch from TTO VWO to Dutch HAVO (Delver et al., 2010; Dakun, 2006).

#### **Variables**

This study has identified eight variables in an attempt to explain respondents' switch from the TTO Athenaeum to the Dutch HAVO program. These variables were defined based on the above-mentioned literature.

## Interest and Enjoyment

This variable measures the extent to which respondents enjoyed studying at the TTO Athenaeum level. What aspects of TTO Athenaeum did respondents find interesting and enjoyable?

## Perceived competence

The extent to which students felt competent studying at the TTO Athenaeum level is measured by this variable. Did respondents feel competent reading, writing, listening and speaking in the English language? In which subjects did the respondents feel incompetent at the TTO Athenaeum level?

## Effort and Importance

This variable determines the willingness of respondents to work hard in order to get good grades at the TTO Athenaeum level. Did the respondents see the importance of getting good grades? Were they willing to put in the required effort in order to achieve such grades?

#### Value and Usefulness

Respondents' perception about relevance of the Athenaeum program for their future education is measured by this variable. Did the respondents have long-term goals regarding the English language at the start of the TTO program? Did these goals change during the course of their studies?

# Study achievement

This variable measures whether grades were a deciding factor for respondents to switch and drop down. Did respondents switch and drop down because their grades were not good enough? Did respondents lower their academic goals in order to avoid getting low grades in TTO Athenaeum?

## Self esteem

This variable measures the extent to which respondents felt self-confident to continue at the TTO Athenaeum level. Did respondents feel self-conscious speaking English in front of their peers?

### Teachers

This variable measures the influence of teachers and mentors in trying to keep students motivated to go on in the TTO Athenaeum program. Do they present their subject content in an interactive and motivating manner?

#### Role of others

This variable measures the influence of peers and parents in respondents' decision to leave the TTO program and to drop down to HAVO. Did either peers or parents play a significant role in that decision?

## Context

This research was conducted at a TTO school in the Netherlands. The school had 1,498 students in the 2011-2012 academic year, of which 215 were enrolled in the TTO program. Three academic levels are offered by the research school namely: Athenaeum, HAVO and VMBO. TTO is only offered at the Athenaeum level. The TTO department is made up of 14 teachers, two of whom are native English speakers.

The European Platform assessed the school in 2011 with the following outcomes: satisfactory English proficiency among teachers and students; and adequate pedagogical and didactical competencies among teachers. It recommended that the school continue to be pro-active in maintaining the English proficiency level of their teachers through training programs.

### **Methods**

This research combines both quantitative and qualitative methods in order to determine the factors that influenced the choice of the respondents to switch from TTO Athenaeum to Dutch HAVO.

## Respondents

The target group of this study consisted of students who began their school career at the TTO Athenaeum level, and subsequently switched to the Dutch stream and dropped down to the HAVO level during the course of their studies. The research school provided a list of 23 names of students who met the above mentioned criteria. The research team aimed to target as many respondents as possible, in order to increase the study's external validity. Sixteen students were available to participate in the research<sup>5</sup>. Of these 16 students, eight were currently studying in the fourth year of Dutch HAVO and eight were studying in the fifth year of Dutch HAVO. The respondents consisted of 11 girls and five boys, aged 15-18 years.

<sup>&</sup>lt;sup>5</sup> Some students had left school during the course of the year or had transferred to another school.

Instruments

Both quantitative and qualitative instruments were used in this study in order to determine

which variables had a significant influence on students' decision to switch from TTO

Athenaeum to Dutch HAVO. A questionnaire was used to obtain information from the

larger sample of students. Subsequently, open-ended questions and interviews were used

to obtain more in-depth information on specific issues.

**Quantitative methods** 

Questionnaire: the IMI

The Intrinsic Motivation Inventory (IMI) designed by Deci et al. (1994) measuring mainly

intrinsic motivation was used in this research study to determine the factors influencing

respondents' switch from the TTO to the Dutch stream<sup>6</sup>. The original instrument consists of

seven subscales out of which, six were selected due to their relevancy for this particular

research<sup>7</sup>. These subscales assessed the following constructs: interest/enjoyment;

perceived competence; perceived choice; pressure/tension; effort/importance; and

value/usefulness. The IMI was set up as a 7-point, 36-item Likert scale questionnaire. For

each of the items on the questionnaire, respondents were asked to indicate their opinion

on a scale from 1 to 7 with responses ranging from "not at all true"(1) to "somewhat

true"(3) to "very true"(7). The items on the IMI subscales were modified to fit the specific

requirements of this research (see Annex I).

Reliability and Validity of the IMI

The IMI consists of 42 items across seven subscales, all of which have been shown to be

factor analytically coherent and stable across a variety of tasks, conditions and settings.

McAuley, Duncan, and Tammen (1989) did a study to examine the validity of the original

IMI and found strong support for its validity. The overall scale was internally consistent with

an alpha coefficient of .858. In a study conducted by Leng et al (2010), the value of

Cronbach's alpha for the IMI was reported as .84, indicating its reliability.

The authors of the IMI's original scale encourage the adaption of its items for use in

different populations and situations. Past research has revealed that order effects of item

<sup>6</sup> The IMI can only be used to measure one phenomenon at a time.

The relatedness subscale was left out as it did not measure motivation.

<sup>8</sup> A Cronbach alpha coefficient value, greater than 0.7 is considered to be reliable.

presentation appear to be negligible, and the inclusion or exclusion of specific subscales appears to have no impact on the others. Therefore, for the purposes of this study, an item such as "I tried very hard to do well at this activity" was changed to "I tried very hard to do well within the TTO program", and "I was anxious while doing this activity" was changed to "I was anxious while working in the TTO program due to English language difficulties". These changes do not affect the questionnaire's reliability or validity.

### Pilot

A pilot of the questionnaire was conducted at a TTO secondary school in Zeist. Two pupils were asked to fill out the IMI. They were also asked to comment on each section of the questionnaire while answering the questions. It took the students 15 minutes to fill out the questionnaire.

The process yielded fruitful results. The students found some of the questions to be repetitive and asked whether or not they had to answer all of the questions. Also, in general, although they found the questionnaire to be clear, words such as tense, prospects and competent, were difficult to understand. These suggestions were incorporated by the research team during the administration of the questionnaire at the research school.

## **Qualitative Methods**

## Interviews and open-ended questions

The interviews were carried out in this research to further validate and explore the outcomes of the quantitative research on switching from the TTO to the Dutch stream. Furthermore, the qualitative research investigated underlying motives for students' decision to drop down from Athenaeum to HAVO. Semi-structured interviews were used in that predetermined questions were present, but the order was modified based upon the interviewer's perception of what seemed most appropriate. The style of the interview was respondent interviews (Powney & Watts, 1987), as the interviewer remained in control throughout the whole process. The purpose of the interview was two-folded: the first part focused on the academic change of levels; and the second part concentrated on the switch from TTO to the Dutch stream.

The outcomes of the questionnaire and the selected variables served as central topics upon which the interview questions were formulated. In the case, for example, that the IMI showed that interest and enjoyment of the TTO program was high, questions such as, "Why did you decide to leave the TTO program as you mentioned you enjoyed it?", and

"What made the TTO program enjoyable?" were posed. The IMI also indicated that most respondents did see the added value of the TTO program, but at the same time, they did not put effort into performing well in the TTO program. In that case, the following questions were asked: Why did you not make an effort to complete the TTO program, as you valued it?" and "What were your expectations of the TTO program when you entered it?"

## Set-up of the research

This research study consisted of a series of activities conducted in the following order: a standardized and modified questionnaire was piloted with two students; the questionnaire then administered among 16 students at the research school; and open-ended questions were distributed, and interviews were conducted with 12 students in two sittings.

### Questionnaire

The questionnaire was introduced to a group of 16 respondents. Attention was paid to potentially difficult terminology, earlier identified by the two students during the pilot study. Respondents were told that they could ask questions at any time during the filling out of the questionnaire. Furthermore, an explanation was also given making a positive link between the repetitiveness of some questions, to an increase in the reliability of the outcomes.

The questionnaires were handed out to 16 respondents who were asked to fill it out without any discussion with their classmates. The questionnaire was administered in English by two members of the research team, in a classroom that was reserved for this purpose. No members of the school staff were on site in order to make respondents feel that their answers were confidential.

## **Open-ended questions**

Twelve students participated in the qualitative part of the research<sup>9</sup>. Respondents were first asked to individually fill out a set of open-ended questions on the possible reasons underpinning their drop in academic level. Conducting this task individually would avoid social desirable answers from the respondents and strengthen the outcomes. The open-

<sup>9</sup> Several students were not available as they were preparing for their final school examinations. One girl was also sick on that day.

ended questions (see Annex II) were drawn up based upon the above mentioned literature survey in order to test the hypotheses of this research.

### **Interviews**

Subsequently, structured interviews were conducted. The first part of the structured interviews was used to gather more information on the key factors that influenced respondents to change academic levels. The second part of the interviews focused on key elements leading to the switch from the TTO to the Dutch stream.

The questions used during the structured interviews were formulated based upon the results of the IMI (see Annex III). The interviews took place in small focus groups of approximately three students each, for 25 minutes. One extra interviewer was present to ensure inter-assessor reliability. All interviews were taped so that interviewers could focus on the interview itself. The interviews were later transcribed.

## Method of analysis

### Quantitative Research

The data obtained from the IMI questionnaire was analyzed using the statistical software Statistical Package for the Social Sciences (SPSS).

# Preliminary Data Analysis

Items in the six subscales were scored. A high score on each subscale indicated a positive outcome (e.g. a high score for *perceived competence* indicated that students felt competent studying in the English language) and a low score indicated a negative outcome (e.g. a low score on *value/usefulness* showed that students did not value the TTO program). A mean value of all the different scales was calculated. Students that scored more than the mean were categorized as high achievers and those scoring less than the mean were considered low achievers. High and the low achievers were categorized for each of the subscales, and this information was used in order to cluster students together during the small group discussions. Students that were not confident in English, were for example, present in the same small group discussion.

## Factor Analysis

An exploratory factor analysis was first conducted on the 36-items of the IMI, in order to validate it for use in switching from the TTO to the Dutch stream. The objective of applying factor analysis on the data was to determine the dimensions within the original IMI instrument that were appropriate in assessing whether or not motivation played a key role in students' decision to switch from the TTO to the Dutch stream.

### Cronbach's α

The reliability of the modified IMI instrument was tested using Cronbach's  $\alpha$ . The items listed under each of the six subscales of the IMI asked similar questions within a subscale, using different wording, on the cause of switching from the TTO to the Dutch stream. The Cronbach's  $\alpha$  test was used to assess the internal consistency of all of the subscales. An  $\alpha$  value higher than 0.85 would reveal that the items within the same subscale have a significant correlation and therefore, give valid information about the responses with regards to the respective subscales.

#### Qualitative research

Given the large amount of data acquired, coding of data was used in its analysis. A code is a symbol applied to a section of text to classify or categorize it (Miles & Huberman, 1994). Open, axial and selective coding was used in order to ensure objectivity in data interpretation. Open coding was used to select and name variables such as effort, importance, self-esteem and academic goals. Axial coding was used in the next stage in which explicit connections were made between categories and sub-categories such as effort and study achievement, teaching methods and interest, and peers and decision-making. Finally, selective coding was applied to identify core categories and to integrate these in order to provide explanations for switching and dropping down. Examples of noteworthy categories are the structure of TTO department, teaching style, and the lack of future goals.

## Results

### Quantitative Research

The results of the quantitative analysis of the IMI questionnaire are given below.

## Preliminary Data Analysis

The mean and standard deviation of the items per subscale in the IMI questionnaire was first computed, the results of which are shown in Table 1. A high score in the subscale indicated more of the concept described on the subscale name.

Subscale	Mean score (out of 7)
Interest/Enjoyment	5,03
Perceived Competence	4,75
Perceived Choice	6,68
Effort/Importance	3,99
Pressure/Tension	5,43
Value/Usefulness	5,89

## Factor Analysis

A principal component factor analysis conducted on the 36-items of IMI questionnaire resulted in 5 components with eigen value greater than 1<sup>10</sup>. The five components retained, represented 83.58 percent of the total variance of the five subscales, which is satisfactory. The factor loadings of each dimension indicated that the subscale interest/enjoyment, perceived competence, effort/importance and pressure/tension had significantly higher loadings on factor 1. Only the factor loading of the subscale value/usefulness and that of perceived choice was under factor 2. This result is therefore consistent with that of literature that points out that the IMI predominantly measures intrinsic motivation.

## Cronbach's alpha

The reliability and validity of the adapted IMI questionnaire was calculated to determine the usefulness of the instrument to account for students' decision to switch from the TTO to the Dutch stream. Table 1 gives an overview of the Cronbach's alpha of the six subscales.

<sup>&</sup>lt;sup>10</sup> The eigen value for a given factor measures the variance in all the variables which is accounted for by that factor. The Kaiser rule is to drop all components with eigen values under 1.0.

Table 1

Subscale	Cronbach's α	Subscale	Cronbach's α
Interest/Enjoyment	0.92	Effort/Importance	0.85
Perceived Competence	0.91	Pressure/Tension	0.87
Perceived Choice	0.57	Value/Usefulness	0.91

Internal consistency for the six subscales was adequate (see Table 1). The overall scale also appears to be internally consistent with an alpha coefficient of 0.94. However, Cronbach's alpha for the items under perceived choice ( $\alpha$ =0.57) was considerably below acceptable levels.

### **Qualitative Research**

The results of the open-ended questions and the interviews with the 12 students provided the research team with a wealth of information that could explain the high switching rate from the TTO Athenaeum to the Dutch HAVO streams. Half of the students first switched from TTO to the Dutch stream, and only after another year, dropped down from Athenaeum to HAVO. The other half switched and dropped down simultaneously.

The open-ended questions provided the general outline for the discussions, and the interviews delved deeper into those main themes. A description of students' responses has been categorized and appears below under the heading 'Switching from TTO to the Dutch stream' and 'Dropping down from Athenaeum to HAVO'.

## Switching from the TTO to the Dutch stream

## Motivation

Most of the students mentioned that they did not want to put any effort into schoolwork, as they had interests outside of school. Some students switched from TTO to the Dutch stream, while remaining in Athenaeum in the first instance. These students believed that they this would be less work than TTO Athenaeum, and that they would be able to get by without doing homework and participating in class. When this proved not to be the case, they then later dropped down to HAVO (see below).

Half of the students were not motivated to stay in the TTO program as they did not see the long-term benefits of continuing on in TTO program. The other half stated that English would be very useful for anything they would choose to do in the future.

# TTO program structure

The majority of the respondents indicated that they had not wanted to leave the TTO program, but that as there was no TTO at the HAVO level, a drop in academic levels required students to switch from the TTO to the Dutch program. In the words of one student:

The TTO program was great but the level of education in Athenaeum was too high for me. The English I love, the language and the trips to foreign countries and stuff were all great. But if you look at mathematics or physics, it was just too difficult for me. But, if I could do the TTO program combined with HAVO, then I would do that straight away.

Some respondents said that their motivation for the TTO program declined over the years. Once the excitement and newness of the program wore off, these students had to be pushed to speak English during class.

## Teaching style

All students stated that material was presented in the TTO class in the same way as it was given in subjects taught in the Dutch language. They remarked that lessons could have been more interesting if they had been more interactive. Furthermore, some of the students, who were notably weaker in spoken English, stated that they would have liked to have been encouraged to really talk to one another in class, and not simply give answers in English to the teacher.

## Teachers and mentors

Some students said that they had found a few teachers to be motivating, in particular, the native English speakers. In other cases, teachers, and mentors in particular, were found to be de-motivating. One student stated that her mentor displayed little confidence in her,

and actually discouraged her from continuing on in TTO at the end of Year 1, even though she did pass the year. (She continued on in TTO until Year 4).

## Dropping down from Athenaeum to HAVO

#### Motivation

In most cases, lack of effort in class and in homework, resulted in low academic performance among students in the Athenaeum stream. This lack of effort was attributed puberty; lack of future goals; and other competing interests such as sports and friends.

Good grades were mentioned as important to students so long as no effort was expended in attaining such grades. Students wanted to get good grades in HAVO, as they would otherwise feel ashamed of themselves. In primary school and the first years of secondary school, they did not have to work hard to get good grades, as they could do so effortlessly.

Students, in general, did not consider re-entering Athenaeum, as this would mean that they would have to work harder or that they would have to stay too long in secondary school. Many students said that they were not sufficiently challenged in HAVO and thus, at some level, regret having dropped down from Athenaeum.

None of the participants mentioned that they found school interesting. Expanding knowledge, for the most part, was not something that the students valued.

## Transition from Year 3 to Year 4

All of the students interviewed noted a big difference between the junior and the senior years of secondary school. They found the first three years of secondary school effortless. In the fourth year, however, a huge change occurred and students were expected to be able to work independently. The following are excerpts from students on this transition:

The first three years, the teachers help you a lot but in the fourth year, they suddenly expect you to be independent. For three years you are spoonfed and after that you have to get your food yourself... In Year 4, I found myself having to study for hours every night, but I didn't know how to study. If I had had more help from my teachers, I could have easily stayed in TTO Athenaeum.

### Teachers and mentors

Some students stated that mentors had told them that they had to switch from TTO Athenaeum to the Dutch HAVO. They didn't realize until it was too late that they had the option to repeat the year in TTO Athenaeum.

### Role of others

Peers played a key role in influencing some students to change academic levels. Parents and teachers, who tried to support these students to continue on in Athenaeum, had little, or no influence on the students' choice.

### **Conclusion and Discussion**

This research study set out to uncover the reasons underpinning a high rate of switching from TTO Athenaeum to Dutch HAVO, from the students' perspective. In order to do this, a distinction was made between switching from the TTO to the Dutch stream as well as dropping down from the Athenaeum to the HAVO level. The theory consulted suggested that lack of motivation; students' experience of the transition from the junior to the senior years of high school; and other factors such as the role of teachers and peers, play a key role in students' decision to switch and drop down. These sub-themes were explored in order to answer the primary research question.

### Lack of Motivation

The results of this research showed that lack of motivation played a significant role in students' decision to switch from TTO Athenaeum to Dutch HAVO. The results of the quantitative research revealed that students were intrinsically motivated to study in the TTO program. This was shown, for example, by the interest and enjoyment subscale and the value/usefulness subscale of the IMI with high mean scores of 5.03 out of 7, and 5.89 out of 7, respectively. If the students were motivated to study in the English language, then why did they decide to switch out of TTO? The qualitative research shed light on that question.

Most of the students interviewed showed no intrinsic motivation to study. Although they did enjoy learning in English, they did not complete homework and they were not interested in the subject content of what was being taught in class. In general, they lacked long-term goals, academic or otherwise. With this low level of effort, they were unable to continue studying at the Athenaeum level and, either chose to, or were forced to, drop down to HAVO. This implied a simultaneous switch to the Dutch stream as HAVO is only offered in Dutch at the research school.

That lack of motivation is a main factor in explaining the high switching rate from TTO Athenaeum to Dutch HAVO, is also substantiated in the literature. As the Expectancy D7 Value Theory suggests, students in the target group had preconceived notions that the level of difficulty in VWO would surpass their own level. Contrary to the theory however, this notion of difficulty arises from an unwillingness on the part of students, to put any effort into their schoolwork, **and not**, as the theory suggests, due to low self-esteem or cognitive inability. Both the IMI and the interviews confirmed that the students were self-confident<sup>11</sup>. Furthermore, most students made a conscious decision to switch to HAVO indicating that they were not lacking in cognitive capacity.

### Transition from Year 3 to Year 4

The open-ended questions and interviews revealed that students' inability to cope with the changing academic demands present between the junior and the senior years of secondary school is another important factor contributing to the high rate of switching between TTO Athenaeum and Dutch HAVO. Half of the students first switched back to their native language a year prior to dropping down an academic level. These students indicated that they hoped to be able to continue to get good grades in Dutch Athenaeum without doing any work. When this failed, they then decided to drop down to HAVO. This is congruous with Woolfolk et al. 2008 who indicate that people who are extrinsically motivated, lower their performance goals, in this case by switching back to their native language or lowering their academic level.

Another small group of students indicated that they really tried their best in Year 4 but that they couldn't manage the transition as they had never worked independently before and they had never learned to do so. These conclusions are confirmed by the literature that states that the senior years require students to be able to plan effectively and to work independently. Also, students are expected to apply knowledge and not only

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<sup>&</sup>lt;sup>11</sup> The IMI subscale for perceived competence had a score of 4.75 out of 7 indicating that respondents were self-assured, for the most part.

reproduce it, which requires differing studying skills (van der Weij, 2010; de Boer et al., 2003).

### Role of Teachers and Mentors

The final main factor, arising from this research, to explain the high rate of switching between TTO Athenaeum and Dutch HAVO, is the role teachers and mentors play. With regard to teaching style, students indicated that they could have been more motivated to learn had teachers adopted a more interactive teaching style. Also, students who were weaker in English suggested themselves that they would have liked to have more opportunity in class to practice speaking English. Both of these conclusions point to the need to incorporate more CLIL techniques in the TTO classrooms. Students clearly realize the importance of a richness of inputs as well as the production of as much output as possible in English, in order to strengthen language acquisition.

A noteworthy finding of this research is the role that some teachers and mentors play in discouraging students to continue in TTO Athenaeum, either directly or indirectly. Some students indicated that they were not made aware of the option of repeating the year at the TTO Athenaeum level and that their mentor just told them that they had to switch from TTO Athenaeum to Dutch HAVO due to low educational achievement.

In conclusion, this research study has succeeded in providing answers to the above-mentioned research questions. The majority of the students highly valued the TTO program and stated that they would not have switched back to their native language, had the TTO program been offered at the HAVO level. Furthermore, students saw the need for the use of more interactive learning techniques in TTO classes, in order to stimulate their learning of English. Finally, the central role that some teachers and mentors played in students' decision to switch from TTO Athenaeum to Dutch HAVO was surprising and remarkable.

#### Recommendations

The following section proposes practical suggestions and topics for further research, based on the results and conclusions of this research. Given the limited sample size of this study, the outcomes are not valid beyond the boundaries of the research school. Nonetheless, other TTO schools could use these recommendations as a starting point for

investigation, regarding students' motivation to switch from the TTO to the Dutch stream, and drop down from Athenaeum to HAVO.

## Practical suggestions

The students interviewed were enthusiastic about the TTO program at the research school. They did, nonetheless, offer recommendations on how the program could be improved. They suggested that TTO lessons could be more interactive, and that teachers should vary their teaching formats, in order to encourage students to practice their English. They also found native English speaking teachers to be motivating, indicating the importance of language proficiency among TTO teachers. The research team suggests that the research school implement the above-mentioned recommendations by offering TTO teachers with opportunities to attend CLIL workshops and to improve their English proficiency as required.

The outcomes of this study also suggest that there is a demand for TTO at the HAVO level. The majority of the students interviewed indicated that they had switched from TTO Athenaeum to Dutch HAVO, due to the challenges presented by the academic level and not due to the TTO program. The research school could consider introducing TTO at the HAVO level, thereby joining 25 other schools in the Netherlands that currently offer this program.

Furthermore, the research findings clearly show a need for greater academic guidance and counseling of students, particularly in the transition years from junior to senior secondary school. The research team sees it as a challenge for the teachers and mentors of the research school to provide the appropriate support to students who are unmotivated to work at the TTO Athenaeum level. Alternatives, other than switching and dropping down an academic level, should first be exhausted, before providing students with this option.

### Further research

This study examined solely the perspective of students regarding the causes of switching from TTO Athenaeum to Dutch HAVO. Future research could focus on TTO teachers and mentors. What is their opinion on the causes of switching and dropping down, and what strategies do they think should be adopted to address this phenomenon? Furthermore,

what teaching methods and materials do they use in the classroom and what is the impact of these on students' motivation?

### Reflection

Conducting this Practice Based Research was an enriching experience for the research team both in terms of process as well as product. Regarding process, in hindsight, the team could have been quicker in reaching preliminary conclusions that emerged from the qualitative and quantitative data collected. A lot of time was devoted to validating research instruments and analyzing data. Once this was completed, the research team realized that an extra meeting with the teachers and the mentors of the TTO department would have been useful, in order to complement the reflections of the students with regard to switching and dropping down. This was a missed opportunity that could be avoided had the research team drafted conclusions earlier on in the process of writing up the research, leaving time to explore emergent issues.

On a positive note, one of the main lessons drawn from conducting this Practice Based Research is the importance of combining both quantitative and qualitative methods in such a study. This combined method provides the depth required, not only to answer the research question, but also to offer genuine recommendations, from the students themselves, on how to address the challenge.

Product-wise, this Practice Based Research has given the research team a unique opportunity to listen to students, and to draw up recommendations accordingly. The team has also had a chance to reflect on the implications of their analysis for teaching practice. The challenge that lies ahead is to continue this process of active listening in our role as future teachers.

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van De Passie Utrecht om de overstap van 3 naar 4 VWO te verbeteren. IVLOS, Universiteit Utrecht.

### Questionnaire

Dear students,

This questionnaire has been designed to investigate the motivation of students with regard to the TTO program. We are interested in **your opinion**. Therefore, it is important that you fill out the questions yourself, without talking to your fellow students.

It is important that you give **honest** answers and that the answers correspond as accurately as possible to your opinion

Please read the questions carefully before answering them! It will take about 15 minutes to fill in both questionnaires.

For each of the following statements, please indicate how true it is for you, using the following scale:

1	=	not at all true
2	=	
3	=	
4	=	somewhat true
5	=	
6	=	
7	=	very true

Thank you in advance!

## **General information**

Name/email address:

**Current year of study:** 

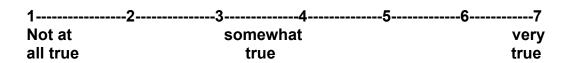
What month/year did you begin high school?

What month/year did you switch from the TTO to the Dutch stream?

What was the main reason for you to switch?

What month/year did you switch from VWO to HAVO stream?

What was the main reason for your switch?



Interest/Enjoyment

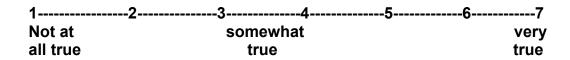
I enjoyed the TTO program very much.
This program was fun.
I though the program was a boring program.
I would describe the TTO program as very interesting.
I would say that the TTO program was quite enjoyable.

**Perceived Competence** 

 1 didditad ddiipatailad	
I think I did pretty well in the TTO program	
I think I am pretty good in English.	
Compared to other students in TTO, I think I am good in English.	
After being in the TTO program for a while, I felt competent in English.	
I was satisfied with my performance in the TTO program.	
I was not doing very well in the TTO program.	

Effort/Importance

 <b>1</b>
I put a lot of effort into the TTO program.
I tried very hard to do well in TTO program.
I did not try very hard to do well in the TTO program.
It was important for me to do well in the TTO program.
I did not put much time and energy into the TTO program.

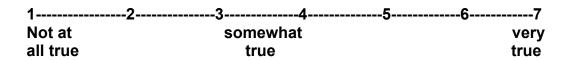


# Pressure/Tension

I felt nervous while following the TTO program due to English language difficulties.
I was confident working in the English language in the TTO program.
I felt very tense while following the TTO program.
I was relaxed while following the TTO program.
I was relaxed working in the English language.
I was anxious while working in the TTO program due to English language difficulties.
I felt pressured while following the TTO program due to English language difficulties.

# **Perceived Choice**

It was my choice to follow the TTO program.
I felt like it was not my own choice to follow the TTO program.
I felt like I had to follow the TTO program.
I followed TTO because I had no choice.
I followed TTO because I wanted to.
I followed the TTO program because I had to.



# Value/Usefulness

I believe the TTO program could have been of some value to me.
I thought that following the TTO program would have been useful for my future education.
I thought the TTO program was important to follow because it could increase my job prospects.
I would be willing to rejoin the TTO program again because it had some value to me.
I think that following the TTO program could help me to improve my English skills.
I believe that following the TTO program was beneficial to me.
I think TTO is an important program.

# Open-ended questions with regard to academic change

- A. Why did you decide to switch from VWO to HAVO? Name at least 3 reasons if possible.
- B. Did the school request you to switch to HAVO due to low grades or could you have stayed on in VWO if you had wanted to?
- C. Many of you said in the questionnaire (appendix of IMI) that low grades were one of the main reasons for you to switch from VWO to HAVO. What do you think was the cause of the low grades?
- D. Who were the people that influenced you the most when you decided to switch from VWO to HAVO? Explain how and why.
- E. Do you regret having to switch from VWO to HAVO? Do you think that the school could have done more to help you to stay in the VWO program? If so, what could the school have done better?
- F. Where does your motivation to work on schoolwork come from? Are you someone who studies because you are interested in gaining knowledge, or are you primarily motivated by grades?
- G. Are good grades important for you? Are good grades more important to you than studying at a higher level (VWO)? Explain.
- H. Have your performance goals changed from the time you entered high school until now? (Do you have lower expectations of yourself now with regard to school grades than you did in Year 1?)