Master's Thesis

PARALLEL SHADOWS:

SHADOW EDUCATION AND PERCEPTIONS OF COMPULSORY EDUCATION EFFECTIVENESS IN A KOREAN MIDDLE SCHOOL

병렬적인 사교육:

사교육과 중등학교 의무교육 효과의 인식에 대해

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Abstract

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Participation in shadow education institutes is a growing concern globally, with the number of countries having some form of out-of-school-learning businesses as yet uncalculated but significant. Korea is at the forefront of shadow education participation, and as such lessons can be learned from the experience students have with the interactions between their after-school academies and private lessons, and the compulsory education they attend in the daytime. Up to now, however, very little research has been done into how these interactions colour student perceptions of education, and where the students think most of their education comes from.

This paper attempts to go some way to filling this gap by performing a case study on a Korean middle school, and hopes to add a description of the current educational landscape by asking two fundamental questions: Where do students think the majority of their education comes from? And does the answer to this affect how they perceive the effectiveness of their school classes?

To answer this question, this paper utilizes two concepts of education in its analytical framework: Daniel Halliday's definitions of *screening* and *development* education; and a combined model of educational effectiveness from Scheerens, Creemers, and Stringfield & Slavin. In doing so, we describe *what education is*, *who provides it*, and *how effective it is*.

The research itself takes a mixed method approach, with semi-structured interviews conducted with a number of students from the school, and a quantitative questionnaire given to third grade students analysed for patterns and relationships. The findings presented here show that students see the majority of their *screening* education now comes from shadow education institutes, with school-based screening education seen as being basic and inefficient. Shadow education institutes have grown to such importance in students' education that this paper considers the term *shadow* to be insufficient in description, and rather prefers the term *parallel education.* Schools are still valued for their provision of *development* education however; a necessary provision considering how much time and focus is actually spent on screening education. Surprisingly, although students hold their shadow education institutes in high regards, they still rated their school classes as being highly effective, with the

majority of students rating their classes positively in all indicators of effectiveness. The only indicators to not score highly were those for ability grouping, provision of feedback, and appropriate-level content.

This paper goes on to provide suggestions for education authorities both within Korea and globally, as well as education effectiveness research as a whole, in order to attempt to provide equal access to high-quality education for all regardless of background. It is suggested that rather than trying to limit the amount of shadow education students participate in; it would be more effective to provide regulation through government participation in the education market. It is also highlighted that for educational effectiveness research to be considered relevant in the modern era, more focus must be given to the context surrounding education provision, of which shadow education plays a pivotal role.

Keywords: Shadow education, Parallel education, Educational effectiveness research, Korea Education

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I. Introduction

"Usually I'd just come home after school, take some rest or finish what [sic] academy homework I didn't do, then just go to my academy and come home about 10 or 11 at night, then do some more homework. It's the same every day during the week. At weekends my first academy starts at 9 in the morning and ends about 7pm. In the summer holidays I do more academies [sic] because I'm not at school"

Although at the more extreme end of teenage study routines, Kim's[1] schedule is not uncommon amongst her peers, where so-called 'shadow education[2]' plays a large role in the lives of students. This paper aims to look at the role shadow education plays in Korean students' lives, and how this colours perceptions of educational effectiveness in their regular classrooms.

Before entering a discussion into education, however, it is necessary to talk about exactly what we are referring to. Halliday (2016), in a paper we will be referring to throughout this study, describes education as having two major purposes: *development* and *screening*. Development education refers to the personal development of the student, "the various ways in which the institutions [i.e. schools] train children for citizenship, prepare them for autonomous life as adults, and otherwise contribute to their well-being (present and future)" (pp 151). Screening education, on the other hand, is what we consider traditional learning: taking academic classes and passing tests, the results of which determine entry (or denial of entry) to prestigious universities and coveted jobs. Importantly, screening education is seen as a *positional* good, one where having more of it puts you in a higher place than someone who has less of it. Halliday uses the example of GPA scores: If one's GPA is higher than another's, they can be said to be more 'educated'. Throughout this paper, we refer to education to be either *screening* or *development* based, and specific elements of education to be *positional* or *non-positional*. Although these categories undoubtedly have elements which may cross-over with each other, for the purposes of clarity they are strictly separated here. If an element is *positional* we mean it to be exclusively concerned with *screening* education. Similarly, although not quite as unambiguously, *non-positional* is used to refer to elements of *development* education.

This paper also makes use of over-lapping terms like 'compulsory education' and 'public education'. These terms both refer to the free-access middle school system provided by the government, and by

[1] Family names are used throughout this study to protect the identity of all participants.

[2] As specified later in this paper, we refer to 'shadow education' to mean any out-of-school paid-for learning institutes, such as academies or private tutoring sessions.

implication the public high-schools in Korea. To a lesser extent this study may be relevant to students who are of elementary school age, however with the reduced emphasis on achievement grades, the case of elementary school students is different enough to warrant a separate study of its own.

One of the key reasons why gathering data on shadow education participation and effects is so difficult in international studies is due to a lack of definitions; particularly between publicly and privately provided extra education. In order to maintain clarity, this paper utilizes Bray's definition of shadow education as being education provision that is consumer-based (i.e. paid for directly by a consumer), and not in any way provided by a school or other governmental division (2009).

In Korea (and, increasingly, as shown later in this paper, globally), provision of education is big business for the academies and private tutors who provide after-school lessons. Indeed, 'Shadow education' as a concept is well ingrained in Asian societies, with private academies and tutoring widespread across Japan, Taiwan, mainland China, and Hong Kong, and an estimated 70% of Korean K-12 students participating in some form of extra-curricular education activity (Korea National Statistic Office, 2011).

This phenomenon, however, is not limited to the Asian continent. Studies show the expansion of shadow education related businesses across the world, in countries as diverse as Bangladesh, Germany, Romania, and Ghana (Bray, 2013), and even in the USA with SAT cram schools (Gadsky, 2011; Buchmann et al, 2010). Being at the forefront of the rise in paid-for after-school education, lessons from Korea can be drawn regarding the shadow education-public education relationship.

Shadow education in Korea has been the subject of numerous studies in recent years, as investigated in the literature review chapter of this paper, but as yet no comprehensive study has been undertaken into *student* perceptions of education in Korea, which this paper attempts to go some way to address. As such, the research aim here is to provide students, parents, and education specialists with a unique insight as to where students perceive the bulk of their *screening* education to come from. Further, the objectives here are to determine which area (shadow education and public education) is seen to be most relevant to students' educational needs, and if this perception colours attitudes towards public education, social mobility, and themselves. Put simply, the research area concerns where the students get most of their education from, and equally importantly, *why?*

To answer this question, we will be using a mixed method research of quantitative data and qualitative interviews. Halliday's definitions of *development* and *screening* education are used to identify what education students get, and *where from*, and a synthesized model of educational effectiveness based on Scheeren's *context-input-process-output* (CIPO) model, Creemers' 1994 model of educational

effectiveness, and Stringfield & Slavin's 1992 hierarchical elementary education effects model is used to measure how changes in depth of participation in shadow education within the context of which education is provided in Korea affects the perceived effectiveness of the public school processes.

The questions addressed here are not merely academic. The impact of shadow education on student perspectives can have important knock-on effects in terms of education attainment parity, social-psychological engagement, and even the governing of education itself. In their paper on the increase of public-private partnerships in education, Robertson et al noted that a higher emphasis on private involvement in education "…bring to the fore implications of weakened central control by government, and how and where concerns over process *and* output legitimacy might be addressed." (2012: 26). In other words, with greater input and control from the private sector in the business of making education, the *legitimacy* of public provided education may be at risk. This paper, therefore, hopes to address the current situation of Korean education as seen through the lens of those most intimately engaged with it – the students themselves.

1.1. Background: Korea Public Education History

Lee et al (2012) chart the spread of compulsory education in Korea over 4 main periods: universal provision of elementary education in the 1950s; expansion to secondary compulsory education in the '60s and '70s, an expansion of higher education in the '80s and '90s; and promotion of autonomy and innovation during the 2000s. Previous to these periods, it should be remembered that Korea was considered a third world country, with a GDP similar to that of Kenya's (Lee, Pg 304). Education prior to 1945 was based around the Japanese colonial system, and could hardly be described as egalitarian (Yuh, 2010; Tsurumi, 1977).

Currently, widespread, diverse, and easily accessible public schools are prevalent. Nine out of ten 3-4 year olds are enrolled in public education institutions, and as of 2016 45% of 25-64 year olds had received tertiary education, both of these statistics are far above the OECD average, and are testament to Korea's continued high investment in education of 5.9% throughout the recent past, even during the global economic crisis of 2008 (OECD education report, 2016). PISA, the OECD's Program for International Student Assessment, ranked the country as 8th in the world in terms of education output in 2010, whereas the 2011 Third International Mathematics and Science Study (TIMSS) report placed it in 4th. Education specialisation company Pearson places Korean education rates as 2nd best in the world behind Finland (Pearson, 2016). Seoul National University, Korea Advanced Institute of Science and Technology (KAIST), Pohang Univeristy of Science and Technology (POSTECH), and

Korea University were all placed in the rankings for the world's top universities at 36, 41, 71, 90 respectively (QS global university ranking, 2018).

The unmistakable progress of Korean educational achievements over the last 70 years has undoubtedly contributed to the economic progress of the country from desperately impoverished to being one of the few trillion-dollar countries in the world (IMF, 2017). The methods of measuring these educational achievements have, however, drawn repeated criticism, as a series of high-stakes exams beginning in middle school and culminating in the one-day college entrance exam at the end of high school, known as *Sunnung* (수능), which can determine a student's future success or failure (Kwon, Lee & Shin, 2017; Tan and Yates, 2009). Academic stress has been blamed as the leading cause for students placing bottom of OECD countries in terms of student happiness (as reported in *the Hankyoreh*, Nov 5, 2014). It is also worth noting that, outside of Lithuania, Korea has the highest rate of teenage suicides in the OECD (OECD health statistics, 2015). As the amount of institutions and importance of compulsory education gathered pace and began to include high-school aged children, so, too, grew the spread of so-called shadow education[3].

1.2. Background: Shadow Education in Korea

The term 'arms race' was popularised during the cold war to describe the build-up of nuclear weapons between the USA and the former Soviet Union during the cold war. It is a term which has most recently been applied to the educational landscape in some Asian countries, where more stock piles of education are seen as improving the arsenal of students in a highly competitive atmosphere. Halliday (2016), in laying out the screening process of education (as described further later in this paper), shows education to be a positional good, one where education '…can't be subject to instances of levelling down or Pareto improvements" (pp 153), and where "one's place in a queue depends on how many parties one is behind"[4].

It is a commonly re-told truism that Koreans value education above all other things, and the competition among young people to enter the most prestigious educational institutions cannot be

[3] In this paper, shadow education refers to any form of education outside of formal compulsory education, i.e. outside of school. A comprehensive definition of the terms and types of education can be found later in the introduction.

[4] Ibid

under-estimated, with the top SKYE universities (Seoul National, Yonsei, Korea, and Ehwa Woman's universities) being seen as the only guaranteed route to a prosperous and happy future. Seen as a positional good – the position of which can determine one's future success, it is no surprise, then, that supplementary education became so incredibly popular, as students aim to get an extra edge over other potential applicants, in the manner of 'defection' Halliday describes.[5]

The impact of shadow education in Korea cannot be under-estimated. As mentioned previously, an estimated 70% of households send at least one child to some form of academy or private tutoring, with an ever-increasing cost (Byun, 2009). Bray and Kwo (2013) highlight that: "…2008 data in South Korea indicated that while 91.8% of households in the highest of eight income groups invested in tutoring, the figure was still as much as 34.4% in the lowest income group and 55.3% in the next lowest." (pp 488), while also pointing out the rather obvious but depressing fact that "Shadow education, if left to market forces, is likely to perpetuate and increase social inequalities since higher-income households are able more easily than lower-income households to afford both superior quality and greater amounts of private tutoring." (pp 487[6])

This challenge to the compulsory education system and family spending levels has not gone unnoticed or unchallenged by the Korean government, however. Various governments throughout the decades have attempted to ban or otherwise regulate shadow education as a concept, most attempts at which have failed (Bae et al, 2010; Choi and Choi, 2016; Lee et al, 2010; Kim, 2016).

This paper, then, sits in and attempts to partially describe the educational landscape of Korea at the moment. Here, we hypothesize that students now see the majority of their screening education coming from shadow education, and that there exists a relationship between participation in shadow education and the perception of legitimacy of compulsory education in Korea, and by extension the potential situation for other countries seemingly following the Korean model.

1.3. Background: International.

Although this paper is solely concerned with the Korean educational landscape, it is well worth noting the rise of shadow education globally, so that others who may be interested in the private-public relationship of education provision regardless of country may be able to gain some small amount of

[5] Ibid

[6] Ibid

insight.

It is no exaggeration to say that shadow education has become a worldwide phenomenon, and is continuing to grow on a global scale (Bray, 2009; Lee, Park, & Lee, 2009, Mori & Baker, 2010). In their article on the implications of shadow education and educational parity (2010), Bray and Kwo compile a list of some of the international indicators of shadow education usage, providing a table (reproduced here) citing 14 country examples, which considering the reported usage of shadow education in Japan, China, several countries in SE Asia, and even the USA; can be seen as a fragment of the actual amount of countries with some form of shadow education in play.

Country	*Patterns*
Bangladesh	According to a government-conducted household survey, in 2008 68.4% of secondary students and 37.9% of primary students were receiving tutoring (Nath, 2011, p. 3).
Canada	In 2007, about one third of Canadian parents reported that they had hired tutors for their children. The number of businesses providing tutoring services had expanded between 200% and 500% in major Canadian cities during the previous three decades (Davies & Guppy, 2010, pp. 111–112).
China	A 2010 survey of 1,397 Grade 12 students in Jinan city found that 23.1% were receiving supplementary tutoring in mathematics; and in a parallel sample of 1,101 students, 18.2% received tutoring in English (Zhang, 2013, p. 8).
Egypt	A 2009 report indicated that 81% of households with children in secondary schools had paid for tutoring. At the primary level, 50% had done so (Sobhy, 2012, p. 49).
England	A 2008 random telephone survey of 1,500 parents indicated that 12% of primary school children and 8% of secondary school students were receiving tutoring (Peters, Carpenter, Edwards, & Coleman, 2009, p. 2).
Georgia	A 2010 survey of 1,200 students found that 15% in primary grades and 57% in the final secondary grade received private tutoring (Machabeli, Bregvadze, & Apkhazava, 2011, p. 14).
Germany	A 2010 report indicated that 1.1 million pupils, representing 14.8% of the student population, received regular tutoring (Klemm & Klemm, 2010, p. 7).
Ghana	A 2008 survey of 1,020 households found that 48% were paying for private tutoring in primary education (Antonowicz, Lesné, Strauss, & Wood, 2010, p. 21).
India	A 2011 survey indicated that 61.0% of Grade 1 students in rural government schools in Tripura State received private tutoring, and the proportion rose to 75.0% in Grade 6. In West Bengal, respective proportions were 55.6% and 77.5% (Pratham, 2012, pp. 215, 235).
Pakistan	A 2011 survey showed that tutoring was especially prominent in cities. In Lahore, 60.5% of students in Grades 1–10 received tutoring, and in Karachi the figure was 47.8% (SAFED, 2012, p. 395). Proportions increased at higher grades but were prominent even in Grade 1. In Karachi, 35.5% of Grade 1 children in government schools received tutoring; and in Lahore the proportion was 35.7%.
Romania	A survey of 1,500 children aged 6–19 in 2010 found that 17% were receiving tutoring (Daedalus Millward Brown, 2010).
South Korea	In 2008, 60.5% of pupils in general high school were estimated to be receiving tutoring. In middle school the proportion was 72.5%; and in primary school it was 87.9% (Kim, 2010, p. 302).
Tunisia	A 2008 survey of 250 households (quoted by Akkari, 2010, p. 51) found that 73.2% paid for tutoring among whom 90.2% described it as a strain on the family budget. The phenomenon existed from the first year of elementary school.
Vietnam	A 2006 survey of 9,189 households found that 32.0% of primary children were receiving tutoring. In lower and upper secondary schooling, respective proportions were 46.0% and 63.0% (Dang, 2011).

Table 1: Trends and implications of global shadow education participation (Bray and Kwo, 2010)

As we can see, although this may be a Korean-domestic study, it is not a Korean-specific topic.

1.4. Research Aims and Research Question.

The aim of this paper is to develop a model of pre-university Korean education in terms of roles for *development* and *screening* provision, showing the interactions between shadow education and compulsory education from the students' perspectives. Considering the high levels of shadow education in Korea, despite continued investment in the compulsory education system, this study considers and attempts to answer the research question are *specific factors in compulsory education responsible for creating demand mechanisms in shadow education?*

This study uses a mixed-methods approach, with semi-structured interviews with students providing detailed qualitative viewpoints in order to assess where students perceive the majority of their screening and development education to come from, and data drawn from a questionnaire given to third grade students at a Korean middle school that examines their perceptions of classroom effectiveness.

The following section will look at the literature published around this area, before going into an in-depth explanation of the methodology used to conduct the study. The findings of the study will then be shown, followed by a discussion on possible implications on the results, and finally areas for possible further research.

II. Literature Review

This study focuses on four distinct areas of research, and looks at how they may interact with another. These areas are: shadow education as a general concept, motivations for participation, shadow education as it applies specifically to Korea, and educational effectiveness research. Continuing on, in the following pages the relevant literature will be discussed and critically reviewed in order to highlight both useful features for the study, and where this study may fill gaps on the original research.

2.1. Shadow Education (General)

Although academic literature on the subject is still in its infancy, and tremendous gaps remain in international research, Mark Bray is one of the main contributors to the literature in the area of shadow education research, in both the theoretical challenges and the practical implications of the phenomenon. While charting the rise of shadow education, he shows in various papers a) the challenges of conducting methodological research (in areas such as defining exactly what constitutes 'shadow education', securing data for analysis, and interpreting the data) (2009) b) how reliable such studies prove to be – and mainly how the majority of research is inconclusive (2014), and c) the potential impacts of shadow education on social justice.

Researching shadow education: methodological challenges and directions (Bray, 2009) reads like a checklist of pitfalls to avoid when undertaking a study in this field, and one that is highly relevant to this field and has been utilised in the research methodology section of this paper. Bray highlights three areas to pay particular attention to, areas which have been neglected or inadequately considered in large scale studies such as the Third International Mathematics and Science Study (TIMSS), Trends in International Mathematics and Science Study (also TIMSS), the OECD's Programme for International Student Assessment (PISA), and the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ). Defining exactly what is meant by shadow education, as also noted in Manzon & Areepattamnil, is necessary to distinguish between private, paid-for education, and supplementary education as provided by the school itself. In the quantitative study of this paper, we specifically differentiate between the two in the questionnaire given to students.

The next challenge Bray identifies is securing the data, with both the willingness and ability of potential participants called into question for various reasons such as the age of participant, stigma attached to admitting that one takes part in shadow education, and timing of the study itself.

Finally, Bray comments on the absolute necessity of (when using surveys, as in this study) producing items that are "…both sufficiently precise and easily understood by the respondents" (Pg 7). A

parsimonious, un-taxing, yet detailed questionnaire is obviously preferred.

Unfortunately Bray does not proceed to offer a template for a research methodology, but seeing as how there are so many factors to be considered in isolation and in tangent depending on the researcher's interests that is hardly surprising. The pitfalls Bray lays out here are also a partial answer to the implied question posed in the title of the next of his articles relevant to this study: *The impact of shadow education on student academic achievement: Why the research is inconclusive and what can be done about it* (2014).

Although this paper re-treads much of the ground covered in the 2009 paper, here Bray also goes into some of the inter-action effects between shadow and compulsory education which this study has at its core. Here, Bray is concerned with the teacher's motivations and actions in the context of an educational environment where private tuition is widespread. To quote directly:

"In such circumstances [where public school teachers are also private tutors], teachers may be tempted to reduce the effort and curriculum coverage of their regular classes in order to promote demand for their private services. Elsewhere teachers are prohibited from providing private supplementary tutoring, but if tutoring is widespread the teachers may assume that their pupils have back-up support and therefore put less effort into their work than they would otherwise." (Pp 382).

Although Bray raises a valid point, there is no mention of the opposite side of this equation: If the students already know that they will study the lessons in more depth during their private lessons (or indeed, have already studied it long before the class even begins), will they be less inclined to pay attention to their normal school lessons, and therefore have a poorer opinion of the class itself? Bray does conclude that in terms of links between participation in shadow education and academic achievement, Byun is correct in stating that "empirical evidence has been inconsistent, contradictory and even confusing." (2014, Pp 40). However, by focussing on the school-only factors (i.e. school curriculum, testing, and teacher attitudes), there appears to be a missing link, and so the picture remains incomplete.

Bray and various collaborators have written on many areas of the subject, but the above three are most relevant to this study, and so form the basis of our criticism of other studies.

In terms of specific studies at the school or country level *outside of the Korean context*, two papers stand out as being particularly appropriate to this research. First of all, Cayubit et al's Q analysis of the impact of shadow education on the academic life of high school students (2014) from the Philippines showed an intrinsic improvement not only in their academic achievements, attitude to learning, and attitude towards themselves in terms of self-esteem as learners. There are, however, two

difficulties with taking these results at face value: The participants were chosen based on those willing to take part in the study on a convenience-basis; and the study had no kind of control variable. This leads to two alternative interpretations of the research findings: first of all, volunteering to take part in an academic study may show that the characters of the students questioned are more outgoing, and potentially more likely to be positively affected by additional educational changes in their environment, whereas the kind of students who may shy away from volunteering may also be more reticent in adapting to shadow education, meaning the study could not be fully representative. Similarly, with no group of students from similar backgrounds who did not take part in the study to use as a basis for comparison, it is impossible to say that the improvements the students who did show an improvement did so *because* of their participation in shadow education.

Zhan et al (2013) conducted a study among students in Hong Kong which is highly relevant to this paper. In it, they attempt to measure students perceptions of effectiveness of shadow education on school grades and examination results, motives for participating in shadow education, and comparisons between school teaches and private tutors. The study used a sample size of 802 grade 9 students and 802 grade 12 students, each of whom were given a questionnaire. In terms of relevance to this study, nine items from the questionnaire are of particular relevance: those related to comparisons of teachers and tutors.

In the findings of the study, Zhan noted that "The students perceived teachers to be more concerned with knowledge, behaviour, and life counselling than with examinations and grades. In contrast, students described tutors as more knowledgeable, inspiring in teaching, interactive with students, and supportive" (Pp 504). These findings point to a diversification in the roles of education givers in Hong Kong, with public school teachers being more responsible for the *developmental* role of education, and private tutors filling the *screening* education-provider role. The paper goes on to state that "Students felt that the (school) examination demanded skills that were not taught adequately in mainstream schools, and tutors helped to fill this void" (Pp 504). As such, students were more likely to approach tutors over teachers when needing academic help. If this is the case, it points to a shifting in the educational landscape in Hong Kong, and a division of labour between the public and private sectors of education-giving; one that may well be similar to the Korean case, as suggested in this paper.

Although highly informative, Zhan et al do not address specific indicators of educational effectiveness which may be influenced by participation in shadow education. In not doing so, it risks over-generalising a comparison between public and shadow education by forcing the participants to say one is good vs one is not good. The themes of a shift in roles of educational providers is, however,

significant, and one that is brought up in the building of this study, both quantitatively and qualitatively.

In recognition of the relatively small but growing field of research on shadow education, Manzon & Areepattamnnil (2014) attempt to identify the patterns of research in a meta-style paper which highlights the different units of analysis available for research in the field; starting at the global level, then filtering down through countries and eventually to the individual level. In an expansion of the original Bray and Thomas (1995) cube-shaped model of meta-analysis, the authors argues for adding research methods, disciplinary theory, and implications of research into the framework.

Although not strictly relevant to discussing individual studies on their own, this paper does help us create a context in which research into shadow education exist.

Less concerned with the quantitative aspects of research into shadow education, and more focussed on the philosophical side of education generally, Halliday's *Private Education, Positional Goods, and the Arms Race Problem* (2016) already referenced in this paper and essential in the analytical framework created herein, puts forth a moral argument for the regulation of shadow education. Showing how the 'educational arms race' caused by excess focus on the screening function of education, parents and their children are obliged to sacrifice developmental education. According to Halliday, market involvement in education (i.e. shadow education and private tuition) does so in two ways: it adds a severe and unjustified burden on the children themselves, and it suppresses the "capacity of educational institutions to carry out their developmental functions" (Pp 155). As mentioned in the introduction to this paper, we will be focussing on the *screening* aspects of educational institutions, however, as the example from the introduction shows, it is undeniable that the developmental education of students (particularly those outside of educational settings, like time spent with family and friends) is affected.

As relevant as this thought process is from Halliday, however, what he has not considered is the potential for markets to *replace* compulsory schooling as the main focus of screening education. It is here that the crux of this paper lies, and although it takes much from Halliday, we hope to develop the idea further in application to the Korean case.

2.2. Shadow Education (Korea)

Shadow education in Korea has been a governmentally recognised phenomenon and treated as a problem since the 1960's, as Lee et al point out in their history of governmental attempts to regulate, control, and/or entirely ban it (2009). The paper highlights five major policy initiatives aimed at

reducing the impact of shadow education, and ultimately describes their failure. They are:

- The 1968 No Middle School Entrance Examination Policy – By eliminating entrance exams for middle school, the aim was to reduce the stress and educational competition for students hoping to get places in the best schools.
- The 1978 High School Equalization Policy – The elimination of high school entrance exams and random assignment of students to high schools for the same purpose as above.
- The 1980 7.30 Educational Reform Measure – A sweeping attempt to bring all shadow education under governmental control and banning college students and tutors from earning money from private classes. By all accounts this measure failed entirely, as the private classes continued in secret. This measure also banned individual college entrance exams, and introduced instead a high-stakes pre-college exam and admittance based on high-school records. The number of places for colleges was also greatly increased in order to lessen competition and reliance on shadow education.
- The 1980s to 1990s Education Reform – Several policies were enacted to improve the standards of public education, as well as offering after-school programs. During this period, the heavy financial cost of attendance in private academies became a social issue, and the governmental response was to attempt to cut demand measures that led to participation in shadow education.
- 2000 to 2004 Enhancement of public education – in 2000, the banning of cram schools and other forms of private education was deemed unconstitutional by the South Korean Constitutional Court, as it was seen to infringe upon the students' rights to learn. In response, a new governmental committee was formed, the *Gwawaegyoseup Dachaek Wiwonhoe* (과외교섭 대찰 위원호). The following demand mechanisms were identified for shadow education:
  - Excessive competition for entering SKYE and other high tier universities.
  - Low-quality public education
  - Consumers' subjective assessment of the positive impact of shadow education on their academic achievements.

  The finding of this committee led to several policy enactments, all aimed at improving and diversifying the public-education system, as well as school-based extra academic support for

students from low-income background. This focus continued under the 2009 Lee-Myoung Bak period and into the present day.

What Lee et al point out in this paper is the failure to reduce demand for shadow education, despite huge advances in the provision of public education. South Korea currently has an outstanding compulsory education system which by and large should have cut demand mechanisms for shadow education, and yet has not done so. It is easy to see how entwined shadow education is in the Korean socio-cultural education landscape.

Byun (2009) continues this theme of governmental-shadow education relationships by analysing the effects of the High School Equalization Policy on shadow education spending. The HSEP was designed to limit competition for places in outstanding high schools by introducing a lottery-based system of acceptance, thus reducing the necessity for students to participate in shadow education in order to out-perform their peers in middle school exams. While arriving at the same conclusions as Lee et al by stating that "…if a policy goal is to eliminate shadow education entirely, it would be likely to be unachievable" (Pp 93), Byun also finds that the greatest determinant in shadow education participation is socio-economic status, regardless of school quality.

2.3. Motivations for Participating in Shadow Education

Park et al (2016) attempt to identify factors such as family make-up, socio-economic status, and educational systems which may influence participation in shadow education. Crucially, they point out the failures of such large scale educational surveys such as PISA to both fully capture the scale of shadow education, and to differentiate between publicly and privately provided educational assistance.

The paper goes on to discuss various areas surrounding the research of shadow education and provide a description of the field in its current state, as well as providing a model for the consideration of shadow education/public education/family level factor interaction.

Aside from a few references to other scholars' hypotheses, however, Park et al neglect to mention the interaction effects between shadow education and compulsory education. The model presented here is focussed very much on providing a simple table to show these factors do influence each other, but holds back from looking inside each of the 'black boxes' to show what happens inside. This is not to take away from the paper itself, however, as it is ostensibly meant to be more of a description in what the current research trends are and how other fields can also be developed, rather than the kind of detailed model just described.

In an effort to understand why participation in shadow education remains so high in a country with such improved public resources, Juhu Kim et al (2005), and Jin-Sook Kim et al (2016) produced studies on the Korean term *Education Fever* – the common term given to the Korean people's propensity to engage so strongly in educational activities. Along with Lee et al's 2011 study on a similar topic, these papers produce similar conclusions on the motivations for participation in shadow education.

The primary conclusion from all three of these papers is that students participate in shadow education mostly at their parents' insistence, and there is little to no evidence of students voluntarily participating with parents either against or ambivalent to it.

Kim (2005) gives the reasons for the parents' eagerness for their children to attend out-of-school learning as "desire and motivation to help their children [be] successful in their lives [in terms of career and social status]" (2005:11), lending credence to Halliday's analysis of markets utilised as a method of 'defection' in order for the students to get a more valuable positional good.

Kim (2016) delves further into this motivation by analysing strength of parents' motivations and categorising enthusiasm for shadow education in four ways:

- Autonomy Supporters – median income families who encourage participation in shadow education, but based on their child's preferences rather than what the parents think they should study.
- Study Supremacists – Highly educated and high income families who insist on private tuition, have supremely high expectations for their children's academic achievements, and limit any possible distractions from their child's academic study.
- Apologetic Supporters – Low income families who do not have the resources to send their children to academies or other kinds of private tuition, and feel sorry because of it.
- Value Enthusiasts – Less educational achievement and lower income than some of the other types of parents, although they still send their children to academies. In this case, however, they have fewer expectations or aspirations for their children, and would be happy with whatever profession their child chose as long as they were economically self-sufficient.

Lee and Shouse's 2011 study on a similar topic provides another explanation for parents' sending their children to shadow education institutions – prestige orientation. Their findings showed that prestige itself was not much of a concern for parents among higher income families, but was a large driving factor among lower-income families, a phenomenon which "may lead to increased spending among

some families ill equipped to afford it and unlikely to recoup comitant [sic] educational gains." (Pp 220).

Overall, these three papers paint an interesting, if rather depressing, picture of the Korean educational landscape. As Kim (2016) points out "social stratification has deepened amid changes in the social and educational system", and that is highly reflected in the participation in shadow education. The following conclusions can be drawn from these studies:

- Educational achievement and social status are presumed to be highly linked in Korean society.
- The higher the educational achievements and higher income the family, the more likely they are to participate in academic-related shadow education.
- Parents from lower-income families are either unable to send the children to out-of-school education, or feel pressure to do so because if they don't they will be seen to be lower-status.
- The stratification of education in Korea means that "students from the working-class believe that it is impossible to move up [social strata] because they lack both financial support and social capital." (Kim, 2016:211)

These findings have direct bearing on this study for two reasons: 1. Depth of Participation as measured in this study may well correlate with family income, and therefore socio-psychological perceptions of self-ability and limits to success; and 2. The perception of educational effectiveness in the public school classroom among those students who do/can not attend shadow education will be all the more important, as it is here where they either get or lose the belief that they will have the future opportunities to improve their social status.

In terms of focussed studies on shadow education, it seems that Bray's assertion that findings can be inconclusive hold true. Choi and Park's 2015 study on high school seniors' achievement test scores echoes previous studies in finding that shadow education is most useful for students who need remedial assistance, and effectiveness tapers off the more advanced the student is.

2.4. Educational Effectiveness Research

Compared to shadow education (which, even as a recognisable term, yet alone a field of study, has only been around since the mid-1990s) education effectiveness research (hereafter EER) has a relatively long and deep history. Reynolds et al (2011) break down the development of the field into 5 stages, which we will briefly review here:

- 1960s – ‘70s: The beginning of empirical testing in response to the commonplace belief that ‘schools make no difference’ and are no compensation for educational background.
- 1980s: The introduction of multi-level methodologies and school effects over time, as well as differential effects of schooling on students from different backgrounds.
- 1990s: The first studies into what made education effective specifically
- Mid-‘90s: The internationalization of the field and closer collaboration between theorists.
- 2000s: EER being researched as a dynamic set of relationships; the interactions of which influence each other and ultimately produce different outcomes.

It is this final phase of EER history which concerns us, however the studies and theories created in the third ‘phase’ as described by Reynolds et al still form the basis of much of EER and will be used extensively in this study.

Unfortunately, despite the internationalization of the field as described here (and indeed this paper was presented at the International Congress for School Effectiveness and Improvement), and much like almost all research into EER, there is no consideration given to the effects of shadow education, despite, as established earlier in this paper, its internationalization as a phenomenon. However, it is necessary to see in what context this study sits in EER, and so here it is treated as the independent variable and researched as such. To follow, then, are some of the more recognizable and outstanding contributions and contributors to the field, with an explanation of why they may be relevant to this study. We will be focussing on classroom effectiveness and occasionally school-level effectiveness, as these areas are most relevant to the study, and items within these areas form the core of the research methodology of this paper. Fortunately, educational theorist Jaap Scheerens (1997) provides an excellent recap of some of the advances in theory-embedded principles of effective schooling, which is drawn from here.

Carroll’s 1963 model of causal influences on student learning is generally seen as the first model of its kind to begin to describe factors that affected educational effectiveness, combining students’ aptitude, the instruction they received, and the home environment to produce ‘learning’ at the behavioural, affective, and cognitive level. This model, serving as it did as a good starting point, lacks depth in exactly what makes instruction effective, and so needed development.

The three main models most relevant to this paper (and most heavily utilised) are Scheerens’ 1990 integrated model of school effectiveness, Creemers’ 1994 basic model of educational effectiveness, and Stringfield and Slavin’s 1992 QAIT/MACRO model of hierarchical elementary education effects.

These models will be discussed in far greater detail in the analytical framework section of this paper, but suffice it to say here that they represent substantial developments in the field of EER, particularly in respect to classroom/teacher effectiveness.

Another development in the field of EER should be recognised here, if only to explain why they were not used in the analytical framework of the study. Creemers and Kyrriakides 2008 Dynamic model of educational effectiveness has in recent years been the most highly tested and utilised model in specific studies (Scheerens, 2013). This model uses five measurements to rate the various factors involved in schooling: frequency, focus, stage, quality, and differentiation. Although undoubtedly an advancement in measuring overall school effectiveness, it was discarded as part of this study for two reasons: First of all, out of these measurements, only *frequency* is able to be measured quantitatively; the other four measurements rely on qualitative judgements by the researcher. In the case of this study, that would mean the research observing what the students' perceptions were. The second reason is necessity. As this study concerns itself only with effectiveness in the classroom, a study of all levels of the school was deemed unnecessary and would only confuse the results.

2.5. Summary and Reasoning for Study

Current research on this area points to the following conclusions: Shadow education is deeply embedded in Korean society, with very little chance of governmental policies being able to phase it out, and limited likelihood of reducing demand mechanisms; parents are motivated to enrol their children in high-cost shadow education institutions due mainly to desire for their children to succeed in a highly competitive landscape (despite questionable effectiveness), and partly due to *prestige orientation*; and depth of participation in shadow education correlates strongly with socio-economic status. What these studies haven't done, however, is provide a model of education provision in the modern-era, particularly not one that distinguishes between developmental and screening education, and not one that takes into consideration student perspectives. Very little research has been done (at least in internationally published and accessible journals), on if or how participation in shadow education affects public schools. What research has been done has only relied on the teacher's perspective, and has not considered how student attitudes to education might be affected.

From the EER perspective, working models of classroom effectiveness have been developed, tested, and proven over the years, with multi-level dynamic models being shown to be advantageous in highlighting interaction effects between the different factors (Kyriakides and Creemers, 2008; 2010). Several indicators of classroom and teacher behaviours have been utilised to test effectiveness. Within

these models, however, shadow education has not been considered, despite being of large importance to students, parents, and indeed teachers.

Taking into consideration the literature on this subject as it stands, the research question going into this paper is this:

Are specific factors in compulsory education responsible for creating demand mechanisms in shadow education?

This study, then, aims to go some way to filling a gap in the research by describing the current educational landscape, combining definitions of education with research in EER to identify specific aspects which may act as a demand mechanism or push/pull factors. To do this, an analytical framework with which to create a methodology will be developed, followed by an explanation of the methodology itself, as well as the instruments used.

III. Analytical Framework

In order to fully answer the research question posed by this paper, it is necessary for us to consider two theoretical areas, and then attempt to blend them into one cohesive whole with which we can analyse the results of the qualitative and quantitative surveys. As we are describing both philosophical approaches to education in the forms of *screening* and *development*, and perceptions of compulsory effectiveness, this paper attempts to create a synthesized model of educational effectiveness specifically for the Korean shadow-compulsory education case. To do this, we will combine three models of Educational Effectiveness Research which provide specific indicators with which to test classroom effectiveness. Unfortunately, as EER has to date not considered the categories of *screening* and *development* to be separated, and as such a separation is necessary for this study, we will highlight the indicators which could only apply to *screening* development in order to assess the students' perceptions.

As it was previously discussed in this paper, this section will not spend too much time discussing Halliday's 'arms race' theory, however it is worth covering the salient points as they apply to the framework of this study. They are:

- Education is divided into two roles: a *developmental* role, non-competitive, and aimed at improving the student and guiding them to adulthood; and a *screening* role – a positional good, the acquirement of which is used to gain access to prestigious universities and coveted jobs.
- Market intervention in education will by necessity focus on screening education, and risks limiting the developmental education of students – as such regulation is necessary.

This study takes Halliday's analysis a slight step further, by positing that unregulated market intervention in education will *replace* publicly provided education as the main giver of screening education. This idea is tested both via interviews with 3rd grade students at Yeoksam Middle-School and a questionnaire given to a representative sample of the population. Although the reliability of responses from students may be justifiably questioned, Kyriakides et al (2014) found a high level of standard response rates across numerous studies, and so was seen to be a reasonable method of data collection.

This questionnaire will also utilise a synthesized framework of three models of educational effectiveness in order to both represent the educational system in Korea and also to fully capture the perceptions of educational effectiveness in the public school, i.e. the variables will be operationalized based on the synthesized model shown herein.

The three models drawn from are Scheerens' 1990 CIPO (context-input-process-output) model, Creemers' 1990 model on school learning (and further elaborated with the basic model of educational effectiveness: consistency of effective characteristics and components), and Stringield and Slavin's 1992 hierarchical elementary education effects model (also known as the QAIT/MACRO model).

In the following sections, we will briefly look at these models, then see a synthesized model and explain why a synthesized model was most appropriate for this study.

3.1. Models of Educational Effectiveness

3.1.1 Scheeren's 1992 CIPO Model

The CIPO model for education (Context-Input-Process-Output) developed by Dutch education specialist Jaap Scheerens is an educational framework that can be used both to analyse systems-level functioning in school processes, as well as review educational quality, as it has been used UNESCO in their Understanding Educational Quality (2005) part of their Evaluation and Assessment of Education framework (OECD, 2014).

Although this model appears somewhat simplistic, it is a useful tool for breaking down the 'black box' of educational process and can help provide a nuanced view of the educational landscape. The four areas that make up this model are broken down as follows:

Context: This is the supra-educational environment in which education occurs. Context refers to government policies, cultures' attitudes to education, the history of educational development in the country and so on. For the purposes of this study, depth of participation in shadow education will be a main factor in considering the context of education.

Input: All of the resources that are utilized are considered inputs. This could be government or private spending, text books and stationary, and even the students themselves. As the dependent variable in this study is based on public school educational processes, any inputs we consider here will be inputs used for the public school system, not any shadow-education resources.

Process: This is the 'black box' of education; how the inputs are transformed into desirable outputs. These processes can be broken down into several sub-headings, such as educational initiatives, timetabling etc; but, this study will focus purely on the lesson-based content of public school education.

Output: Outputs can be seen in terms of results and revenues. In the short-term, these are the results of school examinations or success in entering the next level of education. In the long-term, outputs can be assessed in terms of career paths, and contributions to society both economically and in other productive ways. In terms of this study, outputs are considered to refer to school exams and consequent results. For the purposes of this study, we will be referring to outputs in terms of school grades and extra points achieved.

As the major research question for this study concerns the affect shadow education has on the perception of legitimacy of public school education, shadow education is considered an intrinsic and changeable part of the context of education. It is how this context changes and how it affects the processes of public school education that we wish to measure here.

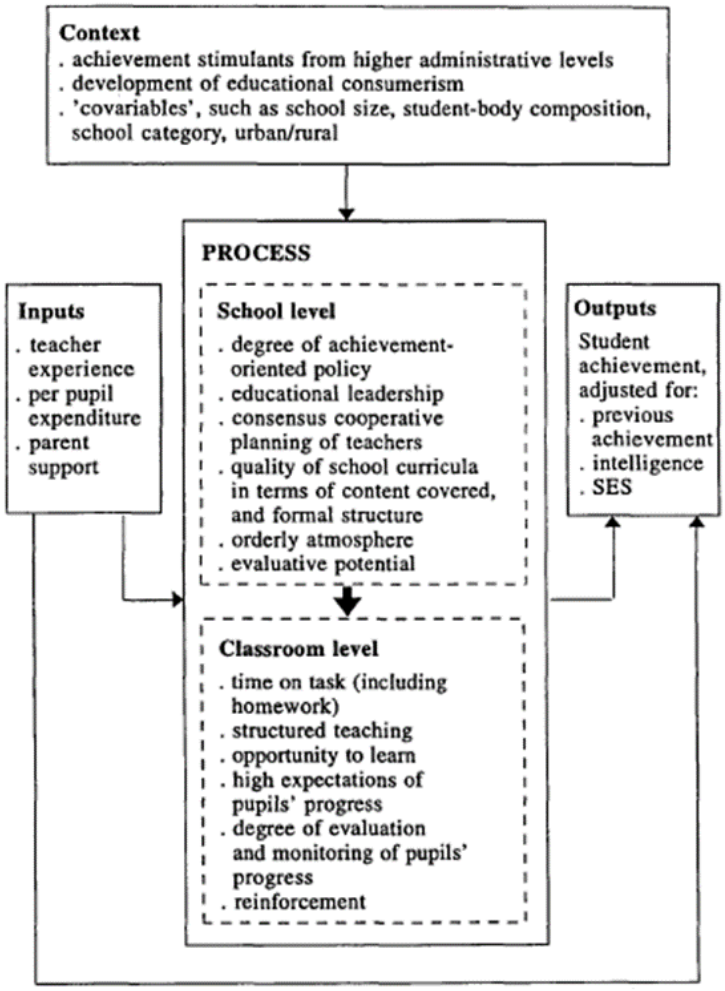

Figure 1: Scheerens' 1990 integrated model of school effectiveness.

3.1.2. Creemers' Model on School Learning

Creemer's 1994 model is more school-focussed than Scheerens' model, and as such spends more time highlighting indicators of educational effectiveness, particularly at the classroom level. Indeed, the *quality of instruction* indicators form the basis of the majority of the questionnaire in this study. Being as school-focussed as it is, however, it is not fully appropriate for the Korean context. As shown in figure 2, the context, or above-school level is concerned only with 'official' education aspects, such as education policy, education board, and attainment targets. No consideration is given to outside influences.

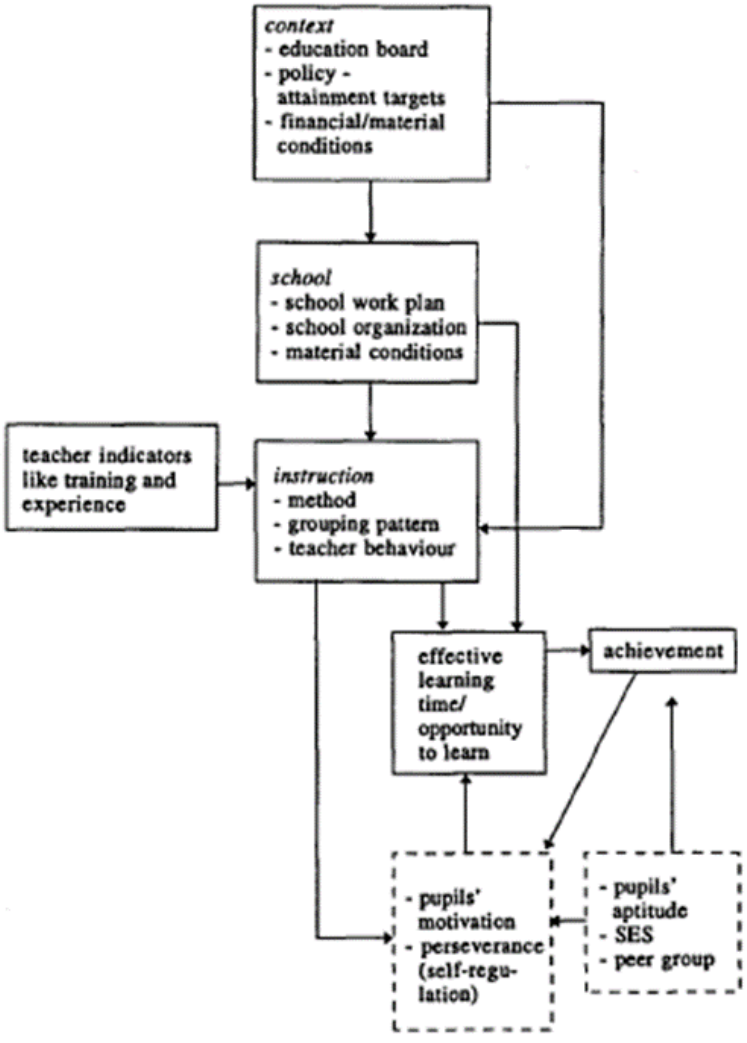

Figure 2: Creemers' 1994 model on school learning

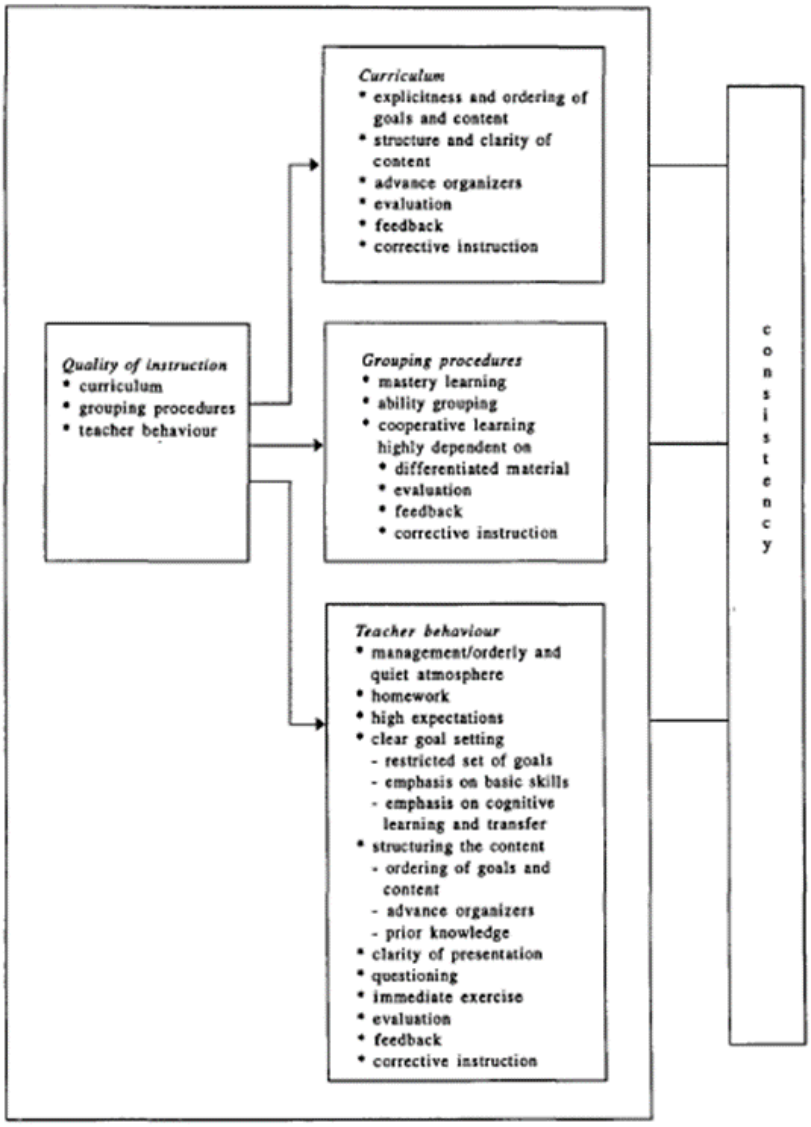

Figure 3: Creemers' basic model of educational effectiveness (1994)

3.1.3. Stringfield and Slavin's Hierarchical Elementary Education Effects Model

Stringfield and Slavin's model, in comparison to the previous models, is highly comprehensive and considers a large number of outside-school factors. QAIT stands for Quality, Appropriateness, Incentive, and Time of instruction, and is very much concerned with the classroom level. MACRO is Meaningful Goals, Attention to Academic Functions, Coordination, Recruitment and Training, Organization. No specific reference is made to shadow education, but in showing the prominence of complimentary education and supplementary education in the model, Stringfield and Slavin highlight the influences of external education factors.

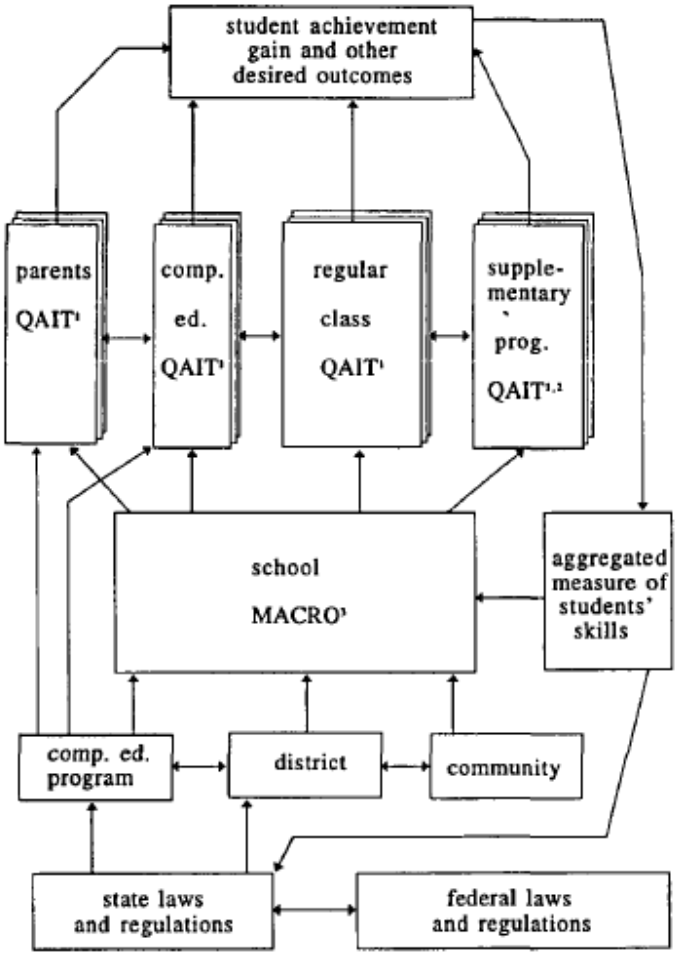

Figure 4: Stringfield and Slavin (1992), hierarchical elementary education effects model (QAIT/MACRO model)

3.2. Necessity of Synthesis

All of the models shown here are multi-dimensional in nature and demonstrate how education is not simply teach, test, succeed in nature. However, given the lack of reference to either shadow education or positional/non-positional lessons (i.e. screening or development education) in all of these models, none of them fully reflect the Korean educational system, nor do they individually provide a basis for testing perceptions of educational effectiveness as demanded by this study.

Scheerens' model is parsimonious and allows for a number of outside-of-school 'covariables' to influence the inside-school processes; a quality necessary for this study. It doesn't, however, have the depth of indicators for classroom effectiveness necessary to properly operationalize items for a

questionnaire. Scheerens' work on identifying process indicators is helpful, but still not encompassing.

Creemers' model, on the other hand, has an in-depth list of process indicators for educational effectiveness in the classroom, which is utilized for this study. The lack of interaction effects between the school and external influences, however, limit its usefulness as a model to the main source of indicators for the dependent variable: perceptions of educational effectiveness. Although ability grouping is one of the indicators Creemers refers to, there is no direct mention of appropriateness of content, which is a key part of this study, considering a large number of students have already learned the middle and high school curriculum long before entering into their respective schools.

Stringfield and Slavin's model does include appropriateness as a key component in assessing educational effectiveness in the classroom, and with the addition of 'complementary education', one could argue that there is space for the addition of shadow education as a part of the multilevel framework. The complexity of this model, however, is unnecessary for this study, and would only risk raising more questions about interaction effects between other factors that would detract from the main hypothesis.

By synthesizing and slightly adapting them to a model more appropriate for the Korean context, we can begin to find a framework within which to test this paper's main hypothesis. What follows, then, is a synthesized model of educational effectiveness that can be used to test the interaction effects between depth of participation in shadow education and perceived classroom educational effectiveness.

The synthesized model of educational effectiveness uses Scheerens' CIPO model as the over-arching framework, Creemers' indicators of classroom effectiveness, and Stringfield and Slavin's QAIT/MACRO concept of appropriateness of content. The indicators of effectiveness have, however, been separated into indicators that refer to either *positional* or *non-positional* categories in order to differentiate between them in the quantitative and qualitative findings. The positional indicators are:

Mastery learning – As this refers to a student fully learning one concept before moving on to the next, more advanced concept, it implies a *rateable and systematic* method consistent with positional education.

Ability grouping – Students are levelled according to their ability in that given subject. Again, rating implies position, thus it is included on this list.

Appropriateness of content – Although 'appropriateness' can refer to a number of elements both

positional and non-positional, the item construction in the methodology of this study strictly refers to academic content material, therefore this indicator is only referring to screening education. This indicator was also necessary due to the pre-study phenomenon discussed in this study (*선행*).

Feedback/Corrective instruction – Again, this indicator is potentially ambiguous, however in this study we refer to feedback intended to improve a student's grades, and so it is an important inclusion in positional instruction.

Here, then, is a visual representation of the model used for this study

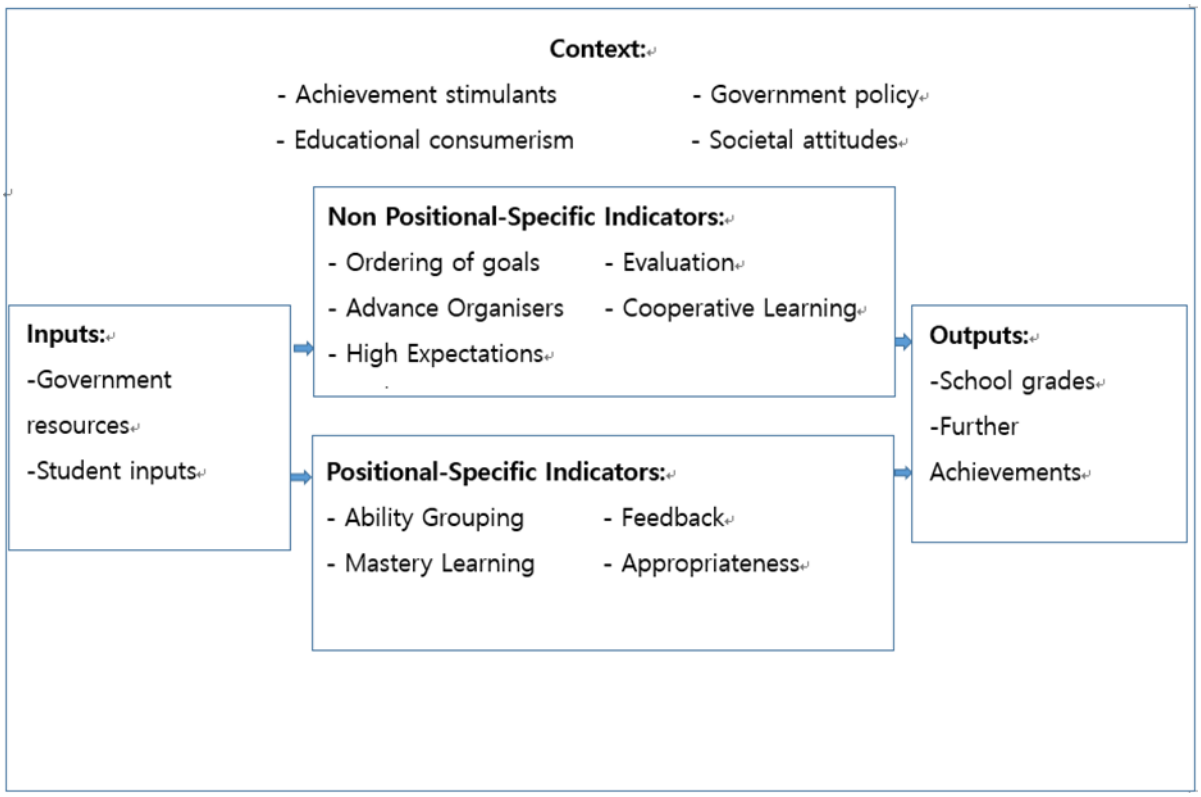

Figure 5: A synthesized model of EER and screening/development education indicators

IV. Research Methodology.

This study will used a mixed-method approach in order to arrive at solid conclusions to the research question presented earlier. The quantitative study utilised a 34-item anonymous online questionnaire, and the qualitative approach comprised of 15 semi-structured interviews with participants within the peer group of those taking the questionnaire, but it was not established whether or not the interviews had taken completed the survey.

4.1. The Case Study – Yeoksam Middle School

Yeoksam Middle School was considered a prime example for this study for three reasons: the school's reputation for academic excellence and high standards of teaching provides an ideal environment in which to test perceptions of classroom effectiveness, with less likelihood that poor standards of practice would be a factor in low ratings. Secondly, its location to a high concentration of shadow education institutes points to high demand for such institutes in the area – thus being more likely to produce participants with a high depth of experience with academies etc. Thirdly, the schools catchment area of low, middle, and high-SES families would ensure the study has a variety of perspectives, and importantly a variety of responses when considering the depth of participation in shadow education.

The school forms part of Gangnam-Gu education authority, schools from which share some common characteristics. Yeoksam Middle School is located in the heart of Gangnam-Gu, one of the wealthiest districts across Korea (Korea Herald, 2014; Dong-A Ilbo, 2005). The average house price in Gangnam is 600 million KRW, whereas in the greater Seoul region it is closer to 502 million KRW. The country-wide average is closer to 400 million KRW (Yonhap, 2016).

The education budget accounts for 3.60% percent of local government spending, equivalent to approximately 24.2 billion won, compared to the neighbouring districts of Seocho which utilises 3% (12.9 billion won) and Songpa, which uses 2.5% (14.3 billion won) of its regional budget. This amount is also considerably higher than other highly populated and wealthy districts in Seoul, such as Jeongro-Gu (1.90%, 6.4 billion won), Yongsan-Gu (1.55%, 4.9 billion won), and Mapo-Gu (1.65%, 8.7 billion won).

Schools in Gangnam-Gu have a teacher-sharing system, whereby teachers stay at a school for two years (based on the principal's decision to retain the teacher or not after a one year period), after which the teacher is moved to another school. Gangnam-Gu education authority also has a rigorous in-house teacher training and evaluation system. Teachers are given regular training, and are evaluated

yearly based both on co-workers' and students' evaluations.

The school also has an excellent reputation amongst parents, particularly for sending students on to special-purpose high-schools; places for which are highly coveted and acceptance into which is seen as a guarantee to further education at a highly rated university. Yeoksam is reported to be among the top middle-schools country-wide for sending students to special purpose high-school, with an entry rate of approximately 6 students per semester, the third highest among schools in Seoul. The top two schools are both private, fee-based international schools (Joongang Ilbo, 2016)

In terms of location, Yeoksam Middle School is notable for two reasons: its catchment area and its proximity to the infamous *Daechi-dong*, colloquially known as *hagwon il bon ga* (학원 일번가), which translates roughly as 'the number one place for academies. Exact figures on the amount of academies and private tutors in the area are unavailable due to both the quick openings and closings of registered institutions, and the occasionally secretive nature of private tutoring, however within a 3 kilometre radius of the school, 22 academies and/or private tutor advertisements were counted. Anecdotal conversations with educators in the region also highlighted the fact the students from outside the Gangnam region would regularly travel into the area to take lessons at academies in Daechi-dong.

Although, as previously stated, Yeoksam Middle School is placed in one of the wealthier districts in the country, the catchment area for the school includes higher, lower, and middle socio-economic-status households, with students coming from the both the nearby luxury apartment complexes and the older two-room villas located on opposite sides of the school.

4.2 – Limitations and Delimitations

A study such as this inevitably faces certain limitations. First of all is the potential threat to external validity in that it may not be representational of the country as a whole, yet alone be able to address global implications, due to the sample only being taken from one school. While this is a valid concern, this study is meant to be a starting point in a discussion that needs to be had, rather than a full-stop in the field.

Secondly, as the main participants are the students themselves, household income cannot be accurately controlled for as the students do not have the information. In a similar vein, motivations for participating in shadow education may be obscured by the fact that in many cases, the parents make the decision to participate on the students' behalf. There is also the inevitability of outliers distorting the data. During my time at the school, I spoke to one student who did not participate in shadow education, and did not feel the need to put any effort into school studies, nor did he care about what

his grades were or what high school he went to. His family were simply so rich he knew he would never have to work once he finished compulsory education.

Other delimitations have been deliberately imposed on the study in order to gather appropriate data. First of all, it was decided that the study would only involve third grade middle school students, and not first or second grade students. There were two reasons for this. In Yeoksam middle school, first grade students do not face any mid-term or final exams (a phenomenon known as 자유학기 or free semester). As previously established, the school outputs (for which exams are a large part) are one of the main motivations in shadow education participation, first grade students may not be as inclined to feel the differences between shadow education and public education as keenly as second or third grade students. In a similar vein, as this was the final semester before applying to either normal or special purpose high-schools for the third grade students, it was deemed most appropriate to focus on them, as they would be most alert to their educational needs.

Secondly, prior to manipulation, the quantitative data was analysed for potential bias or non-response (as outlined in the following section). Suspicious responses were then omitted, with the overall number of responses still being considered representative.

4.3. Quantitative Methodology.

4.3.1. Construct Operationalization.

This study aims to find the specific areas of compulsory education effectiveness which are seen as *ineffectual* and thus create a demand mechanism for shadow education. In order to identify these areas a questionnaire was created for students to complete. The questionnaire was divided into three sections: Basic demographic information (grade in school years, gender, etc.); questions related to depth of participation in shadow education, summarized as amount of subjects studied, years of participation, and hours per week in attendance; and statements about public education which the participants could agree or disagree on based on a five-point scale. All responses were then coded based on a Likart summative scale in order to measure the depth of participation in shadow education (herein DoP) and attitudes to public compulsory education (herein PoCE) based on an ordinal scale. The data from these three sections could then feasibly be analysed in order to find correlations and patterns, should it be necessary (Claydon, 2015, Creswell, 2003).

The items on the questionnaire were constructed in such a way as to check the validity of the

responses. Items 15 and 19, 21 and 27, although measuring the same sub-constructs were re-worded and posed with different attitudes (i.e. one positive and one negative) in order to rule out random responses and general acquiescence, and item 22 contained an extreme statement that would not be likely to have an agreeing respondent in order to identify any potential extreme response styles.

4.3.2. Sampling.

A sampling frame of all third grade students at Yeoksam middle school was provided, including student name, class number, and identifying student number. These numbers were then processed through a random number generator to provide the students who would be asked to participate in the study. With a population size of 410, and using the formula "S = (z2 (d(1 - d))/ e2) / 1 + (z2 (d(1 - d)) / e2)" (S = sample size | P = population size | z = z-score | e = margin of error | d = standard deviation), for 95% confidence level of representativeness, a 5% margin error, and a standard interval of 0.5, it was determined that 199 participants would be required. As there would always be the possibility that a number of responses would have to be omitted from the final analysis (as described later), and accounting for non-respondents, a total of 257 students were asked to participate[7].

As the setting was in the public school system itself, the students were unambiguously told that this was a) an anonymous questionnaire, b) was not at all connected to school, and c) would not in any way affect school grades.

Random probability sampling was preferred over voluntary responses as it would be more likely to produce an actually representative sample. The kind of students who would volunteer to take an online survey with the promise of nothing but a piece of chocolate as a reward may be somewhat positively inclined towards educational engagement in the first place.

4.3.3. Questionnaire Items

The items on the questionnaire[8] were designed to reflect three key areas: Demographic and academic information, Depth of Participation in Shadow Education, and Perception of Educational

[7] Appendix 2

[8] Appendix 3 and 4

Effectiveness (in relation to compulsory public school education).

Demographic Information

Items 1 – 4 are used to ascertain data for potential sub-division of data analysis later. Potential variables for data analysis considered here are grade/age, gender, and academic achievement. It would have been very useful to include a socio-economic status proxy, but unfortunately the students did not have access to that information.

Item 4 was originally intended to eliminate some student responses: I.e. students who had studied or lived abroad. The main basis for comparison of educational effectiveness here is between the shadow education and public education *within the same country*, and it was felt that students who had spent a concerted amount of time in a different educational system would have more biased responses. However, considering the large amount of students who had studied abroad, to not include them would be considered unrepresentative, and so this item is now used in a more demonstrative role.

Depth of Participation in Shadow Education (DoP)

Items 5 through 9 are used to measure the depth of participation, based on a Likart scale and coded appropriately. For instance, if the student answers 'no' to item 5 ("Do you attend any academies or private tutoring outside of school?") they will be given a zero rating in DoP, and the questionnaire will automatically move them on to item 9.

The measurement for DoP is dependent on: attendance at private education institute or group *outside of school*, amount of institutions attended, subjects studied (the focus here is on traditional academic subjects rather than subjects intended to round out a student's personality or education), hours per week spent in shadow education (including homework), and approximate amount of years spent in shadow education. Each item is coded and added together to produce a total score for DoP. Although not strictly necessary for analysing the findings of the study, it was deemed necessary to illustrate the level of which students were involved in shadow education institutions.

Perception of Compulsory Educational Effectiveness (PoCEE)

Items 14 through 31 are related to educational effectiveness and follow the Creemers 1994 indicators of classroom effectiveness as referred to earlier. Here, we lay out which item refers to which indicator:

Item Number	Indicator
14	Explicitness and ordering of goals and content
15	Mastery learning/clarity of content
16	Advance organisers
17	Feedback
18	Corrective instruction
19	Mastery learning/clarity of content
20	Ability grouping
21	Differentiated material/Appropriateness (from QAIT/MACRO model)
22	Classroom management
23	High Expectations
24	Questioning
21	Clarity of presentation
22	Bias testing
26	Incentives (QAIT/MACRO)
27	Differentiated material/Appropriateness (from QAIT/MACRO model)
28	Appropriateness (QAIT/MACRO)
29	Time on task (Scheerens, Carroll, Stringfield & Slavin)
30	Opportunity to learn (Scheerens' CIPO, Carroll model)

Table 2: Questionnaire Items Matched with Indicator of Educational Effectiveness

Item 31 is used to quantify the importance of outputs as described Scheerens (1990) and later Creamers (1994), and item 32 tests the perception of school education *on its own* as being enough to achieve those outputs, whereas item 33 then questions that same ability from another perspective.

Item 34 asks the question that really underpins this whole study: where do students perceive the majority of their education as coming from? Item 35 follows Zhan's study as mentioned in the literature review of this paper, and tests whether or not students deem their private tutors to be more suitable and approachable when they encounter learning difficulties.

4.2. Qualitative Methodology

Semi-structured interviews were conducted with 15 students from Yeoksam middle school. The students were chosen based on three characteristics: That they participated in at least some shadow education (with more being perceived as more relevant to the study), that they had been in middle

school education for at least 18 months prior to the interview, and that they be willing to have published any information they gave, although anonymity would be preserved through using only family names as identifiers. As many Korean people share the same family name, different interviews are identified with a number following their family name (e.g. Kim, Kim 2, Kim 3 etc). This was deemed preferable to using initials for two reasons: first as identities can be more easily determined using initials, and secondly as it was found that a number of students actually shared initials as well as family names.

In the weeks following the interviews, other students at the school were made aware of the opinions put forth in order to see if they were generally supported among their peer groups in order to provide further credibility (Magivly and Thomas, 2011; Golafshani, 2003).

It should be noted that each interview was done in English, the students' second language, and as such great care was taken to ensure the meaning was accurate and relevant. Any ambiguous statements were not considered relevant to the study and were disregarded. Similarly, any direct quotations included here are verbatim, with any grammatical errors also included.

4.2.1. Interview Items

Initial interview questions were created in such a way as to encourage follow-up questions and further conversation. No questions of a deeply personal nature were asked, and no item was deemed to have the potential to cause distress in the interviewees. All interviews were recorded, and transcripts can be provided upon request. Following is a list of the initial interview questions:

1. What is a normal day of studying for you?
2. How do academy lessons differ to school lessons?
3. What are the benefits of attending academies?
4. Is your school work affected by participating in academies?
5. How important are school points to you?
6. Do you think students should be able to earn school points at academies, too?
7. How would you complete these sentences: school is for…, academy is for…?
8. Where do you think you get the most education?
9. Do academies affect how you think about school?

VI Findings

5.1. Statistical Findings

Following is a breakdown of the results gained from the survey taken amongst 3rd grade students at Yeoksam Middle school. First we will look at statistical information, broken down into general academic information, shadow participation information, attitudes to perceived education information, and finally remaining information pertinent to the study gained from the questionnaire. Finally we will look at what conclusions can be drawn from these findings.

5.1.1. General Academic and Demographic Statistics.

257 students in total were given the survey, with 25 partial or suspicious responses deleted, leaving a total of 232 valid responses – far above the amount anticipated for representation.

Of the respondents, 58% were male and 42% female – about representative of the population of the school. Also in keeping with expectations considering the school's outstanding reputation referred to earlier, students reported a high level of previous academic achievement. Final scores for four major academic subjects for the previous semester were tallied (English, science, maths, and Korean). Broken down into corresponding A, B, C, D, and E grades, the following table illustrates the remarkably high grades achieved by the students.

Grade	English	Science	Maths	Korean
A	39.22%	56.47%	47.62%	66.02%
B	29.02%	20.39%	19.44%	21.88%
C	12.94%	9.02%	14.68%	6.64%
D	8.24%	5.88%	7.54%	2.34%
E	10.59%	8.24%	10.71%	3.12%

Table 3: Student grades

When translated into ordinal, numbered rating (i.e A=5, E=1), with a maximum possible score of 20, the average student score came to 16 – essentially a 'B' grade in each subject.

36% of students reported having lived or studied abroad at some point before entering the school. Due to the risks of students comparing foreign schools' effectiveness to Korean schools' effectiveness, deleting (or at least separating) these responses was considered, however, considering the large percentage of the sample, to do so would be counter-productive and result in an unrepresentative

sample. 36% is not an inconsiderable amount, and is undoubtedly a sizable population of the demographic of the school.

An estimated 18% of students are or were taking after-school classes in science, English, or mathematics. Later we shall see how this correlates to academic achievement, participation in shadow education, and perceptions of educational effectiveness.

5.1.2. Shadow Participation Statistics

Unsurprisingly, the vast majority of participants reported at least some level of involvement in shadow education. 83% of students were participating in at least one form of shadow education at the time of taking the survey, and less than 1% of participants reported never having been involved in any form of private tutoring or academy. Of those currently studying at academies, 12% were enrolled in one institution, 25% in two, 31% (the majority) in three, 21% in four, and 11% were enrolled in five or more academies or private tutoring sessions per week. The four subjects most studied in shadow education were: Maths (35% of respondents), English (28%), Korean (16%), and science (15%), supporting claims made by various researchers that shadow education is ostensibly used for improving the major academic subjects, rather than areas meant to round out a student's personality or personal development.

One area in which the measuring instrument may be said to have failed to fully capture information adequately is in measuring the hours per week students spend at academies or in private instruction. The options for the students to choose from were: 1-3 hours, 4-6 hours, 7-9 hours, 9-11 hours, 12-14 hours, 15-17 hours, and 18 hours or more per week. It was assumed that anything over 18 hours per week would appropriately represent the upper limit of this construct, as that equated to 3 hours per day, 5 days per week, and any student above this level would be an outlier. This, however, did not prove to be the case, as the majority of students (32%) chose this option. Later conversations with students highlighted that a more appropriate number for an upper limit would be closer to 30 hours per week. This on top of the maximum possible 26 hours studied at school.

The full breakdown of percentages of responses for each question are represented in the following tables.

Years in S.E.	Percentage
0	0.85%
<1	2.99%
1-3	14.96%
4-6	32.48%
7-9	31.62%
10-12	12.82%
13+	4.27%

Table 4: Years students have spent in shadow education.

No. Academies/Private Tutoring	Percentage
0	0%
1	12.32%
2	25.12%
3	30.81%
4	20.85%
5+	10.90%

Table 5: Amount of academies or private tutoring session students participated in.

Subject	Percentage
English	27.85%
Science	34.50%
Maths	15.06%
Korean	16.64%
Other	5.95%

Table 6: Subjects students were studying in academies or private tutoring sessions.

Hours Per Week	Percentage
1-3	2.84%
4-8	13.27%
9-11	15.17%
12-14	18.96%
15-17	17.06%
18+	32.70%

Table 7: Hours per week students spent in shadow education

All responses were given numerical values, with greater participation given a higher value, and less or no participation given a lower value. The total calculated score represents the Depth of Participation (DoP), with 23 being the highest possible score, and 0 being the lowest. The highest reported score was 23, 0 was the lowest, and the average DoP was 14.1.

5.1.3. Educational Effectiveness Statistics

The participants were given a series of statements with which they could agree or disagree with, based on a 5 point scale (strongly disagree, disagree, no opinion, agree, and strongly agree). The responses were then coded on a Likert scale of 1 – 5 based on the positivity of the response to the construct being measured, with 1 being negative and 5 being positive. All negative statements were coded in reverse (i.e. a negative statement that the student strongly agreed with would be coded as 1, whereas a negative statement the student strongly disagreed with would be coded as 5).

All scores were totalled to give a total Perception of Classroom Education (PoCE). As there were 17 statements, the maximum possible score was 85, and the minimum 17. The maximum score was 83, with the lowest score received was 23. The average was 58.1, reflecting a general trend towards positive perceptions of classroom effectiveness.

In order to identify the perceptions towards specific elements of classroom effectiveness, as demanded by the research question that forms the basis of this study, the mean score for each question was then calculated to give a clearer picture of the students' perceptions. As 3 would represent no opinion either way, any score over 3 would show a generally positive perception, and any score under 3 would represent a generally negative opinion. As shown in the following table, perceptions were almost universally positive for all indicators of classroom effectiveness. The only factor which failed to reach a 3 was the item concerning the level of difficulty of the class content. It appears that the majority of students found class material too easy for them.

Indicator	Mean Response
Organisation	3.22
Mastery Learning	3.93
Advance Organisers	3.64
Feedback	3.04
Corrective Instruction	3.47
Ability Grouping	3.17
Appropriateness	3.63
Classroom Management	3.26
Expectations	3.53
Questioning	3.42
Clarity of Presentation	3.56
Teacher Knowledge	3.77
Incentives	3.54
Appropriateness	2.76
Time on Task	3.46
Opportunity to Learn	3.64

Table 8: Mean responses for indicators of classroom effectiveness of public school classes.

Other items that were closer to having an average rating of 'no opinion' (and more importantly, not 'agree') were those regarding receiving feedback on how to improve (3.04), ability matching in the classroom (3.17), and school classes being enough to pass school exams (3.2). Tellingly, the same aspects highlighted by students as being positives in academy or private tutoring classes, as investigated in the qualitative study later in this paper. Aside from *mastery learning*, these low-scoring indicators match the ones identified as being strictly referring to *positional education* in the analytical framework of this paper.

5.1.4. Other Factor Statistics

The students were asked four questions not strictly relevant to any of the above categories, but still vital to this study, and to understanding the current educational landscape in Korea. They were:

1. School grades/points are the most important part of attending school. Mean response – 3.7
2. Academies are a necessary part of my education. Mean response - 4
3. The majority of my education comes from academies or private tutoring. Mean response – 3.6

4. I am more likely to approach my academy or private tutor than school teacher when encountering learning difficulties. Mean response – 3.5

The mean scores for these responses show a decided trend towards agreement with these statements. This points to three potential conclusions to be investigated further in this analysis; first is that however effective students perceive classroom lessons to be, extra tuition is considered to be vital to their education. Second, the final *screening* process of education (i.e. the outputs in the form of school points or exams) is still firmly within the schools' purview. Thirdly, despite holding the locks to educational advancement, it is the academies that are seen to hold the keys.

5.2. Qualitative Analysis

Discussions with the students brought up a number of themes, which will be discussed below. In the interests of fairness, dissenting opinions will also be provided where they exist so as to avoid misrepresentation or inadvertent cherry-picking of information. Here we will look at each theme as discussed by the students, in order of the starter questions related to earlier.

Duration of Academic Studying

Every student bar one noted that the majority of their out-of-school time was spent either in academies or doing homework from academies. Mostly the students reported going home after school, taking a nap or eating, finishing academy homework, then going to academy. After that, they would do more homework before getting to bed.

A number of students complained about not getting enough sleep, with two students commenting that they could only get 5-6 hours of sleep per night during weekdays, although others said that 7 hours was the norm.

Kim (2), a first-grade student, described his life as "School, academy, sleep, homework, repeat", a routine echoed by most of the interviewees. Other students remarked upon the amount of homework they receive from academies, how it easily outweighs their school-work, and takes up the majority of what free time they have left. Five of the students remarked on how they had stayed awake past midnight on the day before the interview, with one (Kim 3) stating that she felt she had to do it that night otherwise she would feel guilty about not completing it fully. Lee 1 had been up until 1am doing homework, but that was because he had spent an hour of his free time earlier playing computer games rather than doing the work. Interestingly, when asked if they thought they had enough free time, the

students were relatively evenly split; with 8 students disagreeing and 7 students agreeing. Lee 2, who disagreed with this statement, said: "Teenagers have to get 8 hours sleep, but I get to sleep around 1am because of academy homework".

Although all of the students associated academies with negative words ("busy", "stress", "boring", etc), and many stated that they did not want to participate in academies, each one treated participation in shadow education as necessary for academic achievement.

Shadow Education vs. Public School Education

There was a universally recognised difference between the difficulty and appropriateness of the lesson contents between the students' academies and their public school classes, with every interviewee noting that the former were far more difficult, but also more appropriate to their level. The public school education classes were described in terms such as "basic", and "foundational", whereas the academic classes were described as being "difficult", "challenging", "deeper", "more sophisticated", and providing far more opportunities to learn.

Academy classes are also much smaller and individual-student oriented. From the students' perspective, this makes a huge difference in their learning. Jeong 1 noted that school lessons are far more one-way, with teachers informing students, whereas academies are more informal and interactive. This also plays into ability grouping, as she goes on to mention: "In school, all of the 35 students have different interpretation and understanding skills, so the teacher is likely to match the average level of students, resulting in differences of what each student learns... in an academy, the teacher knows what the student is strong or weak at, and teaches what the student needs". This sentiment was shared by all interviewees.

Benefits of Attending Academies

Another theme that was brought up in almost every interview was that students attended academies in order to either get a competitive advantage over their peers or not be left behind them, particularly in terms of their school tests. Park 1 describes academies as being "hugely beneficial" in getting a high grade on the tests, and further, in applying for science or foreign language high schools.

Eleven of the students interviewed also stressed the personalised feedback given at their academies as being one of the biggest benefits, and nine of the students re-emphasized how ability grouping in their academy classes means they are taught at an appropriate level. Lee 2 Summarised it well, when she

simply said "[in academies], students can be educated in [sic] the right level".

Kim 4 was an outlier among this group, as rather than attending the same kind and number of shadow education institutions as her peers, she attends only ones that she believes benefits her personal growth, as such, for her, the benefits lie in doing more of what she wants to do.

School Interference from Academic Studying

Interviewees reported very little interference on their public school classes from their academies, mainly because the content of the classes were deemed as being vastly different. Indeed, the only 'interference' reported was the 선행 (Seonheng) referred to earlier in this paper – the act of studying lessons in academies well before they are broached in the public school system. Jeong 1 noted that: "My little sister who is 12 years old in Korean age [10 or 11 international age] is already learning high school math. I did too at that age." In her opinion, this meant she was more likely to focus on her academy work as a) the students have already studied the middle-school curriculum so are not incentivised to study it again, and therefore b) academy work is more relevant to their screening education needs.

School Points

All students reported thinking that school grades were the most important point of going to school, as they are the determinant of success or failure when applying for high schools. The majority of students also said that they attended after-school clubs in order to gain more school points, such as English newspaper club and a debate class in order to bolster their resume when applying for special purpose high schools.

Most of the interviewees felt the school grades system was fair, however three of the students disagreed, remarking that some teachers were far too eager to give out minus points for minor disciplinary infractions and others could be tempted to give plus points to their favourite students.

When asked if school points should be awarded at their academies too, all bar two students disagreed. It was generally recognised that the screening outputs system should remain the purview of the public schooling system only, and to change that would unfairly disadvantage students who were not able to attend academies. It was also seen as putting even further pressure on some students to attend even more academies. The two students who dissented asserted that the amount of effort and work they put

into their academies should be rewarded; particularly as how that was where most of their academic work was focussed.

Different Purposes for Shadow Education and Public Education

It was generally recognised that the academies the students attended and the public school they attended had clearly different purposes. Whereas the former was where the students received a deep, sophisticated level of academic education, school was seen as the place to receive a 'basic' level of screening education, but more importantly was the main place where students received their developmental education.

When questioned further about what they learn from school, students responded with phrases such as "learning to communicate", "becoming an adult", "discipline and socialize", "building your identity", "learning basic things that are needed in life". Park 2 went so far as to say that "Learning how to be an adult is more important than getting good grades", although that sentiment was not repeated by other interviewees.

5.2.7. Quantitative Study Summary

All students overwhelmingly concurred that the majority of their screening education comes from their academies, with school lessons being seen as a 'basic' level of education. A large proportion of students also devote the majority of their free time to screening education, although this is seen as being appropriate from their perspective.

Both developmental education and screening education outputs are under the purview of the public school system, with both being highly valued by the students. This was generally recognised as being appropriate, as allowing academies some control over the school points system was recognised to be unfair to lower SES background students.

VI. Conclusions

The findings of this study would appear to point to three apparent conclusions. First of all, as hypothesized, the screening processes of education have been taken over by shadow institutions for those who participate in it (and those who participate in it seem to be the large majority of students). All students who are enrolled in out-of-school academic institutes agree that these institutes are a necessary part of their education, with school lessons being seen as 'basic' and inadequate to cover all the material necessary to pass their exams.

Secondly, despite not being the place where students do most of their academic learning, school classes are still highly valued among students, and ratings are consistently high among almost all indicators of effectiveness, with the exceptions being among class sizes, ability grouping, and being of an appropriate difficulty; thus highlighting the specific indicators where shadow education institutes are seen as more effective than compulsory schooling. Instead, students appear to place the *development* education element of public schooling in high regard, citing *learning how to communicate*, *learning sociability*, *becoming civilised*, and other life skills-oriented lessons as reasons why school is important to them.

Thirdly, public schooling is still perceived to be place where screening *outputs* are maintained, with the majority of students agreeing that this is correct, and only a small handful of students believing that shadow education institutions should also have some responsibility in the distribution of official academic points (학좀 – *Hakjeom*).

Taken together, these conclusions point to an educational landscape where the private academies and tutoring sessions students attend outside of school cannot adequately be described as *shadow* education institutions. Although many of them do follow the school curriculum and are aimed at helping students pass school exams, their importance to students has grown to the point where they are seen as indispensable, and as such run *parallel* to the compulsory education system. Referring back to the synthesized model of education created in the analytical framework of this paper, and applying it to the findings of this study, an updated model specific to the Korean context would seem to look something like this:

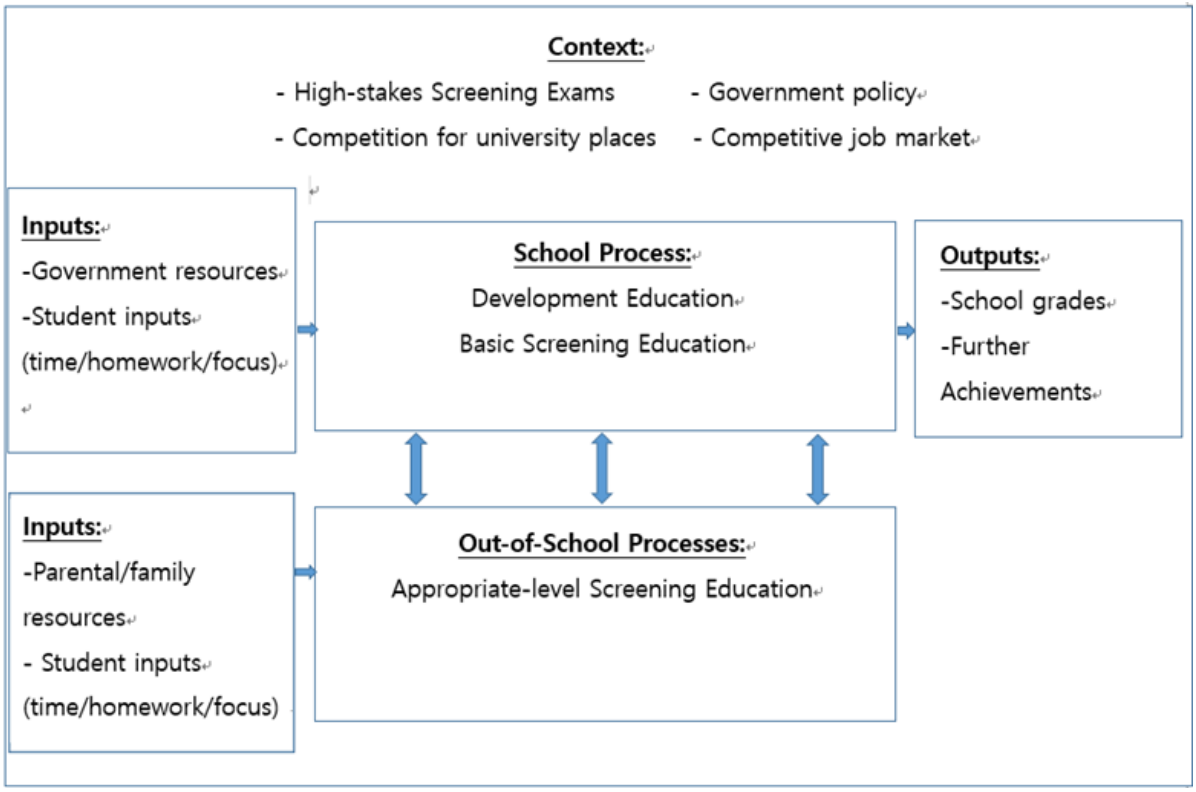

Figure 6: Model of Korean Middle School Education

Rather than shadowing the compulsory education system, out-of-school academic institutes have *replaced* the public schools in screening education provision, and now offer an educational that runs *parallel* to the free-access school system.

6.1. Implications for Korea

Earlier, this essay referred to education as a lock and key system. If we imagine that on the other side of a door is access to a good university, a prestigious job, and a comfortable and happy life; then the lock to open this door is thoroughly maintained by the public school system (at least for those who do not attend the elite private schools). The key to this lock, however, is now seen to be held by the private academies and tutoring groups run by market forces, and with only a limited amount of keys available, it is inevitable that these shadow education systems become entrenched in the society itself, and it is no wonder that governmental efforts to regulate market involvement in the industry have by and large failed to reduce demand. The findings of this study would also appear to highlight that the creation of demand mechanisms for participation in shadow education do not stem from the teacher or

classroom, but are rather endemic to the education system itself: content to be taught, class size, and ability grouping. Overhauling the education system entirely to accommodate these factors would cost an enormous amount, and is generally unfeasible for almost any government to enact.

This situation leads to a number of issues that need to be addressed if widely available, free public education is to have the equalising effect it is meant to have on the society (Sylwester, 2000). First of all is the issue of access. In one of the articles referenced in the literature review of this paper, Bray (2013) delves into the implications on equality that participation can have in families of a lower socio-economic status. Simply put, if one can't afford an education, then one is automatically denied access to social mobility mechanisms. This paper is not the place to discuss potential psychological damage to children from less-advantaged backgrounds when they are shown repeated evidence that they will not be able to succeed in life, but it is not hard to imagine that said damage may be profound and long lasting.

Secondly is a slightly more sinister aspect of access that needs to be regulated. It is not uncommon to see academies boast of the number of students that have gone on to be accepted at highly esteemed universities, as well as having alumni of those universities on the teaching or management staff. The implication being here that not only will the students receive the right kind of education to go on to prestigious universities, but the teachers can use their networks to help secure a place there. Although there isn't anything strictly immoral about a teacher recommending a student to another institute, if the student or the family has paid for the access to that network in the first place it casts a doubt over the meritocratic aspects that screening education is meant to represent in society.

The third possible implication for Korean society and education is a slightly more philosophical one, and refers to the legitimacy of public institutions themselves. We have already demonstrated how the screening processes of education has been siphoned off by market forces; if the screening outputs are also lost to the academies and private tutors, then students and families would be well justified in questioning what the purpose of going to school would be at all. As Halliday mentions, the increased emphasis on screening education and the educational 'arms race' inevitably leads to a de-emphasis on developmental education, and if families see more worth in sending their children to academies full-time to ensure a better future for them, the appeal would be difficult to ignore. The financial burden on the families would easily rule out those from lower SES backgrounds, resulting in a clearly defined educational-economic strata. This is, of course, a hypothetical situation, but it does not take a giant leap of the imagination to see high school and university admission boards considering what academies the students attended when deciding who should be accepted into their institution. They are, after all, the main place where the student was educated.

Realising that shadow education is not going to go away any time soon, and that regulation has so far failed to reduce the demand mechanisms for participation, the Korean government needs to take a more creative and engaging approach to ensuring a meritocratic and equally accessible approach to screening education is taken. One possible method of doing this would be to introduce either scholarships for lower SES background students, or subsidies for academies who take them on for free or reduced fees. Although this would mark a somewhat controversial entrance into the market from the government (as well as possibly to some, an admittance of failure), it may prove to be a more effective method of regulation than previous attempts. If an academy is providing sub-standard education, or not providing sufficient developmental education, or is placing excessive burdens on the students, the government will be able to remove the students or the subsidy and place it into another, more suitable institution. In this way, the government may be able to both wrestle back some control of screening processes, while ensuring that students' developmental needs are not neglected.

It may also be appropriate to lessen the emphasis on the high-stakes high school and university entrance exams. One of the undeniable drivers towards greater participation in shadow education is to out-perform peers in these exams. It is important to note, however, that despite the focus on screening education, public high schools and universities also consider the students' developmental education important when considering their applications for admittance. Indeed, Yeoksam Middle School, along with many others, encourages participation in developmentally progressive out-of-the-classroom activities such as school newspapers, volunteering, art and music groups, and debate groups; and awards participation in these clubs with school points that can be used to bolster the application of a student to the next step in their education. The high schools and universities also consider these activities important, and a sign of a well-rounded student (Center on international Education Benchmarking, 2017). The Korean government also recognises the need for reform in the emphasis placed on screening education, as evidenced by the reduction in rote learning in favour of a creative-based learning program rolled out in 2015 (Korean Education Whitepaper, 2017).

6.2. Global Implications

To reframe this paper in an international context, we must look at what can be learned from the Korean example, and what this mean for international education as a concept. As mentioned before, Korea is at the forefront of shadow education participation (so much so that we consider it here to be *parallel* education), and so lessons can be learned in the future of education development for other nations.

First of all, we can reasonably conclude that a primary focus on quantitative screening education opens the door to market participation in after-school education institutions, who aim to exploit parents' fears over 'losing the arms race' for education.

Secondly, as Halliday predicts, unregulated market participation lessens the ability of students to focus on developmental education, having to focus as they do on passing exams.

Thirdly, an unregulated market will eventually take over as being the *main font of screening education provision*, lessening the legitimacy of public-school provided classes.

When considering these factors, this paper suggests two areas to consider when developing education provision and considering market regulation in education in a country.

1. In order to lessen the perceived necessity of shadow education participation, ensure that developmental education is considered equally when designing educational outputs. Students are less likely to spend excessive hours studying for an exam if spending time with family or doing some volunteer work is considered equally important.

2. Rather than attempting to close down or regulate shadow education from the outside as has historically been attempted in Korea, where relevant, see how shadow education can be incorporated into public education to the benefit of *all* students, regardless of SES background.

Shadow education as a concept is not inherently a bad thing, and a student's desire to become more educated and improve themselves should never be denied. However, having a child governed by market forces is most likely not the most productive way for that child to grow up. As such, it is necessary for a society to incorporate what the shadow education institutions can bring to education (such as smaller classes, more focussed lessons and feedback), while ensuring that control of education remains a public concern.

6.3. Suggestions for Further Research

A study such as this is necessarily limited in its scope, but the themes explored here highlight the potential for a number of areas to research further. Primarily, this case study should be extended across other schools in the country to see if the results hold true. Of particular note would be any potential differences in results based on geographic location, specifically urban-rural and high SES-

low SES backgrounds.

Another salient area to be studied would be how the focus on screening education and the resultant excessive hours of after-school studying effects students' developmental education. As we have seen in this paper, the developmental education provided by schools is highly valued by students, but other fonts of developmental education such as time spent with families, in play, or alone may be neglected.

Furthermore, as high schools and universities increasingly look past academic grades and consider a student's personal achievements, are the shadow education institutions adapting to include more developmental education within their curriculum? If so, would this represent a further shifting away from the public school system in terms of being at the forefront of education provision?

All of these questions lie outside the limited scope of this paper, but may well be relevant not only in describing the Korean educational landscape at the moment, but also in informing the educational development of other nations looking to both emulate Korea's outstanding academic achievements, as well as avoiding the pitfalls that an unregulated market intrusion into education may entail.

Bibliography

Bae, Sanghoon, Hunseok Oh, Hyunchul Kim, Cheolwon Lee, Beomho Oh. 2010. "The impact of after-school programs on educational quality and private tutoring expenses" *Asia Pacific Education Review* (11)349-361

Book.songpa.go.kr. Accessed 2017.12.18

Bray, Mark. 2009. "Researching shadow education: methodological challenges and directions" *Asia Pacific Education Review* (11):3-13

Bray, Mark, and Ora Kwo. 2013. "Behind the façade of fee-free education: shadow education and its implications for social justice" *Oxford Review of Education* (39:4): 480-497

Bray, Mark. 2014. "The impact of shadow education on student academic achievement: Why the research is inconclusive and what can be done about it". *Asia Pacific Education Review* 15: 381-389

Buchmann, Claudia, Dennis J. Condron, and Vincent J. Roseigno. 2010. "Shadow Education, American Style: Test Preparation, the SAT and College Enrollment". *Social Forces* (89:2): 435-461

Byun, Soo-Yong. 2010. "Does policy matter in shadow education spending? Revisiting the effects of the high school equalization policy in South Korea" *Asia Pacific Education Review* (11):83-96

Byun, Soo-Yong. 2014. "Shadow Education and Academic Success in South Korea." In H. Park & K.Kim (eds) *Korean education in changing economic and demographic contexts* (Pp 39-59) Dordrecht: Springer.

Cayubit, Ryan Francis O., Janelle Ysabele S. Castor, Erick John S. Divina, Raymond Michael S. Francia, Remirr Theodore P. Nolasco, Amellia Jade E. Villamiel, Anna Isabelle S. Viloria, Mark Troy G. Zarraga. 2014. *Psychological Study* 59(3):252-259

Center on International Education Benchmarking. 2017. "South Korea: Instructional Systems". Accessed on October 2017. http://ncee.org/what-we-do/center-on-international-education-benchmarking/top-performing-countries/south-korea-overview/south-korea-instructional-systems/

Choi, Hoon, and Alvaro Choi. 2016. "Regulating private tutoring consumption in Korea: Lessons from another failure" *International Journal of Educational Development* (49): 144-156

Choi, Yool and Hyunjoon Park. 2016. "Shadow education and educational inequality in South Korea:

Examining effect heterogeneity of shadow education on middle school seniors' achievement test scores" *Research in Social Stratification and Mobility* 44(2016) 22-32

Claydon LS. 2014. "Rigour in quantitative research" *Art & Science Research Series* (21):43-48

Creemers, Bert, and Leonidas Kyriakides. 2010. "Using the Dynamic Model to develop an evidence-based and theory-driven approach to school improvement" *Irish Educational Studies* (29:1): 5-23

Creemers, Bert, and Leonidas Kyriakides. 2015. "Developing, testing, and using theoretical models for promoting quality in education" *School Effectiveness and School Improvement* (26:1): 102-119

Creswell, JW. 2003. *Research Design: Qualitative, Quantitative and Mixed Method Approaches* Sage Publications, Thousand Oaks: CA

Dong-A Ilbo, 2006. "Gangnam Housing Prices Still Rising". Accessed on 2017.12.11 http://english.donga.com/List/3/all/26/246591/1

Eom, Moonyoung; Lee, Sun-Ho; Kim, Hye-Ja; Kim, Min-Hee; Oh, Beom-Ho; Yun, Hong-Ju (2014) "A Study for Exploring the Actual Conditions and the Efficiency Plans of Education Welfare Investment" Korea Education Development Institute 2014 Research Projects, available at: http://eng.kedi.re.kr/khome/eng/archive/report/listReports.do

Gangnam.go.kr. Accessed 2017.12.18

Golafshani, Nahid. 2003. "Understanding reliability and Validity in qualitative research" *The Qualitative Report* (8:4): 597-607

Halliday, Daniel. 2016. "Private education, positional goods, and the arms race problem". *Politics, Philosophy & Economics* (15:2): 150-169

IMF. 2017. Global GDP Reports. Accessed September 2017.

http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weorept.aspx?pr.x=34&pr.y=6&sy=2000&ey=2016&scsm=1&ssd=1&sort=country&ds=.&br=1&c=924&s=NGDPD&grp=0&a=

Joongang Ilbo, 2016 "강남·양천은 과학고형, 노원·도봉은 외고형 많아", accessed 2017.12.11, http://news.joins.com/article/20675492

Kim, Jin-Sook and Hyeyoung Bang. 2017. “Education fever: Korean parents’ aspiration for their children’s schooling and future career” *Pedagogy, Culture & Society* 25(2), 207-224

Kim, Juhu, Jong-Gak Lee, and Soo-Kwang Lee. 2005. “Understanding of Education Fever in Korea” *KEDI Journal of Educational Policy* Vol.2:1, 7-15

Kim, Seolah. 2016. “Effects of Government’s Regulation on Private Education Expenditures in Korea” *Seoul Journal of Economics* (29:2): 182-416

Korea National Statistics Office. 2011. “Statistics on Youth”. Accessed March 2017. http://kostat.go.kr/portal/eng/index.action

Kwon, Suh Keong, Moonbok Lee, and Dogkwang Shin. 2017. “Educational assessment in the Republic of Korea: lights and shadows of high-stake exam-based education system” *Assessment in Education: Principles, Policy & Practice* (24:1):60-77

Kyriakedes, Leonidas, and Bert P.M. Creemers. 2008. “Using a multidimensional approach to measure the impact of classroom-level factors upon student achievement: a study testing the validity of the dynamic model”. *School Effectiveness and School Improvement* (19:2)183-205

Kyriakides, Leonidas, Bert P.M. Creemers, Anastasia Panayiotou, Gudrun Vanlaar, Michael Pfeifer, Gasper Cankar, and Lean McMahon. 2014. “Using student ratings to measure quality of teaching in six European countries” *European Journal of Teacher Education* (37:2): 125-143

Lee, Chong Jae, Heesook Lee, and Hyo-Min Jang. 2010. “The history of policy responses to shadow education in South Korea: implication for the next cycle of policy responses” *Asia Pacific Education Review* (11) 97-108

Lee, Chong Jae, Yong Kim, Soo-yong Byun. 2012. “The rise of Korean education from the ashes of the Korean War” *Prospects* (42):303-318

Lee, Soojeong, and Roger C. Shouse. 2011. “The Impact of Prestige Orientation on Shadow Education in South Korea” *American Sociological Association* 84(3) 212-224

Manzon, Maria and Shalhan Areepattamannil. 2014. “Shadow educations: mapping the global discourse” *Asia Pacific Journal of Education* 34:4, 389-402

Namgung, Jiyeong; Kim, Yangboon; Park, Kyeongho; Park, Heejin "Analysis on Current Status of School Education (IV): Focused on Middle School" Korean Education Development Institute 2014 Research Projects, available at: http://eng.kedi.re.kr/khome/eng/archive/report/listReports.do

OECD. 2015. Programme for International Student Assessment (PISA). Accessed June 2017. http://www.oecd.org/pisa/pisaproducts/

OECD. 2017. "Global Education Indicators." Accessed August 2017.http://www.keepeek.com/Digital-Asset-Management/oecd/education/education-at-a-glance-2016/korea_eag-2016-66-en#page4

OECD. 2017. Health – Suicide Rates. Accessed July 2017. https://data.oecd.org/healthstat/suicide-rates.htm

OECD. 2017. "Reviews of Evaluation and Assessment in Education". Accessed September 2017. http://www.oecd-ilibrary.org/education/oecd-reviews-of-evaluation-and-assessment-in-education_22230955

Opengov.seoul.go.kr. Accessed 2017.12.18

Park, Hyunjoon, Claudia Buchmann, Jaesung Choi, and Joseph J. Merry. 2016. "Learning Beyond the School Walls: Trends and Implications" *Annual Review of Sociology* 42:231-52

Pearson. 2017. Global Education Profiles. Accessed August 2017. http://thelearningcurve.pearson.com/country-profiles/south-korea

Reynolds, David, Pam Sammons, Beike De Fraine, Tony Townsend, and Jan Van Damme. 2011. "Educational Effectiveness Research: A State of the Art Review". Paper presented at the annual meeting for International Congress for School Effectiveness and Improvement, Cyprus, 2011.

Robertson, S.L. and Verger, Anton. 2012. *Governing Education Through Public Private Partnerships* Centre for Globalisation, Education and Societies University of Bristol, Bristol: UK

Robertson, S.L, Karen Mundy, Anton Verger and F. Menashy (eds). 2012. *Public Private Partnerships in Education: New Actors and Modes of Governance in a Globalizing World*, 21-42, Cheltenham: Edward Elgar

Scheerens, Jaap. 1990. "School Effectiveness Research and the Development of Process Indicators of School Functioning". *School Effectiveness and School Improvement* (1:1):61-80

Scheerens, Jaap. 1997. "Conceptual Models and Theory-Embedded Principles on Effective Schooling" *School*

Effectiveness and School Improvement (8:3):269-310

Scheerens, Jaap. 2015. "Theories on educational effectiveness and ineffectiveness" *School Effectiveness and School Improvement* (26:1): 10-31

Scheerens, Jaap. 2013. "The use of theory in school effectiveness research revisited". *School Effectiveness and School Improvement* (24:1):1-38

Sylwester, Kevin. 2000. "Can education expenditures reduce income inequality?" *Economics of Education Review* (21): 43-52

Tan, Joyce B., and Shirley Yates. 2009. "Academic expectations as sources of stress in Asian students". *Social Psychological Education* (14):389-407

Teddlie, Charles, Peggy C. Kirby, and Sam Stringfield. 1989. "Effective versus Ineffective Schools: Observable Differences in the Classroom" *University of Chicago Press Journals* (3):221-236

The Hankyoreh. 2014. "Academic Stress Threatening South Korean Childrens' Very Survival". Accessed August 2017. http://english.hani.co.kr/arti/english_edition/e_national/663037.html

The Korea Herald. 2016. "Number of South Korean Ultrarich On the Rise". Accessed 2017.12.11 http://www.koreaherald.com/view.php?ud=20160707000755

Thomas, Eileen, and Joan K. Magilvy. 2011. "Qualitative Rigor or Research Validity in Qualitative Research" *Journal for Specialists in Pediatric Nursing* (16):151-155

Top Universities. 2017. "Who Rules?" Accessed August 2017.www.topuniversities.com/university-rankings/world-university-rankings/2018

Tsurumi, Patricia E. 1977. *Japanese Colonial Education in Korea*. Harvard University Press: Cambridge.

www.mapo.go.kr. Accessed 2017.12.18

www.seocho.go.kr. Accessed 2017.12.18.

www.yongsan.go.kr. Accessed 2017.12.18

Yonhap News Agency. 2016. “Seoul Home Prices Hit New High, With More Gains in Gangnam”. Accessed on 2017.12.11. http://english.yonhapnews.co.kr/business/2016/07/04/0501000000AEN20160704002500320.html

Yuh, Leighanne. 2010. “Contradictions in Korean Colonial Education” *International Journal of Korean History* (15): 121-149

Zhan, Shengli, Mark Bray, Dan Wang, Chad Lykins, Ora Kwo. 2013. “The effectiveness of private tutoring: students’ perceptions in comparison with mainstream schooling in Hong Kong” *Asia Pacific Education Review* (14):495-509

Appendix III – Questionnaire (English)

What grade are you in?

1. 2학년
2. 3학년

What is your gender?

1. Female
2. Male

What were your final scores for English last semester?

1. 90 - 100
2. 80 - 89
3. 70 - 79
4. 60 - 69
5. <59

What were your final scores for science last semester?

1. 90 - 100
2. 80 - 89
3. 70 - 79
4. 60 - 69
5. <59

What were your final scores for math last semester?

1. 90 - 100
2. 80 - 89
3. 70 - 79
4. 60 - 69
5. <59

what were your final scores for Korean last semester?

1. 90 - 100
2. 80 - 89
3. 70 - 79
4. 60 - 69
5. <59

Have you ever lived or studied in a different country?

1. Yes
2. No

Do you take any after-school classes in science, maths or English provided by your school?

1. Yes
2. No

Up to and including the present day, for how long have you been attending any academy or had private tutoring?

1. Less than 1 year
2. 1-3 years
3. 4-6 years
4. 7-9 years
5. 10-12 years
6. More than 13 years
7. I have never had any private tutoring.

Do you currently attend any academy or have any private tutoring?

1. Yes
2. No

How many academies or private tutoring session do you attend?

1. 1
2. 2
3. 3
4. 4
5. More than 5

Please select which subjects you study in academies or private tutoring

1. English
2. Maths
3. Science
4. Korean
5. Other

How many hours per week do you attend academies or private tutoring

1. 1-3 hours
2. 4-8 hours
3. 9-11 hours
4. 12-14 hours
5. 15-17 hours
6. 18 or more hours

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	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
My school lessons are clearly organized, and are logically ordered	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I clearly understand the content of all of the lessons.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I know at the beginning of the lesson what I will study that day.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I am regularly given feedback on how to improve in my classes.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I am shown how to correct any mistakes I make in my work.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I can completely understand and apply the content of each class before moving on to the next class.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
My classmates are of a similar ability to me in each class.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
The content of each class is suitable for my ability.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
The teachers keep an orderly and quiet atmosphere.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
My teachers expect me to achieve high grades in each lesson.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
Students are regularly questioned on the lesson content to check their understanding.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
My teachers have an in-depth knowledge of the subject.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I have a clear incentive to learn the material.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I studied most of the middle-school material before entering middle-school.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
The content of school classes is too easy for me.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I have enough time in class and with school homework to study everything I need to for my school exams.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I have enough opportunities in school to learn everything I need to for my school exams.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
School points are the most important part of attending school.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
School education is enough to pass my school exams with high marks.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
Academies are a necessary part of my education.	❑	❑	❑	❑	❑
	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
The majority of my education comes from academies or private tutoring.	❑	❑	❑	❑	❑

	매우 동의한다	동의한다	보통이다	동의 안한다	매우 동의 안한다
I am more likely to approach my academy or private tutors than my school teachers if I encounter learning difficulties.	❑	❑	❑	❑	❑

Appendix IV – Questionnaire (Korean)

1. 몇 학년 입니까?

   A. 2학년

   B. 3학년

2. 성별이 무엇입니까?

   A. 여자

   B. 남자

3. 2학기 중간고사 과목별 성적을 적으세요.

   A. 영어

   B. 과학

   C. 수학

   D. 국어

4. 다른 나라에서 거주하거나 공부한 적이 있나요?

   A. 네

   B. 아니오

5. 학교에서 이루어지는 방학 후 수업 중 과학, 수학, 영어를 수강한 적이 있나요?

   A. 네

   B. 아니오

6. 학교 외에 학원을 다니거나 개인과외를 하고 있나요?

   A. 네

   B. 아니오

7. 얼마나 많은 학원을 다니거나 과외를 하고 있나요?

   A. 1

   B. 2

   C. 3

   D. 4

   E. 5개 이상

8. 학원을 다니거나 과외로 공부하는 과목에 모두 표시하세요.

   A. 영어

   B. 과학

   C. 수학

   D. 국어

   E. 음악

   F. 스포츠

   G. 미술

   H. 기타

9. 얼마나 많은 시간을 학원이나 과외로 공부하나요?

   A. 1~3 시간

   B. 4 – 6 시간

   C. 9 – 1 시간

   D. 12 – 14 시간

E. 15 – 17 시간

F. 18시간 이상

10. 현재까지 몇 년 동안 학원을 다니거나 과외로 공부해 왔나요? (지금 다니고 있는 것 포함하되, 현재 아무것도 하지 않을 경우 과거에 했던 기간을 모두 포함 시켜 표시 하세요.)

A. 1년 미만

B. 1 – 3년

C. 4 – 6년

D. 7 – 9년

E. 10 – 12년

F. 13년 이상

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아래 나오는 말에 얼마나 강하게 동의하고 동의하지 않는지 나타내세요.

11. 학교 수업은 굉장히 조직적이고 논리적으로 진행된다.

12. 나는 학교에서 수업 받는 내용을 잘 이해한다.

13. 나는 수업 도입부에서 오늘 배울 내용에 대해 알 수 있다.

14. 나는 정기적으로 수업에서 어떻게 실력을 향상 시킬 수 있는지 피드백을 받는다.

15. 나는 선생님에 의해 수업시간에 만든 실수를 어떻게 교정해야 하는지 알게 된다.

16. 나는 다음 수업으로 넘어가지 전에 배운 내용에 대해 완전히 이해하고 응용할 수 있다.

17. 각 수업마다 나에게 반 친구들은 비슷한 능력을 가졌다.

18. 각 수업의 내용은 내 능력에 적합하다.

19. 선생님들은 수업시간에 질서 있고 조용한 분위기를 유지하신다.

20. 각 수업마다 선생님들은 내가 더 높은 점수 받기를 기대하신다.

21. 학생들은 정기적으로 수업 내용의 이해도를 확인 하기 위해 질문을 받는다.

22. 선생님들은 그 과목에 깊은 지식을 가지고 있다.

23. 나는 학습 주제들을 왜 배우는지에 대한 분명한 이유가 있다.

24. 나는 중학교 입학하기 전에 이미 대부분의 중학교 과정을 선 학습 했다.

25. 나에게 학교 수업 내용은 너무 쉽다.

26. 나는 학교 시험을 준비하기 위해 필요한 모든 것을 공부할 충분한 수업시간과 숙제가 있다.

27. 나는 학교에서 학교 시험을 위해 필요한 모든 것을 준비할 충분한 기회가 있다.

28. 학교 점수는 내 교육에 가장 중요한 부분이다.

29. 학교 교육은 학교시험에서 높은 점수를 받기 위해 충분하다.

30. 학원은 내 교육을 위해 필요한 부분이다.

31. 나의 교육의 대다수는 학원이나 개인과외로 이루어진다.

국문초록

성명: Matthew Skidmore

학과 및 전공: International Studies, International Cooperation Major

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사교육의 참여는 전 세계적으로 커지고 있는 이슈이다. 많은 국가들에서 상당한 규모의 사교육 시장 형태의 비지니스가 존재한다. 한국은 사교육 시장의 선두있기에, 방과후 교육, 사교육, 낮에 다니는 의무교육의 상호작용을 겪은 학생들의 경험을 통해 배울 바가 있을 것이다. 하지만 그럼에도 불구하고, 이러한 상호작용이 교육의 인식에 대해 어떠한 영향을 주는지, 학생들이 생각하기에 가장 가치있는 교육이 어디서 오는가와 같은 연구는 거의 이루어 지지 않았다.

본 논문은 중등학교에 대해 케이스 스터디를 적용함으로써 이러한 갭을 줄이려고 시도하였으며, 두가지 근본적인 질문을 통해 현재 교육의 현황에 대해 추가적인 설명을 하고자 하였다: 학생들은 대부분의 교육이 어디에서 온다고 생각하는가? 그리고 이 대답이 학교 수업에서의 효과에 대한 인지에 영향을 미치는가?

이 대답에 답하기 위해, 본 논문은 분석의 뼈대에서 두가지 교육의 개념을 사용하였다: Daniel Halliday 의 *스크리닝과 발달*에서 나오는 교육과, Scheerens, Creemers, 그리고 Stringfield & Slavin 의 교육적 효과에 관해 혼합한 모델이 그것이다. 이를 통해, *우리는 무엇이 교육인지, 누가 제공하는지, 얼마나 효과있는지를 설명할 것이다.*

본 논문은 혼합된 방법으로 접근을 하였는데, 준-구조화된 인터뷰들을 학교의 학생들에 대해 시행하였고, 수치로 표현 가능한 질문들을 3 학년 학생들에게 주어 그 패턴과 관계들을 분석하였다. 여기서 발견된 점은 학생들이 대부분의 *스크리닝* 교육은 이제 사교육에서 오며 학교에서 학습하는 *스크리닝* 교육은 단순하거나 효율적이지 않다고 생각한다는 것이다. 사교육은 학생들의 교육에서 중요한 부분을 차지할 정도로 성장하였기에, 본 논문에서는 소위 *사교육(그림자)을* 불충분한 설명으로 간주했고, 대신 *병렬 교육* 이라고 부르는 것을 선호하였다. 학교는 여전히 학생의 *발달* 교육을 제공한다는 점에서 여전히 가치가 있지만, 이에 필요한 시간과 집중은 실제로는 스크리닝 교육에 사용되고 있었다. 놀랍게도, 비록 학생들을 그들의 사교육 기관을 매우 중요하게 생각하고 있었지만, 여전히 그들의 학교에서의 수업을 상당히 효과적이라고

생각하고 있었으며, 대부분의 학생들은 학교 수업의 효과 측면의 질문들에 대해서는 긍정적으로 답했다. 높은 점수를 받지 못한 항목들은 능력별로 그룹을 나누는 것, 피드백의 제공, 수준에 맞는 컨텐츠 제공 측면들 뿐이었다.

본 논문은 높은 질의 교육을 배경에 상관없이 모두 제공하기 위해서, 교육 효과에 대한 연구 뿐만이 아니라 한국과 그 이외 전 세계의 교육 당국에 제안을 하고자 한다. 그저 사교육에 참가하는 학생들을 제한하기 보다는, 적절한 규제를 통해 교육 시장에 정부가 참가하는 것이 나을 것이라는 점이다. 또한 현대 교육의 효과를 연구함에 있어서, 사교육이 많은 영향을 미치는 주변 환경에도 많은 관심이 필요하다는 점이다.

Keywords: Shadow education, Parallel education, Educational effectiveness research, Korea Education

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