Abstract
This article aims to analyze student progression in European higher education (HE) using Sweden and UK as countries of reference. It presents and problematizes common ways to measure student progression (e.g., rates of dropout, completion, and retention), distinguishing between institutional departures or system departures, and the implications of the timing of the measurement, hence focusing on early and late leavers. The article also discusses general rates of student progression in different countries and the reasons for dropping out, revealing what lies behind the dropout statistics. Finally, the article also includes a critical questioning of the interests and intentions behind the data production. The article offers an orientation among the multiple definitions and measurements of student progression in HE. It deals with the value of measurements and alternative ways of measuring student progression, and with the implications for further studies on dropout and completion rates, which are politically contested issues.

Keywords: dropouts, higher education, policy, measurement, student progression

Introduction
Student progression in higher education (HE) has been an enduring issue in European HE policy due to its inclusion in the European Union’s strategic document “Education and

1 Department of Education, Stockholm University, Stockholm, Sweden, Email address: carina.carlhed@edu.su.se, ORCID: 0000-0003-4494-8015

Recommended citation format: Carlhed Ydhag, C. (2019). Understanding the complexity in measuring student progression in European higher education. Hungarian Educational Research Journal, 9(2), 1–25. DOI:10.1556/063.9.2019.1.21
Training 2020” (European Commission, 2009). It states the principles needed to achieve the common strategic objectives and selected benchmarks in prioritized areas, such as student completion. The headline targets are a 40% completion rate of tertiary-level education among 30- to 34-year olds, and a rate of early leavers from education and training under 10% by 2020. These headline targets were formulated in the report “Rethinking Education: Investing in skills for better socio-economic outcomes” (European Commission, 2012). The urgent call for knowledge about rates of dropout and completion is related to the growth of the European Higher Education Area (EHEA) and the Bologna process, and the work toward harmonization of data on the topic. The European HE policy promotes the EHEA to be a competitive actor in the globalized knowledge market (Carlhed, 2017b).

According to a study, student dropout is highly prioritized on the European HE policy agenda, as study success is regarded as highly important in 75% of 35 European countries, including the Visegrad countries of the Czech Republic, Hungary, Poland, and Slovakia (Stiburek, Vlk, & Svec, 2017; Vossensteyn et al., 2015). Dealing with student dropout is also highly prioritized on the Swedish educational policy agenda, and this has resulted in further actions – especially increased monitoring activities. For example, the Swedish government has ordered annual follow-ups from the Swedish Higher Education Authority on student efficiency and the development of new measures and methods for studying student efficiency (The Swedish National Financial Management Authority, 2012, 2013). Hence, policymakers, authorities, and HE management agents in European countries are very interested in how to decrease rates of student dropout. Nonetheless, studies that address the impact of national policy and practices are very few. In 2015, in Slovenia, the Czech Republic, Bulgaria, Iceland, Lithuania, Cyprus, Macedonia, Malta, Hungary, and Sweden, scientific national studies on student success were non-existent (Vossensteyn et al., 2015).

A core question is whether it is at all possible to create and compare statistics regarding dropout and completion rates from different countries. There is certainly a clear need of comparison between different national HE contexts and specific educational programs. Many education organizers would like to know whether their study programs are exceptional when it comes to dropout rates, or whether they are consistent with a larger transnational trend in Western society. They also have concerns about how dropouts can be contextualized and understood and whether they need to take action. Comparative studies are very valuable but are difficult to pursue, for example, due to methodological reasons. Furthermore, there are epistemological obstacles in comparative studies when the terminologies and aims from critical research studies are mixed with those from policy-friendly and evaluative studies (Carlhed, 2017b), or the challenges researchers face when searching for common categories and concepts to compare the
cases and explain differences and similarities between them (Valimaa & Nokkala, 2014). Hence, the research area needs carefully designed and context-sensitive comparative studies that adhere to the complexity in measuring student progression. This article will hopefully raise awareness about this complexity in the measuring processes and the common use of multiple definitions of student progression and dropout.

Aims of the article
This article analyzes and problematizes common ways of measuring student progression and the interests and intentions of the data production on the topic. The article will also address the implications of researching a politically contested issue. The article aims to guide the orientation among the multiple definitions and measurements of student progression in HE using Sweden and the UK as countries of reference.

Disposition
In the first section, the range of opportunities to measure student progression is presented and explored, distinguishing between institutional departures and system departures, and the timing of the measurement, which means focusing on early and late leavers. The second section concerns general patterns and rates of student progression in different countries. The third section deals with research on the reasons for student dropout, by looking at results from qualitative studies on that topic. A concluding section considers the way measurements of student progression could be considered useful, despite methodological obstacles. The quest for measurement of student progression is then related to a policy perspective, while the knowledge interests, intentions, and implications of the data production in the area are discussed.

Swedish higher education
Before going into the patterns of student dropout, some words on the Swedish HE landscape might be of value to the reader. Swedish HE in general is characterized as an open, flexible system without student fees, except for students outside the EU/EEA countries and Switzerland. The Swedish HE system is relatively uniform since it comprises all types of post-secondary education, including a range of programs with professional qualifications such as nursing and teaching. It is a formally unified system with few exceptions, although some researchers define it as binary. Researchers have shown it is a complex system and it is an oversimplification to describe the Swedish system as binary (see Hallonsten & Holmberg, 2013). Students can choose to study programs or single, freestanding courses. Students can also assemble and combine the freestanding courses for a bachelor's or a master's degree if they observe certain criteria in the Higher Education Act (1993, p. 100). If the student decides to pause his or her
studies for any reason, it is possible to enter the program again and not lose any previous credit achievements. In general, it is very easy to change course of study within the Swedish HE system. Concerning access to HE, Sweden has had a relatively high number of students with non-traditional access and has a higher degree of relative social mobility compared to other European countries (Crul, 2013, 2015; Orr, Gwosć, & Netz, 2011).

**Common Ways to Measure Student Progression**

In several European countries, dropout rates are measured regularly, such as in Belgium, Bulgaria, Denmark, Estonia, France, Italy, Finland and Norway, France, Italy, Portugal, the UK, and Iceland, whereas Sweden does not measure dropout rates systematically (European Commission, EACEA, & Eurydice, 2014); instead, the regular measures used in Sweden are completion rates, retention rates, time to degree, and performance indicators (UKA, 2015), and in the UK, non-continuation and degree completion (HESA, 2015). Nevertheless, there is and has been a strong consensus among researchers in the field regarding the difficulties in both identifying students who drop out and calculating the levels of student departures (Carlhed, 2017b; Quinn, 2013; RANHLE, 2008; Thomas & Hovdhaugen, 2014; Vossensteyn et al., 2015).

*The level of student departure*

One interesting aspect of student progression and the identification of the dropout student are connected to the *level* of dropout. Often, it is seen as alarming when too many students withdraw prematurely. Researchers often fail to distinguish dropout resulting from academic failure from voluntary dropout, temporary withdrawals, transfer to other HE institutions, or from permanent withdrawals caused by, for example, academic failure. It is important to distinguish departures from the educational program, from the faculty or university, or even from the HE system entirely. Thus, there could be varieties of institutional departure or a system departure. In Figure 1, the different levels of student departure are illustrated (Larsen, Kornbeck, Kristensen, & Larsen, 2012, p. 33).

Just as there are multiple terms in the literature on this topic, there are multiple ways to measure them. In order to judge the validity of the terms, it is very important to define the method of measurement. There are two basic types of common measure concerning the *course of study* (an institutional departure), one of which is based on the time to degree (degree frequencies) and student inability to earn a degree and is often termed “student non-completion” or completion rate. The completion rate is considered as the most important measure and requires a follow-up of a certain cohort usually 2 years after the students were supposed to graduate (nominal study time; see Vossensteyn et al., 2015 for a detailed discussion). The other common measure is based on an expected but missing active registration early in the program (2nd or 3rd semester) and is often termed...
“retention” or “non-continuation” in the literature (e.g., Hovdhaugen, 2012; Yorke & Longden, 2004). In Table 1, some frequently used terms in Sweden and the UK are defined and compared.

In Table 1, the measurements “retention” and “continuation” seem to be quite similar, and are meant to reflect early dropouts by measuring how many students stay in the program. The information is collected in the second and the third semesters, respectively. This means that the Swedish figures will show higher retention/continuation than the UK figures, because an additional semester goes by, which means that there are more opportunities for students to leave the program during that “extra” semester. Regarding degree frequency and degree completion, the data are more different than alike. The Swedish degree frequency follows a true cohort method and actually counts students who graduate, i.e., if they apply for their degree certificate. It is the actual application that counts as earning a degree in Swedish HE administration. In the UK example, the degree completion figure does not actually count students but uses information based on the continuation measurement (in students’ third semester) from which projected outcomes are calculated; it is an approximation. Hence, there are differences in data, methods, and time in these measurement examples.

Early leavers and late leavers

Another distinction is the timing of the measurement. There is a need to distinguish between early leavers and late leavers. The measurements of retention or continuation are calculated during the second or third semester of a program. In Sweden, leaving early is correlated with students with a foreign background enrolled in professional degree programs (besides Dentistry and Pharmacy), men, younger students, and students with low entrance qualifications (UKA, 2017). Early leavers could also be those on programs that are quite specialized and often require an authorization to work in the profession.
after earning the degree (e.g., nursing). This effectively means that you are forced to decide quickly if you want to pursue a degree and not waste time on a program you cannot use elsewhere. However, leaving early can also be related to academic difficulties, not being happy with the quality of the program, or realizing one has made the wrong choice of program. Late leavers are, for example, found in Swedish engineering programs, where the students often do not require a certificate (which creates dropout statistics) because they tend to get employed before graduation. They may have completed all coursework, but the certificate is not ordered or they do not finish their thesis. Thus, the context around different courses of study is important to understand.

The examples from Sweden and UK could be further explained with many more examples. Completion and retention are measured in a variety of ways in European HE and national contexts (European Commission et al., 2014). Hence, there are also serious difficulties in comparing different countries’ completion and dropout rates (Carlhed, 2017b; Hovdhaugen, 2012; RANHLE, 2008; Thomas & Hovdhaugen, 2014; Quinn, 2013; Vossensteyn et al., 2015). In sum, the difficulties are connected to:

- lack of information about the student departure level (institutional or system departure)
- control for transfer within course of study/institution/system
- the type of data on which the study is based, such as cross-sectional, true cohort follow-ups, surveys, or projected data
- whether the focus is on early dropouts (retention measures) or late dropouts (completion measures)

| Sweden | UK |
|--------|----|
| **Retention** | **Continuation** |
| Retention during the second semester of HE, i.e., the proportion of HE entrants who are still registered in HE in their second semester (UKA, 2015) | Students who start in a particular year, and follow-up whether they are still in HE 1 year later, i.e., the 3rd semester (for full-time students) |
| **Degree frequency** | Degree completion (projected outcomes) |
| That is, the proportion of graduating students from a program compared to the number of admitted students (new program entrants). Follows a true cohort method | The proportion of graduates who gain a first or upper second class degree (not based on real data, but on projections based on past experience; HESA, 2015) |

In the statistics, “degree” means that the student has to request the award of a degree certificate (UKA, 2013)
the use of national statistics created for administrative purposes or researcher-initiated data production, which relate to internal and external validity, i.e., specificity and generalizability

- the rigidity and flexibility for mobility within the HE system, including the general assumption that students always intend to carry on toward a degree

- whether the researchers are producers or users of already-existing data

- whether the measurements are contextualized and systematized in relation to theory, i.e., whether it is research or pure statistical analysis by statistics authorities

While the European national statistics authorities collaborate via Eurostat on feasibility studies to improve the methodology for collecting and harmonization of domestic administrative data on completion rates in HE, some of the large-scale transnational surveys are perhaps an alternative – surveys such as the Labour Force Survey and the Eurostudent Survey could provide comparable data. However, then, on the other hand, the low response rate and low generalizability are problematic (Carlhed, 2017b). A Danish meta-study concludes that large-scale UK studies based on administrative data are robust regarding possible causes of dropout related to student characteristics such as socioeconomic factors, gender, ethnicity, etc. (included in administrative data) but less valuable than studies of individual factors such as motivation, previous university experiences, satisfaction with study conditions, making friends, and learning processes. The German large-scale studies are mainly questionnaire-based and use smaller samples than the British studies, but still manage to study the individual factors of student experiences and motives, which makes it possible to study the qualities of the dropout phenomenon (Larsen et al., 2012).

Questions remain, however, concerning whether measurements of dropout rates, retention, and completion are really useful.

Patterns of Student Progression

For European and domestic policymakers, researchers, and practitioners related to HE, it is of interest to find similarities or differences between general patterns of student progression in different countries. Among the findings on completion, retention, or dropout rates, there seem to be some similarities in student progression between countries according to the type of educational program and its accessibility, students’ social background, their parents’ educational level, gender, and ethnicity. The interesting aspects are the similarities among high/low rates and not the exact numbers of completion, retention, or dropout rates. Obviously, they should be considered as gross patterns or trends that need more context-sensitive in-depth research to understand. The trends presented below should be considered as examples (primarily from Sweden and UK) and not be seen as an exhaustive and systematic review.
Selective programs and institutions

In terms of the types of program and their accessibility, the highly selective programs in medicine and dentistry have low student dropout rates in the UK (HEFCE, 2014). The same pattern goes also for the programs in medicine, law, midwifery, pharmacy, dentistry, and psychology in Sweden (UKA, 2017). The lowest completion rates are observed in the economics and engineering programs, where nearly half of the student body do not complete. In 2017, architecture had the lowest completion rate of 43% (UKA, 2017). The engineering programs (especially the shorter programs) are also known to have a large proportion of late leavers, probably due to good opportunities to gain employment without any diploma or degree (Carlhed, 2017a; HSV, 2010; UKA & SCB, 2015).

The type of institution also matters, specifically if they are elite or non-elite institutions. In the UK, the Russell Group universities have the highest average continuation rates compared to the post-1992 universities, which had the lowest average rate overall (National Audit Office [NAO], 2007). Accessibility and selectivity are closely related to the students' preferred choices of institutions or programs. A popular institution is often selective, which means that only students with the highest grades are admitted. In addition, the selectivity is dependent on the maximum number of entrants. A program that offers a high number of places seem to be more accessible and do not require high grades for admission. A recent study shows that there is a stable hierarchy among the HEIs, especially in England (Raffe & Croxford, 2015). In Sweden, the UK, Germany, Austria, and Slovakia, students from underrepresented groups are more likely to attend non-elite HEIs or programs that are not highly selective (Borjesson & Lidegran, 2015; Carlhed, 2017a; Fleming & Finnegan, 2011; Nairz-Wirth, Feldmann, & Spiegl, 2017; Pugsley, 2004; Raffe & Croxford, 2015). Swedish students from urban regions are also more likely to participate in HE (UKA, 2015) – a known pattern in the UK as well (HEFCE, 2012). In the UK, the number of students from educationally disadvantaged areas increased but these students are disproportionately likely to be at low-tariff HE institutions (HEFCE, 2017). In France, admission to the grandes écoles is very competitive, while access to university education is open (European Commission et al., 2014, p. 20). In Germany and Spain, students with completed upper-secondary education automatically have the right to a place at university, but in practice there are selection procedures (Vossensteyn et al., 2015). The situation is different in Austria and the UK compared to Sweden, due to the use of admission fees (European Commission et al., 2014; Nairz-Wirth et al., 2017; Vossensteyn et al., 2015) in combination with self-reflective admission processes in which the prospective student writes a letter explaining his/her application to a particular program and/or institution.

Hence, some programs and institutions seem to attract more students. The competitiveness is higher, which in turn affects the composition of the admitted student population,
who are more qualified and motivated to pursue a degree. This is a well known phenomenon that structured the HE system in many countries during the HE elite phase and was described by Trow (2006) as “input selectivity.” For programs and institutions that are less prioritized among potential students, there is a higher dropout risk (Carlhed, 2015). This aspect of popularity could be exemplified by Swedish teacher training programs, whose dropout rates have increased dramatically in recent years and whose acceptance ratios have decreased from 4.8 applicants per place in 2002 to an average range of 1.4 applicants per place in 2015 (UKA, 2016a). This declining popularity is also observed elsewhere (IBF, 2013), although in other localities such as Finland where the acceptance ratios are 10.0–12.6, the figures remain fairly consistent (Andere, 2013).

In the UK, there is strong competition for places in the best upper-secondary schools, since the most prestigious private schools pave the way to the elite institutions. This social stratification is then amplified by the elite HEIs such as the Russell Group universities in the UK (Marginson, 2016). Thus, a certain university must be chosen very early to choose the right upper-secondary school as preparation. In Austria, the pupils’ selection into the academic versus vocational track begins already in year five (Nairz-Wirth et al., 2017). In Sweden, the most important selection takes place in the transition to upper-secondary school, where there are academic and vocational programs to choose between. However, access to HE continues to be biased according to socioeconomic background, with lower social classes poorly represented not only in particular disciplines but across tertiary-level institutions in general (Berggren, 2013; Borjesson & Lidegran, 2015; UKA, 2013; UKA & SCB, 2014).

**Gender differences**

There are also differences in dropout and completion rates between countries when it comes to gender. In the UK, women are less likely to continue their studies in the second year than men (HEFCE, 2014, 2015; Quinn, 2013). In general, the lower grade of study success on the basis of gender, disability, and educational disadvantage has remained consistent in UK lately (Boliver, 2011; HESA, 2016). However, in Sweden, the dropout rates are slightly lower for women than for men in general (UKA & SCB, 2015); the rates mentioned concerning women in Swedish HE are based on the retention measure, which only reflects early dropouts, while the degree frequency rates take degree completion into account and late leaving patterns emerge. For example, a large Swedish study on educational strategies across six professional degree programs identifies quite large gender differences in degree completion, with 38% of male students not gaining a diploma within 5 years of the expected degree timeframe, compared to only 17% of female students. However, this signifies the underlying structures of two largely
gender-biased study programs, which are known to have different kinds of dropout patterns; students in engineering tend to drop out late due to employment offers, in spite of the absence of a diploma, while the few nursing students who drop out do so early (Carlhed, 2017a; UKA & SCB, 2015). Two recent analyses from the national HE authority on dropout and completion of professional degree programs show that men are generally more inclined to dropout (UKA, 2017; UKA & SCB, 2016).

**Ethnicity**

In Sweden, there is no national data collection or university-based data record that deals with student ethnicity at all. There are no recent studies on completion based on ethnicity and few studies at all on student participation in HE based on Swedish or foreign backgrounds (Mahlck, 2012). In the UK, however, race and/or ethnicity (self-categorization) are accepted measures in analyses of research policy (HEFCE, 2014) and are used in analyses of participation and student dropout in HE in the UK.

However, the closest measures available in Sweden are “country of birth” and the dichotomous categories of being foreign or having Swedish background, e.g., being an “immigrant” or a “Swede” (Mahlck, 2012). A recent statistical analysis of 10 professional degree programs by the Swedish HE authority, UKA, reports that students born outside Sweden dropped out to a larger extent than students born in Sweden (UKA, 2017).

Regarding the situation in the UK, the HEFCE’s statistical analysis shows that, in 2010, there was a large difference in the rate of degree completion between the different ethnic groups, where white students had the highest completion level (62%) and black students had the lowest level (37%) (HEFCE, 2010). In 2014, the degree outcome was even higher for students classifying themselves as white, who consistently achieved nearly 20% higher degree outcomes than other ethnic groups, such as Asian and Black students – even when entering with the same A-level grades (HEFCE, 2014). In recent years, the non-continuation rate has risen sharply for students from educationally disadvantaged areas and black and minority ethnic students (HEFCE, 2017).

More recent Swedish studies focus on participation or access rates among students with foreign backgrounds instead of completion. The rate of HE participation among students with foreign backgrounds rose to 19% in 2012 and to 24% in 2016 (UKA & SCB, 2014), which is very close to the participation rate of minority ethnic students in the UK in 2007 (HEFCE, 2010). However, there are research studies on access for students with migrant backgrounds in Sweden (Crul, 2013, 2015) but research on degree completion or dropouts among students with foreign backgrounds is practically non-existent.
Social background and parental educational level

Young people’s educational choices are multifaceted; they either express their choice as a consciously planned action or a serendipitous event (Reay, David, & Ball, 2005), or they described it as a result of them explicitly wanting to move away from their origin or traditions and the already well-worn paths. Nonetheless, as many studies show, gender, ethnicity, and socioeconomic conditions still impact educational choice and the parents’ lifestyles and socioeconomic positions are inherited and repeated (Bathmaker, Ingram, & Waller, 2013; Borjesson & Lidegran, 2015; Carlhed, 2015, 2017a; Erikson & Rudolphi, 2011; Hallsten, 2010) and even amplified between generations (Hallsten, 2014; Lindahl, Palme, Sandgren Massih, & Sjogren, 2015; Møllegaard & Meier Jæger, 2015).

When comparing pathways to student success in HE in other countries, Sweden stands out as giving more opportunities to students with migrant backgrounds, and it seems to be possible there for gifted students from disadvantaged backgrounds to reach HE through a direct route without major delays (Crul, 2013, 2015). However, in Sweden, as in Austria and the UK, the participation rates are lower among underrepresented groups of students (Nairz-Wirth et al., 2017; Rose-Adams, 2013). Figures in the UK show that 33% of students in HE come from NS-SEC classes 4–7, which is also the highest level of entrants from lower socioeconomic classes recorded (HESA, 2015) and the percentages from low HE participation neighborhoods have steadily risen over time across the UK (HESA, 2016). Regarding access to Swedish HE, 22% of students with parents with upper-secondary education or lower apply, while the figure is 84% for students who have parents with a doctoral educational level (UKA & SCB, 2016). Several studies show that student dropout is higher for students with parents with low educational levels and/or with parents born in a foreign country (Carlhed, 2017a; HSV, 2002, 2007; Rose-Adams, 2013; Quinn, 2013). In terms of student dropout in Sweden, there is a lower degree of completion among students with low parental educational level on professional degree programs that exceed 4.5 years (engineering, law, medicine, and psychology). However, there are very small or no differences for the mid-range programs (3–3.5 years), e.g., nursing, social work, physiotherapy, and shorter engineering programs (UKA, 2013). A Swedish statistical analysis shows that parental educational level is more important than the parents’ birth nation (UKA, 2013), and its impact is also apparent in other studies in regard to choice of program or university and educational strategies like transfer (Berggren, 2013; Borjesson & Lidegran, 2015; Carlhed, 2017a; Engstrom & Carlhed 2014; Hallsten, 2010).

Therefore, it is important to address and support students with low parental educational levels who are entering longer programs that are selective. In addition, even if there is an overall increasing trend of participation of students from disadvantaged backgrounds in
HE, the socially biased recruitment remains for the selective and prestige programs, where also fewer disadvantaged students progress toward a degree (Gustafsson, Andersson, & Hansen, 2000; UKA, 2016a). In other words, in the mass education segment, there are smaller differences in student dropout in relation to social class and parents’ educational level than in the elite or prestige segment in Trow’s (2006) terminology (UKA, 2013).

As was mentioned earlier, the internal hierarchies of prestigious institutions and programs, and the ordinary mass education programs within domestic HE, present themselves to potential students in different ways. Hence, the dropout rate is a function of both selectivity and demographic factors.

Having delved into the differences of student progression in regard to the types of educational program and their accessibility, as well as students’ social background, parental educational level, gender, and ethnicity, one might wonder whether we can rely on the figures? Are they valid? There are many pitfalls to avoid when comparing quantitative figures on student progression, and it might be more productive to aim at understanding the reasons for students’ premature departure, regardless of the percentages. The section below describes some common themes in international HE, as well as differences in the empirical patterns of student dropout and the reasons for it.

**Reasons for Dropout**

A considerable number of researchers emphasize the importance of individual meaning-making and negotiations with the current situation within a sociocultural context (Carlhed, 2015; Fleming & Finnegan, 2011; Kurantowicz & Nizinska, 2013; Nairz-Wirth et al., 2017; Reay et al., 2005; Thunborg, Bron, & Edstrom, 2012, 2013; Yorke & Longden, 2004). It is also well known from research that experiences during the first year of university are of great importance for staying or leaving (Carlhed, 2015; NAO, 2007; Yorke & Longden, 2004). Quinn (2013) reports on an extensive European comparative analysis on dropouts, in which six key factors leading students to drop out are identified: (a) sociocultural factors concerning the student experience in a constrained context; (b) structural factors, such as social class, race, gender, and poverty; (c) policy factors, which negatively affect students’ ability to complete (i.e., financial constraints in student finance structures); (d) institutional factors, such as unsupportive institutional cultures and practices; (e) personal factors connected to health, peers, religion, family, or work commitments; and (f) learning factors, which include prior educational attainment and current quality of teaching, absence from class, metacognitive aspects or poor organization of self-study practices. Before going into the reasons, students themselves give for why they departed prematurely, it may be of
interest how dropout statistics are created and what explanations could lie behind the statistics.

**Behind the dropout statistics**

In Carlhed’s earlier study (2015) on dropouts and aspirants from the Swedish teacher program, a group of students was defined in the initial sampling as being at risk of dropping out, since they had no active registration for their third semester. Two survey rounds were made \( (n = 366 \text{ and } n = 116) \), with response rates of 49% and 17%. The results of the study showed that the dropout statistics were overestimated. Reasons for not being a “true dropout” were that students either had returned to their studies after a gap year, or that they have taken parental leave or sick leave, or that they did not apply for their certification (which is the actual indicator for graduation in the Swedish student data record) even if they had fulfilled all course requirements. These reasons for overestimation were also apparent in a statistical analysis of dropouts from the Swedish Higher Education Authority in 2010 (HSV, 2010).

In the questionnaire used in the study (Carlhed, 2015), students were asked to participate in interviews about their experiences and reasons for dropping. Thirty-one students responded positively and participated. The results from the interviews of the students were used in the creation of a typology of students who ended up in the dropout statistics, namely: (a) able, but not committed – students who can, but do not want to pursue a degree. They have the ability to complete, but lack commitment, i.e., these students made a wrong choice, became employed, or took a sabbatical year; (b) committed, but not able – students who want to pursue a degree, but cannot do it for different reasons. These students have health problems, academic achievement difficulties, or doubt their choice of program; (c) able and committed – students who are able to carry on and want to. These are students who take voluntary and temporary pauses, or who are registered as being absent due to technical administrative deficiencies; and (d) not able and not committed – students who cannot carry on and/or do not want to either. These students doubt both their choice and/or their ability to carry on due to emotional problems and/or academic performance pressure. In this group are the students who are a long way behind in their studies (Carlhed, 2015).

**Transfer.** Swedish statistics suggest that parents’ educational level affects men and women equally, but increases the likelihood of transferring to another program rather than dropping out altogether (UKA, 2013, 2017). Thus, the phenomenon of transfer could be worth displaying in the statistics. Hovdhaugen’s (2012) study in Norway concludes that about half of the students who could be considered as dropouts in fact transfer to another university. In her study from 2009, she shows that transfer is more common among younger students, Norwegian students, and among students in the humanities and
social sciences. Their goals were also important; for example, a student who only intended to take a few courses and not pursue a degree was more likely to transfer (Hovdhaugen, 2009). The Carlhed’s study from 2015 shows that students who transfer have different reasons to change program, such as deciding to take a more challenging course of study or changing the profile of their teacher training program but remaining in the same department. In these cases, the statistics nonetheless record a dropout (Carlhed, 2015).

Hence, the results concern institutional dropout rather than system dropout, which is often the case with other measures like retention, attrition, and non-continuation, which cannot specify if the student has dropped out or has transferred to another program/university etc. (Thomas & Hovdhaugen, 2014; Yorke & Longden, 2004).

*Dropout–drop in.* There is also a considerable proportion of mature learners that drop out and then later drop in again as a part of a personalized lifelong learning project (Thunborg et al., 2012, 2013), or non-traditional students who manage to reapply later on (Rose-Adams, 2013). Naturally occurring situations also cause dropout statistics, such as temporarily leaving studies for parental leave, military service, sick leave, or taking a gap year to work or travel (Carlhed, 2015; Carlhed Ydhag, 2018; Hovdhaugen, 2012; HSV, 2010; Quinn, 2013; Yorke & Longden, 2004).

*Working parallel to studies.* Studies show that students who work more than 20–25 hr per week in addition to their studies face a higher dropout risk (Callender, 2008; Hovdhaugen, 2014; Vossensteyn, Cremonini, Epping, Laudel, & Leisyte, 2013). Their reasons for working could be to enhance their employability or due to financial constraints (Vossensteyn et al., 2015).

*Motives for enrolling.* Other studies on students’ reasons for leaving early point out rather straightforward explanations of student dropout, such as flawed decision-making about entering the program (Carlhed, 2015), which could be an effect of low amounts of social capital, i.e., low access to useful information about the different programs (Christie, Munro, & Fisher, 2004). However, for others, it may simply be the wrong choice. For example, in a Norwegian study, 50% of those who drop out think it was a good decision retrospectively (Hovdhaugen & Aamodt, 2005).

The students’ reasons for dropping out should also be understood in relation to their motives for enrolling in the program in the first place. Carlhed (2015) shows in her study that students having teacher training as a second, third, or fourth priority in their application to HE have a significant impact on their tendency to dropout early, which corroborates results from other studies on students’ motives for their educational choices (Hovdhaugen, 2012; NAO, 2007). For many young students, the choice of continuing to HE is a non-choice, as the contemporary norm is to progress to HE as a logical step after completing secondary school. However, finding suitable studies or programs can be hard and may take some trial and error before they find their way.
Voluntary and involuntary dropping out. One useful distinction is between voluntary and involuntary dropping out. An American ethnographic study by Seymour and Hewitt (1997) reports on the similarities between students who dropped out because of problems with the structure of the study program or with the specific culture of the discipline. The different reasons given for leaving are analyzed in terms of being “pulled out” or “pushed out.” Students who failed exams or felt they did not fit in are categorized as being pushed out from their studies, while students who had more compelling alternatives to choose are categorized as “pulled out.”

Non-traditional students meet academia. Many qualitative studies on retention and success rely on a cultural perspective on student life in academia, and conclude that “belonging” is a key aspect for understanding student success. The students’ identification and integration with their institution are crucial for student engagement, as is the institution’s commitment to build and maintain an inclusive and supportive culture. This is especially important for non-traditional students, and in the early phase of transition to HE, due to the vulnerability students experience during the first year. During this initial period, they could also have doubts about their choice and how to deal with academic issues or future aspirations – or simply feel a bit lost in the transition between home and university life (Palmer, O’Kane, & Owens, 2009; Thomas, 2012; Thunborg et al., 2012). For many non-traditional students, the decision to go to university is often postponed but well-prepared for, and is seen as very risky in case of possible failure (Carlhed, 2015; Reay, 2003; Reay, Crozier, & Clayton, 2009; Redmond, 2006; Thunborg et al., 2013). And, after transition to HE, many non-traditional students’ lifestyles are far from the idealized image of independence, leisure, and successful academic work. They may have to simultaneously balance family commitments, working life, and the demands of their studies (Reay, 2003). Nairrz-Wirth et al. (2017) compare teachers’ expectations of students’ study skills. At the university, students are assumed to be self-organized and be able to plan their own reading and studying, which non-traditional students’ are often not. Pusztai’s study shows that reciprocal interaction in intergenerational relationships, meaning a close interaction with socializing agents is important – especially for non-traditional students. These interactions between lecturers and students could be protective against early dropping out (Pusztai, 2014).

Aspects of being “pushed” out are: disappointment in the educational content, perceived poor quality of education, lack of ability (Meeuwisse, Severiens, & Born, 2010), or disappointment with the organization of the program (Carlhed, 2015) or students’ negative experiences of the program/institution or difficulties in coping with the demands of the program (Hovdhaugen & Aamodt, 2005).

The question here is whether these students are struggling with their academic performance or whether it is about them finding the right program. Hence, if students enter programs in which they are not really interested, there is a greater risk for them to change...
their minds and either drop out or transfer to another course of study. The Swedish HE system having no student fees, except for students outside the EU/EEA countries and Switzerland, may encourage trial opportunities, that is, students apply for admission while not really being decided on what to become professionally and/or just want to try and see. In addition, Swedish HE in general is characterized as an open flexible system. Students can choose to study either programs or single courses, and can also assemble and combine freestanding courses for a bachelor's or a master’s degree. If they decide to pause their studies for any reason, it is possible to enter the program again and not lose all previous credit achievements. In general, it is very easy to change program within the Swedish HE system, and it is also sensitive to unemployment in the labor market, which generally increases the number of admissions to HE (UKA, 2016b).

**Conclusions**

*Critically questioning of dropout rates*

As we have seen, completion, dropout, and retention rates are measured in many countries in Europe in a variety of ways for a variety of purposes (European Commission et al., 2014). Hence, there are also multiple and serious difficulties in comparing the different domestic statistics on dropout, retention, and completion rates reported in a number of publications (Carlhed, 2017b; Hovdhaugen, 2012; Quinn, 2013; RANHLE, 2008; Thomas & Hovdhaugen, 2014; Vossensteyn et al., 2015). In some cases, the figures are based on general assumptions that students always intend to carry on toward a degree, or that the HE system allows transfer without being registered as a dropout. There are also problems with the different designs of data collection procedures, e.g., the analyses are based on either cross-sectional, true cohort follow-ups, surveys, or mixes of different methods. In addition, the data are collected at different times in different HE systems (Carlhed, 2017b; Vossensteyn et al., 2015). In sum, there are serious validity and reliability problems that threaten the quality of research in the area and which need attention.

There are a range of issues to address when trying to understand rates of student dropout, retention, or completion. The first question to ask would be: what kind of departure is it? Is it from a program, from a department/faculty (an institutional departure), from the university, or from the HE system itself (system departure)? Should a transfer within the same program/faculty be considered as a dropout?

Furthermore, do the students leave voluntarily? Are they “pulled out” from their studies, “pushed out” due to underachievement, or do they fail to find friends? It is also important to see how “dropout” is defined; it could be framed either as student failure, an opportunity for a new course of study, or as a transition to the labor market. In some
studies, there is a clear institutional perspective when failures at the institution are addressed, and often implicit assumptions about student deficits as the reasons for dropping out.

Another issue is the time of departure; do the students leave early or late? Which consequences would that imply? As studies show, it is related to program-specific features and employability aspects. Professional degree programs need to be understood in their labor market context, and it is also important to know what kind of studies we are talking about. Do the rates reflect general basic programs or specializations, as in additional training programs? Sometimes, the rates are calculated on single courses as well, reflecting the number of students who actually earn the credits they enrolled and registered for.

One crucial component in the assessment of dropout rates and the like is in which kind of HE system the analysis is done. There is presumably a difference between an open and flexible system that allows transfers between programs and institutions with opportunities to validate earlier and earn competencies, and a system that is more closed and in which programs are more or less dead-ends if one leaves prematurely. Matters such as whether students have to pay a fee or not also have consequences for enrollment rates. If the system is flexible and open for lifelong learning, recurrent enrollment and the student’s intent to study need to be considered – how “serious” is the intent? Finally, as critical researchers, we need to ask ourselves if dropout is necessarily bad. Which basic assumptions do we put in our design and analysis?

Questioning the intentions of the data production

Student progression is an administrative object that requires an act of breaking with mundane and political pre-notions to become a research object in critical social science (Bourdieu, Chamboredon, & Passeron, 1991; Carlhed, 2017b). First and foremost, it is a politically contested issue due to current policies connected to the EHEA that started with the Bologna process, which was a top-down politically driven process (Trow, 2006). In these contexts, education is mainly meant to produce competitive human capital and fuel the EU’s goal of becoming the world’s most competitive knowledge economy (Daun, 2011; Gornitzka, 2006). Second, the issue of studying dropout rates has an institutional origin, with researchers such as Tinto (who is one of the key figures in the research field) mainly working within HEIs. Tinto developed a model for classifying student departure that takes into account both students’ pre-entry attributes, goals, and commitments, as well as the academic and social integration issues at university (Tinto, 1975) – this is research that has clearly sprung from an administrative and institutional perspective. Hence, it is crucial to acknowledge the perspective from which the research problem and
data are produced. At present, in qualitative studies, the perspectives are more often explicit but not so often in quantitative studies. The blurred line between pure statistical reporting, policy evaluation, and educational research in critical social science is implicit, but severe in its consequences. Hence, there is a great risk of not understanding the difference between hard core research and its strict onthological, epistemological, theoretical, and methodological grounds compared to evaluation studies, which often use the scientific methodologies, but leave out the onthological, epistemological, and theoretical positioning.

Large-scale quantitative research on dropouts is quite rare and mostly targets partial populations. There seems to be few researchers if any, who work comparatively with large-scale comparable research data. From a broad variety of studies, one can find reports from domestic statistical authorities, EC authorities, and EU projects. In European educational policy, the line between science and policy evaluation is constantly blurred and ignored. In policy, texts “studies” mean light versions of comparative studies, rather than proper basic research. There is a risk that scientific knowledge production on dropouts and researchers’ own data production on the topic are replaced by a growing monopoly in quantitative data production practices through large-scale cross-national surveys (e.g., by Eurostat and the European Statistical System). In these large surveys, single indicators and internationally compared rates are supposed to represent the dropout phenomenon, but with little or no attention given to the specific contexts discussed above (Carlhed, 2017b). The messy reality beneath the indicators of dropout (which have been reported in several studies) seems not to be intended to advance knowledge on the topic in the policy context. The messiness of the reality is thus considered only as noise.

Hence, readers should think about who is producing data and what it means to reuse already existing data. The risk of unreflectingly reusing administrative or policy-driven data means that the researcher is thinking like the state (or like EC) and not as a critical researcher. Critical social science cannot do that because its mission is to study society, the state, and the classifications and categorizations it produces – not uncritically reinforce the “natural” administrative order and make social science into a policy tool only.

An alternative route

When dealing with the messy reality embedded in indicators and rates of dropout, educational researchers might feel overwhelmed – but there is a way forward. Instead of seeing the domestic dropout and completion rates as exact measurements that have their exact counterparts in another country, we can still research the patterns in qualitative differences within each country. Hence, the patterns within and between each country...
could give us insights into the *qualities* of dropout and help to create knowledge of structural and/or individual obstacles. In the research field of student progression in HE, there is strong political pressure on researchers to come up with answers and comparable data for national and transnational policies and practices, but we need to study *what* dropout and completion actually mean. And there is more to be done with respect to the *qualities* of dropouts and completion in HE, before we can measure levels. To explain *why* these levels differ between countries, and the size of the gaps, specific fine-tuned comparative research is needed. However, instead of relying on the (un)comparability between countries’ domestic statistics, there is a need for close collaboration between researchers who are experts on their own HE-context and accordingly, funding infrastructures, to ensure such collaborations.

**Acknowledgements**

The paper was funded by the Swedish Research Council (Grant 2009:6065).

**About the Author**

CCY has a PhD in Education and is an associate professor of Sociology of Education. She currently holds a position as a senior lecturer in Education at the Department of Education, Stockholm University, where she is also Director of Research Studies in Education. Her research spans critical studies on student participation and study success in HE, and how knowledge is produced on student completion in the European policy context. Her research interests also include studies of social structures of dominance/power and knowledge production within social and professional fields (education and medicine). The author is responsible for the study concept and design, analysis, and obtained funding.

**Ethics**

The study procedures were carried out in accordance with The Swedish Research Council’s guidelines “Good research practice.” No ethical considerations regarding humans involved as participants in research were made due to the theoretical nature of the article.

**References**

Andere, E. (2013). *Teachers’ perspectives on finnish school education: Creating learning environments*. New York, NY: Springer.

Bathmaker, A.-M., Ingram, N., & Waller, R. (2013). Higher education, social class and the mobilization of capitals: Recognizing and playing the game. *British Journal of Sociology of Education, 34*(5–6), 723–743. doi:10.1080/01425692.2013.816041
Berggren, C. (2013). The influence of gender, social class and national background on education and work career? *Nordic Journal of Migration Research, 3*(3), 135–144. doi:10.2478/njmr-2013-0005

Boliver, V. (2011). Expansion, differentiation, and the persistence of social class inequalities in British higher education. *Higher Education, 61*(3), 229–242. doi:10.1007/s10734-010-9374-y

Bourdieu, P., Chamboredon, J. C., & Passeron, J. C. (1991). *The craft of sociology. Epistemological preliminaires*. Berlin, Germany: De Gruyter.

Borjesson, M., & Lidegran, I. (2015). Utbildningsfält och arbetsmarknad [Fields of Education and labour market]. In Y. Bergstrom, E. Bertilsson, M. Borjesson, M. Gustavsson, & I. Lidegran (Eds.), *I Sociala strukturer i utbildningssystemet* [Social structures in the education system]. Stockholm, Sweden: Arena Ide.

Callender, C. (2008). The impact of term-time employment on higher education students’ academic attainment and achievement. *Journal of Education Policy, 23*(4), 359–377. doi:10.1080/02680930801924490

Carlhed, C. (2015). *Vid den normala studietaktens utkanter: Analyser av studieavbrott på lärarutbildningar vid Uppsala universitet* [At the outskirts of the normal study rate: Analyses of dropouts at Teacher Education programmes at Uppsala University]. SEC Research Reports, 54. Uppsala, Sweden: Uppsala University.

Carlhed, C. (2017a). The social space of educational strategies: Exploring patterns of enrolment, efficiency and completion among Swedish students in undergraduate programmes with professional qualifications. *Scandinavian Journal of Educational Research, 61*(5), 503–525. doi:10.1080/00313831.2016.1172496

Carlhed, C. (2017b). Resistances to scientific knowledge production of comparative measurements of dropout and completion in European higher education. *European Educational Research Journal, 16*(4), 386–406. doi:10.1177/1474904116667363

Carlhed Ydhag, C. (2018, September 3–7). *Narratives of teacher training students who postponed their studies*. Presentation at the ECER European Conference on Educational Research Conference “Inclusion and Exclusion, Resources for Educational Research”, Bolzano, Italy.

Christie, H., Munro, M., & Fisher, T. (2004). Leaving university early: Exploring the differences between continuing and non-continuing students. *Studies in Higher Education, 29*(5), 617–636. doi:10.1080/0307507042000261580

Crul, M. (2013). Snakes and ladders in educational systems: Access to higher education for second-generation turks in Europe. *Journal of Ethnic and Migration Studies, 39*(9), 1383–1401. doi:10.1080/1369183X.2013.815388

Crul, M. (2015). Is education the pathway to success? A comparison of second generation Turkish professionals in Sweden, France, Germany & The Netherlands. *European Journal of Education, 50*(3), 325–339. doi:10.1111/ejed.12133

Daun, H. (2011). Globalization, EU-ification, and the new mode of educational governance in Europe. *European Education, 43*(1), 9–32. doi:10.2753/EUE1056-4934430102

Engstrom, S., & Carlhed, C. (2014). Different habitus–different strategies in teaching physics? Relationships between teachers’ social, economic and cultural capital and strategies in teaching physics in upper
secondary school. *Cultural Studies of Science Education*, 9(3), 699–728. doi:10.1007/s11422-013-9538-z

Erikson, R., & Rudolphi, F. (2011). Social snedrekrytering till teoretisk gymnasieutbildning. [Social biased recruitment to theoretical secondary education]. In A. Svensson (Ed.), *UtvArdering Genom Uppfoljning* [Evaluation by follow up]. Gothenburg studies in educational sciences 305. Gothenburg: Gothenburg University.

European Commission. (2009). *Education and training 2020 ET 2020. Summaries of EU legislation*. Retrieved from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:ef0016

European Commission. (2012). *Rethinking education: Investing in skills for better socio-economic outcomes* (Report No. COM/2012/0669). Retrieved from http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52012DC0669

European Commission, EACEA, & Eurydice. (2014). *Modernisation of higher education in Europe: Access, retention and employability 2014*. Eurydice report. Luxembourg: Publications Office of the European Union. Retrieved from http://dx.doi.org/10.2797/72146

Fleming, T., & Finnegan, F. (2011). *Non-traditional students in Irish higher education: A research report*. Retrieved from http://www.dsw.edu.pl/fileadmin/www-ranlhe/files/Final_Copy_July_20_2011.pdf

Gornitzka, A. (2006). The open method of coordination as practice – A watershed in European education policy? (Working Paper No. 16). Oslo, Norway: Centre for European Studies, University of Oslo.

Gustafsson, J.-E., Andersson, A., & Hansen, M. (2000). Prestationer och prestationsskillnader i 1990-talets skola [Differences in achievements]. In *Välfärd och skola. SOU 2000:39* [Welfare and school]. Stockholm, Sweden: Fritzes.

Hallonsten, O., & Holmberg, D. (2013). Analyzing structural stratification in the Swedish higher education system: Data contextualization with policy-history analysis. *Journal of the American Society for Information Science and Technology*, 64(3), 574–586. doi:10.1002/asi.22773

Hallsten, M. (2010). The structure of educational decision-making and consequences for inequality: A Swedish test case. *American Journal of Sociology*, 116(3), 806–854. doi:10.1086/655751

Hallsten, M. (2014). Inequality across three and four generations in Egalitarian Sweden: 1st and 2nd cousin correlations in socio-economic outcomes. *Research in Social Stratification and Mobility*, 35, 19–33. doi:10.1016/j.rssm.2013.09.002

HEFCE. (2010, May 13). *Student ethnicity. Profile and progression of entrants to full-time, first degree study* (Issues paper). Bristol, UK: Higher Education Funding Council for England.

HEFCE. (2012, October 26). *POLAR3. Young participation rates in higher education* (Issues paper). Bristol, UK: Higher Education Funding Council for England.

HEFCE. (2014, March 3). *Differences in degree outcomes: Key findings’* (Issues paper). Bristol, UK: Higher Education Funding Council for England.

HEFCE. (2015). *Non-continuation rates: Trends and profiles*. Bristol, UK: Higher Education Funding Council for England. Retrieved from http://www.hefce.ac.uk/analysis/ncr/
Mahlck, P. (2012). Differentiering och excellens i det nya forskningslandskapet. Om kon, tystnad och performativa vithetshandlingar [Differentiation and excellence in the new research landscape. On gender, silence and performative whiteness acts]. *Tidskrift for genusvetenskap*, 6(1–2), 23–48.

Marginson, S. (2016). The worldwide trend to high participation higher education: Dynamics of social stratification in inclusive systems. *Higher Education, 72*(4), 413–434. doi:10.1007/s10734-016-0016-x

Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Reasons for withdrawal from higher vocational education. A comparison of ethnic minority and majority non-completers. *Studies in Higher Education, 35*(1), 93–111. doi:10.1080/03075070902906780

Møllegaard, S., & Meier Jæger, M. (2015). The effect of grandparents’ economic, cultural, and social capital on grandchildren’s educational success. *Research in Social Stratification and Mobility, 42*, 11–19. doi:10.1016/j.rssm.2015.06.004

National Audit Office [NAO]. (2007). *Staying the course: the retention of students in higher education*. Report by the comptroller and Auditor General. London, UK: The Stationary Office.

Nairz-Wirth, E, Feldmann, K., & Spiegl, J. (2017). Habitus conflicts and experiences of symbolic violence as obstacles for non-traditional students. *European Educational Research Journal, 16*(1), 12–29. doi:10.1177/1474904116673644

Orr, D., Gwosc, C., & Netz, N. (2011). *Social and economic conditions of student life in Europe. Synopsis of indicators*. Final report. Eurostudent IV 2008–2011. Bielefeld, Germany: W. Bertelsmann Verlag.

Palmer, M., O’Kane, P., & Owens, M. (2009). Betwixt spaces: Student accounts of turning point experiences in the first-year transition. *Studies in Higher Education, 34*(1), 37–54. doi: 10.1080/03075070802601929

Pugsley, L. (2004). *The university challenge: Higher education markets and social stratification. Cardiff papers in qualitative research*. Abingdon, United Kingdom: Routledge.

Pusztai, G. (2014). The effects of institutional social capital on students’ success in higher education. *Hungarian Educational Research Journal, 4*(3), 68–83. doi:10.14413/herj.2014.03.06

Quinn, J. (2013). *Drop-out and completion in higher education in Europe among students from under-represented groups*. Retrieved from http://hdl.voced.edu.au/10707/292542

Raffe, D., & Croxford, L. (2015). How stable is the stratification of higher education in England and Scotland? *British Journal of Sociology of Education, 36*(2), 313–335. doi:10.1080/01425692.2013.820127

RANHLE. (2008). *An overview of national statistics on retention and withdrawal*. European Lifelong Learning Project 2008–10. RANHLE – Access and Retention: Experiences of Non-traditional Learners in HE. Retrieved from http://www.dsw.edu.pl/fileadmin/www-ranlhe/files/national_stat.pdf

Reay, D. (2003). A risky business? Mature working-class women students and access to higher education. *Gender and Education, 15*(3), 301–317. doi:10.1080/09540250303860

Reay, D., Crozier, G., & Clayton, J. (2009). ’Strangers in Paradise’? Working-class students in Elite Universities. *Sociology, 43*(6), 1103–1121. doi:10.1177/0038038509345700

23
Reay, D., David, M. E., & Ball, J. (2005). Degrees of choice: Social class, race and gender in higher education. Stoke-on-Trent, UK: Trentham.

Redmond, P. (2006). Outcasts on the inside: Graduates, employability and widening participation. Tertiary Education and Management, 12(2), 119–135. doi:10.1080/13583883.2006.9967163

Rose-Adams, J. (2013). Widening participation and lifelong learning: Leaving university early: Exploring relationships between institution type and student withdrawal and implications for social mobility. Widening Participation and Lifelong Learning, 15(2), 96–112. doi:10.5456/WPLL.15.2.96

Seymour, E., & Hewitt, N. M. (1997). Talking about leaving. Why undergraduates leave the sciences. Boulder, CO: Westview Press.

Stiburek, S., Vlk, A., & Svec, V. (2017). Study of the success and dropout in the higher education policy in Europe and V4 countries. Hungarian Educational Research Journal, 7(1), 43–56. doi:10.14413/herj.2017.01.04

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45(1), 89–125. doi:10.3102/00346543045001089

The Swedish National Financial Management Authority. (2012). Government instruction to Swedish Higher Education Authority (UKA) U2012/7213/UH. Stockholm, Sweden: The Swedish National Financial Management Authority.

The Swedish National Financial Management Authority. (2013). Government instruction to Swedish Higher Education Authority (UKA) U2013/7791/UH. Stockholm, Sweden: The Swedish National Financial Management Authority.

Thunborg, C., Bron, A., & Edstrom, E. (2012). Forming learning identities in higher education in Sweden. Studies for the Learning Society, 2(2–3), 23–34. doi:10.2478/v10240-012-0002-5

Thunborg, C., Bron, A., & Edstrom, E. (2013). Motives, committment and student identity in higher education. Studies in the Education of Adults, 45(2), 177–193. doi:10.1080/02660830.2013.11661650

Trow, M. (2006). Reflections on the transition from elite to mass to universal access: Forms and phases of higher education in modern societies since WWII. In J. J. F. Forrest & P. G. Altbach (Eds.), International handbook of higher education. Dordrecht, The Netherlands: Springer.

UKA. (2013). Social bakgrund och genomstomning i hogskolan En studie av langa och medellanga yrkesexamensprogram [Social background and completion within higher education. A study of long and middle range professional programmes] (Rapport: 2013:4). Stockholm, Sweden: The Swedish Higher Education Authority.
UKA. (2015). *Universitet och högskolor. Arsrapport 2015* [2015 status report] (Rapport 2015:8). Stockholm, Sweden: The Swedish Higher Education Authority.

UKA. (2016a). *Fortsatt fler soker sig till lärarutbildningen – men langt från det prognostiserade behovet* [Continued interest for Teacher education but far from the predicted need]. Stockholm, Sweden: The Swedish Higher Education Authority.

UKA. (2016b). *Trender och tendenser i högskolan* [Trends and tendencies in higher education]. Stockholm, Sweden: The Swedish Higher Education Authority.

UKA. (2017). *Tidiga avhopp från högskolan – Analyser av genomstomning på de tio största yrkesexamen-sprogrammen* [Early dropouts in higher education. Analyses of completion on the 10 largest professional degree programmes] (Rapport 2017:17). Stockholm, Sweden: The Swedish Higher Education Authority.

UKA, & SCB. (2014). *Universitet och högskolor Svensk och utländsk bakgrund för studenter och doktorander 2012/13* [Swedish and foreign background among students and doctoral students in higher education 2012/13] (Report No. UF 19 SM 1401). Stockholm, Sweden: UKA & Statistics Sweden.

UKA, & SCB. (2015). *Universitet och högskolor. Genomstomning och resultat på grundniva och avancerad niva till och med 2013/14, Sveriges officiella statistik. Statistiska meddelanden* [Higher education. Throughput at first and second cycle studies up to and including 2013/14] (Report No. UF 20 SM 1502). Stockholm, Sweden: UKA & Statistics Sweden.

UKA, & SCB. (2016). *Universitet och högskolor Hogskolenyborjare 2015/16 och doktorandnyborjare 2014/15 efter föräldrarnas utbildningsniva* [Higher education. Level of parental education among university entrants 2015/16 and new doctoral students 2014/15] (Report No. UF 20 SM 1403). Stockholm, Sweden: UKA & Statistics Sweden.

Valimaa, J., & Nokkala, T. (2014). The dimensions of social dynamics in comparative studies on higher education. *Higher Education, 67*(4), 423–437. doi:10.1007/s10734-013-9684-y

Vossensteyn, H., Kottman, A., Jongbloed, B., Kaiser, F., Cremonini, L., Stensaker, B., Hovdhaugen, E., & Wollscheid, S. (2015). *Dropout and completion in higher education in Europe (HEDOCE)*. Luxembourg: Publications Office of the European Union.

Vossensteyn, J. J., Cremonini, L., Epping, E., Laudel, G., & Leisyte, L. (2013). *International experiences with student financing: Tuition fees and student financial support in perspective*. Final Report for the Dutch Ministry of Education, Science and Culture. Enschede, The Netherlands: CHEPS.

Yorke, M., & Longden, B. (Eds.). (2004). *Retention and student success in higher education*. Maidenhead, UK: Open University Press.