The late 1980s witnessed the deregulation and decentralization of education in Belgium. To examine some of the effects of this reform, four dimensions of general secondary education in the Flemish community following reforms are provided here. Each dimension is explored in a chapter. The first dimension, the structure of Flemish education, outlines secondary education organization, monitoring, teacher training, finance and budget, and multiculturalism. Dimension two, curriculum, is examined through a historical overview, through information on the current curriculum, and through the effects of the unification of Europe. A short chapter on dimension three, teaching strategies, discusses the types of instructional methodologies used in Flemish secondary schools. The last dimension, the integration of computer technology within the schools, concentrates on the history of computer technology in the schools and describes recent developments in technology integration. Results indicate that these reforms have had few, if any, adverse effects on the system; Flemish secondary school students still rank high on international standardized tests. The central authority has given the responsibility of education to the Flemish community and it is hoped that, as the local groups gain competence and experience in handling responsibilities, more decision-making opportunities will be bestowed on them. (RJM)
AN APPRAISAL OF THE EFFECTS ON SECONDARY EDUCATION
OF THE REFORMS OF THE LATE 1980s IN THE
FLEMISH COMMUNITY OF BELGIUM:
QUALITY MAINTAINED

Catherine Lee Wade Zedalis

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by
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AN APPRAISAL OF THE EFFECTS ON SECONDARY EDUCATION OF THE REFORMS OF THE LATE 1980s IN THE FLEMISH COMMUNITY OF BELGIUM: QUALITY MAINTAINED

A RESEARCH PAPER
APPROVED FOR THE DISCIPLINE OF EDUCATION

By
Catherine Lee Wade Zedalis

________________________________________, Advisor
ABSTRACT

Zedalis, Catherine Lee Wade (Master of Arts in Education)
An Appraisal of the Effects on Secondary Education of the
Reforms of the Late 1980s in the Flemish Community of
Belgium: Quality Maintained (49 pp.-Chapter VI)
Directed by Professor James Green

During the late 1980s, deregulation and decentralization educational reforms occurred in Belgium. Responsibility for education was given to the three Belgian language communities with the exception of a few areas. This paper examines four dimensions of general secondary education in the Flemish community after the reforms. The dimensions are: (1) the structure of Flemish education (its organization, teacher training, budget and financial obligations, and multiculturalism); (2) curriculum (including the European dimension); (3) teaching strategies; and (4) the integration of computer technology within the schools.

The reforms have not altered what had previously been a strong educational system. The Flemish community education system continues to provide a solid educational experience for
its students. This has been evidenced by the consistent high ranking of Flemish secondary school students on international standardized tests.
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CHAPTER I
Introduction

The need for education reform heeds no one country’s national boundaries. The call for excellence in education can be heard from the nearest local school district to the suburbs of China’s major cities. Educational policy-makers, administrators, legislators, teachers, students and their parents are demanding that changes be made to improve the learning process. In the United States, President Clinton has called for the establishment of national tests to fulfill the desire of Americans to "put high standards in the classroom" (New York Times, November 23, 1997, p.29).

Since October 4, 1957, when the success of the former Soviet Union’s launch of "sputnik" signalled the beginning of a new era, Americans began to realize the need to restructure their science, math, and foreign language programs (Ravitch, 1995). Ever since, calls for reform in all areas of education have been at the forefront of every political agenda at the local, state, and national level.

In the United States, over the past two decades, what historically has been local control of education has
gradually yielded to the pressures exerted by state entities. Control over fiscal policies and the addition of more stringent standards have given states added power to deal with their education systems. The response by state authorities to the recommendations made in the 1983 publication of *A Nation at Risk* made this shift even more apparent. Several of the recommendations called for higher educational standards, increased requirements for graduation from high school, an extended school day and year, and urge states to develop and implement plans from these proposals (National Commission on Excellence in Education).

The U.S. Congress in March of 1994 passed the *Goals 2000: Educate America Act* (PL 103-227), one of the more prominent attempts by the national government to wield its influence over education. The U.S. Department of Education (1994a) called the "Goals" the "beginning of a new era in school and education reform -- a revolutionary, all-inclusive plan to change every aspect of our education system, while at the same time aligning its individual parts with one another" (p.1).

It is obvious that there is a move on to increase the centralization of the U.S. education system. Under consideration are the establishment of national standards for individual subject areas, increasing standardized testing to assess both student and teacher performance, restructuring teacher education programs, and instituting freedom of school
choice. National authorities have also called for integrating technology within the classroom and implementing innovative teaching methodologies in an effort to reach all students. If successfully implemented, some may suggest these would guarantee the United States its position as a world leader economically, politically, and socially.

By contrast to the current reform trends in the United States, the federated country of Belgium has attempted to radically change its educational system through a process of deregulation. Deregulation of education, as cited in a study conducted by three University of Twente education professors (van Amelsvoort, Scheerens, & Branderhorst, 1995), can be defined as both "functional decentralization," meaning "the dispersal of control over particular activities," and "territorial decentralization," described as "the distribution of powers between tiers of government" (p. 5).

Originally, Belgian education was administered by two distinct ministries of education and culture. One of the ministries of education and culture was controlled by the Flemish community, and the other was supervised jointly by the French and German communities. The constitutional reform of 15 July 1988 transferred almost all power in educational matters to the three language communities (i.e., Flemish, French, and German) (Michielsens, 1995). The transfer process began January 1, 1989, the goal being to resituate responsibility for educational policy, so as to develop
innovative programs and assure the populace of quality education (van Amelsvoort, Scheerens, & Branderhorst, 1995). The language communities coincide with the three principal regions of the nation: Flanders, southern Belgium, and the eastern border area with Germany. The hope evident in the reforms was that by having greater autonomy in the educational decision-making process, each community would be able to meet the needs of their constituents with superior results. Political councils, complete with legislative and executive powers, were created within each community. Each council received a portion of the national budget to be used to finance most aspects of education, human services, and cultural affairs. Only a few areas of education were not transferred from the national government to the regional communities. These included the ability to set the number of years required for compulsory education, establishing the minimum requirements for graduation from secondary education, and matters related to pensions.

According to J.C. Verhoeven, a professor at Catholic University of Leuven, the entire education reform movement in Belgium is affected by the basic "polarization" of Belgian society (Verhoeven, 1992, p.99). Political affiliations within the country shape the positions taken on issues of educational policy. Verhoeven believes that this will continue in the near-term, despite the movement of decision-making authority from the national government to the regional
language communities. The Flemish language community of Flanders tends to be dominated by the Christian Democratic Party, thus it may not be disposed to adopt the same policy approach to a certain educational issue as, say, the French language community of Wallonia, which tends to favor the political positions of the Socialist and Liberal Parties.

The broad interplay between language, political affiliation, and comparative differences among Belgium’s three regional communities on various educational issues is intriguing. This paper, however, will examine several more limited matters pertaining to the Flemish community’s policies involving general secondary education. Four dimensions in particular will be examined. The first is the structure of Flemish education. Considered will be the organization of secondary education, the types of schools and educational opportunities available, teacher training; budget and financial obligations, and multiculturalism within the Flemish school community. The second dimension to be addressed will be curriculum. Here, a variety of matters will be investigated, including historical background and the current curriculum. Since all European nations are struggling to find their place in the larger European Union, the implications of this for curriculum will be briefly discussed. The third matter examined will be the strategies used to promote innovation and to achieve the quality education standards set by the Flemish community. The fourth, and final item
considered will be how computer technology is being used within the schools.

It may be far too early to tell how the reforms of 1988 are faring in the Flemish community. In that connection, it clearly would be important to assess the nature and extent of the educational changes already put in-place, and the aspirations of the community regarding what those innovations might accomplish. The thesis of this brief study, however, is that, if the results from the 1995 "Third International Mathematics and Science Study" (TIMSS) can be considered a legitimate indicator, Flanders is succeeding in offering a quality educational experience and preparing its students for the twenty-first century. The results show that students from the Flemish community scored fifth in mathematics and eleventh in science out of forty-one countries surveyed for thirteen year olds (The Economist, 1997, p.21). Statistics provided by the Ministry of Flemish Education show students thirteen to fourteen years old scoring third in math and eighth in science out of twenty-six nations (Hulst & Pelfrene, 1997, p. 246). The nation’s per pupil expenditure is at US$4690, among the highest in the world (Organization for Economic Cooperation and Development [OECD], 1997, p. 98). Given this data, the 1988 reforms have plainly solidified an otherwise previously sound educational system, or have facilitated genuine improvements that have shored-up a system receptive to beneficial change.
CHAPTER II
The Structure of the Flemish Education System

Organization of Secondary Education

The concept of democracy is extremely important to all Belgians. With the decentralization of the education system, democracy remains one of the guiding forces in education policy. "Freedom of Choice" regarding the type of education students may want to pursue is considered to be the keystone of the Belgian education system (Michielsens, 1995; Mason, 1992). Historically, most schools in Belgium have been organized by the state, communes, provinces, or by religious organizations. Article 17 of the revised Belgian Constitution (1988), the Article which speaks to education, has been characterized as guaranteeing "the existing right to education, to freedom of choice in education..., of parity of esteem for different types of state and subsidized schools within the system, and free education for all in the compulsory years" (Mason, 1992, p.7). Article 24 of the Constitution guarantees any natural or legal person the right to provide education, and can establish institutions for that purpose (Ministerie Van De Vlaamse Gemeenschap, 1997). Community schools, and provincial and communal schools, are
supervised by state authorities and are known as "official education." Private schools are referred to as "subsidized private education" (Ministerie van de Vlaamse Gemeenschap, 1997). The private schools can be either denominational or nondenominational in nature. The majority of Flemish students, however, attend private Catholic schools (about 70%) (Mason, 1992; Ministerie van de Vlaamse Gemeenschap, 1997; OECD, 1993; Verhoeven, 1992).

Originally, Belgian secondary schools were organized to align students within either an academic, vocational, or technical track. During the 1970s, this system was changed in an effort to postpone the need for specialization and give students an opportunity to explore their educational potential. Today, all students from the ages of six to eighteen are required to be in attendance at some sort of school (compulsory education). Part-time schooling for vocational students ages sixteen to eighteen is an option. Classes and apprenticeships are coordinated for these students.

The reform of secondary education in the Flemish community has resulted in a so-called "unitary system"; a system combining latitude and freedom in the education process with elements of a more established and structured program (Michielsens, 1995). The primary goal of the unitary system is to "respect providers' independence, [while] introducing a degree of uniformity," the objective being to "ensure the
equal treatment of all pupils (with regard to their studies) and all schools (with regard to funds the community wishes to invest in education)" (Michielsens, 1995, p.13). Essentially, the idea is to allow the tailoring of education to the disposition of the particular school, yet require each school to conform to certain centrally articulated standards. No entrance examination is required for entry into secondary school. However, a certificate of basic education from primary school is necessary.

The unitary system for secondary education is comprised of three stages (the Ministry of Education refers to these as "grades"). Each stage is of a duration of two years. This was devised in an effort to maintain some form of equality of academic opportunities and prevent segregation based on abilities. The first stage consists of an "observation" phase, when a majority of learning is centered around basic training and the study of core subjects. Exposure to as many subjects as possible occurs at this time. The second stage is an "orientation" phase. An introduction to general (ASO), technical (TSO), vocational (BSO), and artistic (KSO) education is offered. The third stage is known as the "determination" phase. At this time, students are required to decide which line of study (general, technical, vocational, and artistic) they will pursue based on teacher assessments and student's "preference" (Archer & Peck, 1991). Students may move between the different lines of secondary education,
but some restrictions exist. For students in the general education line, the third stage is the time to prepare for study in higher education. The general line (ASO) provides a "broad theoretical education which can serve as a solid foundation for higher education" (EURYDICE, 1997, p.18). A third year to the third stage is offered if students desire to prepare for specialization in higher education. Teachers are allowed to choose teaching materials, the method of instruction, and the organization of course content.

The Flemish school year runs from September 1st through August 31st. Students attend classes 182 days per year. Classes are held Monday through Friday, starting between 8 and 8:30 a.m. and ending between 3 and 5 p.m. Schools are closed for the day at noon on Wednesday. Students receive on average an hour lunch break. Classes last for 50 minutes. School vacations are usually one week around the first of November, two weeks at Christmas, one week in February, two weeks at Easter, and two months during July and August.

Monitoring

Apart from the way in which Flemish education is organized, the monitoring of education within the Flemish community has also felt the effects of the decentralization of 1988. Inspection procedures for education have been restructured, with power being transferred from the national government to each of the three language communities. A Decree of 7 July 1991 created an organization of inspectors
(referred to in this paper as the Inspectorate) whose task involves monitoring and applying "statutory regulations," as well as assessing each school within Flanders at predetermined intervals (OECD, 1993). The Flemish inspection organization consists of an equal number of teachers from public and private schools. Once a school has passed audit, they are given permission to issue "valid diplomas" (Michielsens, 1995, p.32). Should any problems within the school be reported by the inspection team, the school in question may appeal to the Inspectorate for help in remediating the situation. To ensure that the reforms and requirements are being applied, the Inspectorate is responsible for providing the Flemish Parliament with an annual report on the state of education in the community.

As mentioned in the Introduction, the Flemish community receives a portion of the national budget for financing education. This was established by the Act of 19 January 1989. The community is obligated to subsidize all schools (both public and private) on a per pupil basis. The subsidies are used to cover maintenance, equipment and supplies, and other costs associated with school upkeep. The community has formed several levels of councils to control education. The highest educational authority, the Ministry of Education, is the central or federal level. It organizes, subsidizes, and legislates for most educational matters. The second level consists of the Regional Council.
The third or community level consists of the Autonomous Council of the Flemish Community for Education (Autonome Raad Gemeenschap Sonderwijs, [ARGO]). It was created by the Flemish government as a result of the 1989 reforms and given the responsibility to oversee public education in the community (about 16% of the schools). ARGO is referred to as an organizing power in Flemish education. It's oversight does not extend to private education -- denominational or non-denominational. ARGO consists of two levels of authority, the Central Council and the local councils. The basic principles of ARGO focus on decentralization, democracy, and the need for individual accountability. The Central Council's purpose is to ensure that the community's goals are met. It is responsible for the school education plan, curricula, recruitment, school maintenance, and overall educational planning. The local councils are given enough authority to attain their prescribed goals within the schools in their locales. Teachers, parents, and members of the community at large comprise the local councils. Verhoeven (1992) believes a major problem exists as a result of reform initiatives of this nature, they have permitted politics to infiltrate the local councils. Local school councils were intended to organize ideologically neutral education, it was expected that members from the entire political spectrum would be elected (Verhoeven, 1992). In Verhoeven's estimation, local school councils have been polarized by political parties at the
expense of neutrality and inclusion. It is believed that
decisions by local councils are driven by a specific political
agenda. This could prove detrimental in the event ideology
takes precedence over the interests of the students.

Schools organized by the provinces and
communes (Gesubsidieerd Officiël Onderwijs) comprise about 13% of the Flemish community's schools. The remaining schools (70%) are operated as private schools (also referred to as independent, free schools, or Gesubsidieerd Vrij Onderwijs), and are subsidized by the community to cover salaries and funds providing they follow a curriculum approved by the Flemish Education Ministry (van Amelsvoort et al., 1995). Specialized committees associated with the private schools, and the schools of the provinces and communes, draw up syllabi and examples of teaching methods for voluntary adoption by most of these schools. The Decree of 21 March 1991 gave teachers in private schools the same legal status as those in public schools. Presumably, this Decree also extends to teachers affiliated with provincial or communal schools.

**Teacher Training**

In-service training for teachers of secondary education has been one area that was cited as needing a major restructuring (OECD, 1993). Beginning September 1997, the structure of teacher training has changed. Three phases of teacher training have been introduced: (1) initial teacher
training (for students who have not received any teacher training, this training is defined as a period for acquiring basic skills that will enable them to teach at the second and third stages of secondary education); (2) initial teacher training at the university level (for students who have received a diploma in a basic course at the university level); and (3) advanced teacher training, an opportunity to promote mobility in the teaching profession for those individuals who have completed initial teacher training (Ministry of the Flemish Community, 1996).

Teachers must meet specific qualifications in order to teach at the various stages of the secondary school. Those individuals wanting to teach at the first stage, also termed lower secondary, must receive three years of higher education teacher training at a Higher Pedagogic Institute (HPE), and obtain a diploma for lower secondary teaching (Diploma van geaggregeerde voor het lager secundair onderwijs). HPE's are distinct from comprehensive universities. Teachers in training at this level learn general content knowledge and technical subject areas. Field experiences are monitored by a mentor (an experienced teacher at the secondary level) and a supervisor from the HPE. Kelchtermans (1994) maintains that teachers in training use these opportunities to develop their own personal organized body of knowledge and beliefs about teaching, called "subjective educational theories" (SET) (p. 54). Integrating this information with content knowledge
will help teachers at this level develop their own professional character.

In order to teach at the third stage of secondary education, a teacher must be qualified at the higher secondary stage. Teachers with that qualification would be university graduates with four years of study and a teaching diploma for higher secondary education (licentiaat and a Diploma van geaggregeerde voor het hoger onderwijs). A teacher at the second stage can be either a lower or higher stage qualified teacher. All teachers' salaries are linked to the amount of educational training. Salaries for educators had been stagnant during the 1980s, which led to threats of strikes by the Flemish teachers. Pay negotiations in the early 1990s resulted in some increases. Yet, problems still persist in this area. Michielsens (1995) reports that the Flemish community is short of resources due to inadequate funding from the federal government to the regional authorities.

For those teachers entering lower secondary positions, they "must be at least 23 years of age, and have served 240 days as a temporary teacher" (Archer & Peck, 1991, p.70). Those individuals seeking a teaching position for the upper secondary stage "must be at least 25 years of age and have served 240 days as a temporary teacher" (Archer & Peck, 1991, p.70). Hiring regulations exist for all first year teachers. A successful probationary period of teaching can lead to a permanent appointment. Competition for jobs is tight and many
first time teachers must wait several years before receiving permanent placement. Probationary teachers are subject to inspection during their first year of teaching by both the head teacher (the principal) and the Inspectorate.

Reform efforts have not touched upon several crucial issues that are of concern to educators. Besides salary woes, teachers have been worried about job security, the lack of educational materials available, and the feeling their profession has lost prestige (Verhoeven, 1992; Kelchtermans, 1994; Michielsens, 1995).

In an effort to address some of the problems, the Inspectorate, referenced above in connection with the monitoring of educational quality, has established a department for developing educational programs that will offer help to teachers. Support services associated with this professional development have been devised to assist educators with their teaching objectives, creating syllabi, and developing assessment techniques to critique their teaching. Teachers are encouraged to "welcome" appraisals of their teaching efforts annually (OECD, 1993, p.64).

**Finance and Budget**

Decentralization of education in the Flemish community has given schools more decision-making power, especially in the area of finance and budget obligations. Originally, schools and their governing bodies did not have much say about
their budgets. The money given to schools was "ear-marked" by the Belgian government and had to be spent in accordance with a centrally set framework (van Amelsvoort et al., 1995, pp. 42, 50). After the reforms were instituted through the Act of 19 January 1989, schools have received lump sum distributions of money and the "flexibility and autonomy" to spend such for educational purposes (OECD, 1993, p. 21). The language community subsidizes all schools founded by the provinces, communes, and other public bodies, as well as private schools who meet the conditions prescribed by the law. These conditions specify that all schools must:

- use a pre-approved educational structure or have the Minister of Education approve the structure on an individual basis;
- use a recognized curriculum;
- have periodic inspections to ensure all subjects are being taught;
- meet all health regulations;
- have a minimum number of students;
- and have the essential teaching materials and equipment. (EURYDICE, 1993, p.10)

The Inspectorate is given the responsibility to oversee that each school provides a quality educational experience for its students.

Operating funds for one year are calculated on the basis of the number of pupils in attendance the previous year.
Funding for the public community schools is intended to cover the expenditures associated with teacher salaries, the maintenance of school buildings, heating and lighting, teaching materials, professional development, and other incidentals. Public schools (under the supervision of ARGO) are financed directly by the Flemish community. Private, provincial, and communal schools receive most of their funding from the community. Technically, because secondary schooling is compulsory, tuition is free. No fees are accepted. Yet, students may be required to pay some incidental fees (ex. the purchase or rent of textbooks and lunch).

According to a report by the Ministry of Education for the Flemish community (1996), almost 43% of their budget is spent on secondary education (p. 45). This is due to the fact that there are higher salaries at the upper secondary level, a broader range of areas of study that result in higher staffing costs, and a larger number of teachers to cover all of the subject areas. Projected funding problems may cause further restructuring within secondary education in the long term. Lack of sufficient capital for additional salary raises (although cost of living increases adjust automatically) may force some schools to consolidate their student populations (Michielsen, 1995). This in turn may affect the employment status of some teachers. In addition, class sizes and choice of subject offering could be affected as well. The Review of National Policies of Education: Belgium, conducted by
The OECD in 1993 cited that an "estimated 95% of all expenses incurred by subsidized private schools are met out of public funds" (p.29). The OECD mentioned that there were problems associated with the distribution of these financial resources. The state, and in turn the communities have been "accused of favoring their own schools by providing them with funds which on a per-pupil basis are thought to exceed the per capita grant awarded to subsidized schools" (OECD, 1993, p.29). Yet, the community has argued that because they educate more learning disabled students and that they are required to offer both ethical and religious instruction they require more funding "in order to operate under the same conditions as the subsidized schools" (OECD, 1993, p.29). As of 1998, changes are being planned to equalize the discrepancies that exist in funding.

**Multiculturalism**

The Flemish Executive Council is responsible for funding educational opportunities for children of immigrants. Within the Flemish community, slightly over 4% of the population originate from such areas as the Maghreb, North Africa, southern Europe, and Turkey (Michielsens, 1995). The children of immigrants are placed in a position where they need to become acclimated and fluent in the local language. In some urban centers within the Flemish community, pockets of immigrant neighborhoods have developed. This had led to
serious tensions between Belgian natives and immigrants. In an effort to defuse these tensions, cultural diversity education programs within the school system have been encouraged by the Flemish Education Ministry. This effort would provide additional class-time, student and career guidance, as well as teaching support to schools who launch these special programs. Schools located in areas with large foreign populations must attempt to make their environment appealing to these children and develop intercultural education programs to help all students, both Flemish and immigrant, acquire the skills and knowledge they need to function adequately in culturally diverse societies.

Starting in the early 1980s, some primary schools in Flanders experimented with a method known as "EOO" or "education by mutual encounter" (OECD, 1993, p. 61). This method integrated organized lessons in the language of the immigrants within the normal school environment and in the presence of native Flemish students. In 1991, a more coherent integrated policy that grew out of the "EOO" (referred to as the "Policy of Education for Allochtonous Students" or OVB), was developed to address the diversity issue and provide adequate guidance for underprivileged allochtonous students (ARGO, in press 1998). This policy calls for not only career guidance for these students, but the establishment of mentoring programs, and requires the involvement of the students' parents.
Another program that was planned to begin in 1992 offered two "social integration" models. The first, a "bicultural" model offered 50% of classes to be taught in the ethnic language and 50% in the Flemish language. The second, called a "supporting" model, offered 20% of the classes taught in the ethnic language and the remainder in Flemish (Verhoeven, 1992, p.106).

No matter what program or model is used, the Flemish community may need to reform its cultural diversity efforts, especially in light of the move towards integration between the entire European Union. As noted in Birzea's (1994) report for a Council for Cultural Cooperation Meeting held in Brussels in December of 1993, countries that "host" immigrants are "obliged to preserve the cultures of origin" (p.15) for the immigrants. In addition, Belgium, as well as other European nations must be sensitive to the worry that a "resurgence of nationalism" could result in a backlash against multicultural efforts (Birzea, 1994, p.15). Dealing with the issue of cultural diversity therefore, becomes a sensitive matter.
CHAPTER III
Curriculum

Historical Overview

Just prior to the 1988 educational reforms, curriculum and the educational structure in Belgium had undergone several changes. The traditional form of secondary education had been restructured in an effort to alleviate socio-cultural discrimination and to delay the need for student choice of specialization. Belgian educational policymakers reacted negatively to a traditional system that believed every child should be taught the same curriculum, that placed an emphasis on intellectual or technical education, that used evaluation as an instrument for selection, and that saw economic principles as the driving force behind education (Wielemans, 1991).

The negative reaction of the educational policymakers produced changes that stressed each student should be viewed as unique, thus necessitating a more individualized approach to curricula. These pre-1988 changes suggested using policies of flexibility and tolerance in the hope of reducing the student drop-out rate. They also emphasized the social principles of education rather than the economic, and stressed
that student evaluation was designed for both "self-orientation/selection" and "remedial feedback" (Wielemans, 1991, p.171).

By 1988, these particular changes were incorporated into a movement to deregulate and decentralize education throughout Belgium. As mentioned in Chapter II, both the development of a "unitary system" of education in the Flemish community, and student freedom to select the educational institution attended, have affected curriculum development. Competition for students among all schools has been heightened as a result of the desire to increase the schools' enrollment dependent budgets (Vandenberghe, 1992). With larger budgets, schools can offer a more varied curriculum.

Before the 1988 reforms, over 500 different subject options (electives) existed in secondary education, particularly in the technical and vocational tracks (Michielsens, 1995). Many of these options consisted of duplicate subject material using different course titles. With control for education being given to the language communities, the number of subject options was reduced and a uniform class title system was adopted to facilitate a more coherent, manageable, and cost-effective approach (Michielsens, 1995).
The Current Curriculum

As will be recalled from Chapter II, the "unitary" system for secondary education within Flanders consists of three stages: observation, orientation, and determination. The Decree of 31 July 1991, issued by the Flemish parliament, mandates these and their attendant curricular requirements. The observation phase is the first stage of secondary education and it requires all students in the language community schools receive the same basic training, on average twenty-seven hours per week in the first year, and twenty-four hours per week during the second year. Electives can fill the remainder of the thirty-two hour school week. Every school is free to set its own timetable, subject to ministerial approval. Humanities, native language, foreign language, mathematics, sciences, history/geography, physical education, art, and ethics or religious education make up the core offerings all students must complete during their first two years, irrespective of line of study. Options, such as remedial classes, are available for students with difficulty meeting established standards necessary for continuing to the next stage.

The Decree of 31 July 1991 does not specify individual subjects and the amount of time that must be spent on instruction during the second, or orientation, and third, or determination, stage of secondary education. General (ASO), technical (TSO), artistic (KSO), and vocational (BSO) lines of
education are explored and pursued at this time. All must take five hours of language training in the mother tongue, two hours of ethics and religious instruction, two hours of history, geography or social sciences, and three hours of sports. Subjects such as mathematics, foreign languages, physical sciences, art, and music, in addition to some technical and vocational subjects, can be taken as electives. At the completion of the sixth year, students can choose to take a seventh year of specialization in preparation for higher education.

The organizing authorities (the networks: ARGO, private [Free], or provincial/communal) for various schools hold the power to mandate the list of subjects required to be studied, define curricular guidelines, and specify the principles for developing all educational programs. Curriculum teams from each content area are empowered by the appropriate organizing authority. These teams, known as "working groups," consist of teachers, teacher educators, and subject specialists (van Amelsvoort et.al., 1995, p.16). The Flemish Minister of Education is responsible for approving all curricula, as per the requirement for receiving subsidies. The implementation of curricular guidelines, as well as the organization of course content (syllabi), and choice of teaching materials is left to the school and individual teachers.

"Attainment targets" are currently being developed and implemented within all phases of Flemish education. The
Ministry of Flemish Education has deemed the attainment targets to be "necessary for offering guarantees regarding the quality of Flemish education" (Ministerie van de Vlaamse Gemeenschap, 1997, p.6). These targets relate to the minimum aims that must be met by the majority of pupils in each stage and discipline. Specifically, the attainment targets relate to knowledge, insight, educational attitudes, and skills. Subject specific as well as cross-curricular attainment targets exist. These targets are devised by a scientific service of the Education Ministry, the Education Development Service (DVO) and are ratified by the Flemish Parliament. The attainment targets for the first stage of secondary education were executed on September 1, 1997. The targets for the second stage should be implemented in the near future. The third stage attainment targets are currently being written.

Assessment of student achievement is controlled by the individual schools. Generally, class councils comprised of each student's teachers meet in a staff meeting near the end of the school year and discuss whether the individual student is ready to progress to the next level, and whether any restrictions should be imposed on the student (Ministry of the Flemish Community, 1996). Those who do not pass must repeat the year. The head of each school chairs these assessment meetings. The decisions made are based on the student's previous school assessments, tests and examinations,
information provided by the PMS Center (guidance) and possibly on the information provided by parents and the student in question. Michielsens (1995) states that "each school must have a set of rules governing studies so pupils and parents know what assessment techniques apply at their school" (p. 31). Although no central standardized tests exist, schools have the ability to develop their own final exams. Many teachers in Belgium feel that required central exams result in student "cramming" and do not accurately represent the students' knowledge and skills (OECD, 1993).

At the completion of their studies, students can, depending upon their subject selections and success, receive a "certificate of secondary education," giving them access to a non-university higher education, or a Diploma van Secundair Onderwijs, certifying their ability to pursue university educational opportunities (OECD, 1993). Those successfully completing technical or vocational studies at the secondary level can become qualified in their area of study, and may either seek employment or further training at the non-university level.

The Effects of the Unification of Europe

A recent curricular area that has become increasingly important with changes in the configuration of nation-state power in Europe has been altered is the inclusion of a "European" dimension within education. The evolution of the
European Economic Community (EEC) from its original six member nations in 1957, to the present day European Union under the November 1993 Maastricht Treaty open to countries from central and eastern Europe, has created a need for intercultural education to be included in all European curricula. As the pace of monetary and political unification intensifies throughout Europe, the movement of labor, professional and blue-collar alike, across national borders has increased. The education of the children of these mobile workers is a task that continues to be of real concern to nations involved. Clearly, a call for globalizing education has been issued.

It is believed a European dimension can help create a society that is "economically, socially, politically, and culturally integrated" (Hellgren, 1994, p. 153). Hellgren (1994) suggests such integration within Europe can provide the native culture with "new opportunities to engage in dialogue within the community, and establish contacts with other parts of Europe and the world" (p. 153). He also indicates it can furnish themes for exploration such as "environmental, health, world peace and problems of the third world, tolerance and understanding of other cultures" (p. 147).

It is interesting to note that the Treaty of Rome (March 25, 1957), which established the European Economic Community and the Council of Europe, did not contain any supranational legislative powers in education. Nonetheless, the Council
has, through unanimous consent on several occasions, adopted non-binding policy statements. On 24 May 1988, the European Commission passed a Resolution (n. 14) that called for an enhanced treatment of the European dimension in education (Ryba, 1992). The resolution recommended seven major points of action to be taken at the level of member states and eleven points of action pursued at the level of the European Community. The main actions proposed included incorporating the "European" dimension in curriculum, emphasizing this dimension in teachers' pre-service and professional development training, promoting the creation of appropriate teaching materials, emphasizing this dimension in teachers' pre-service and professional development training, encouraging information exchanges between students and teachers of different nations.

The Belgian capital of Brussels is well known for its importance within the European Union. It is the seat of the EU, OECD, and NATO, as well as many multinational corporations and international economic, social, and political organizations. The inclusion of the "European" dimension in the Flemish community's educational curriculum planning is therefore of significance. Brussels is situated within Flanders, though technically it is considered to be a region unto itself and a bilingual city (Flemish and French).

In the Flemish community, history and foreign language curricula have been influenced the most by the inclusion of
the "European" dimension. Michielsens (1995) states that "every young Fleming (apart from pupils' receiving vocational education) learns two or even three foreign languages" (p. 34). French, English, and German are the most popular at the secondary level, with Spanish or Italian sometimes replacing German. It is interesting to note that an international education expert, Torsten Husen (1993), believes that English is now the first foreign language learned in more than three out of four countries and has "assumed the role of a 'lingua franca' in Europe and around the world" (p. 505).

In an effort to promote international integration, several academic foreign exchange programs exist within the EU for both teachers and students alike. European Union sanctioned education projects such as "Socrates" and "Leonardo Da Vinci", have prospered and been successful. A variety of materials are provided by the EU's Dimensions in Education unit office in Brussels to all interested schools.

One important potential benefit of including the "European" dimension in the Flemish curriculum, as well as in the general curricula of all countries, is the reduction of tensions resulting from cultural differences and misunderstandings. As mentioned in the multiculturalism section of Chapter II, Belgium has suffered from periodic bouts of ethnic strife. Since the early 1980s, the Council of Europe has stressed the need for all member states to teach about human rights, especially at the secondary level, when
schools are preparing students for outside life with others (Council of Europe Recommendation No. R. 83, 13). As recently as October 1997, the Second Summit of the Council of Europe proposed that all members cooperate in a program called "education for democratic citizenship." That program would teach, among other things, democratic values and practices, and human rights.
CHAPTER IV
Teaching Strategies

Teaching strategies within the classroom have been affected by the reforms of education in the Flemish community. The objectives of the "unitary system," which call for more individualization of learning and recognition of the differences between students, have required teachers to reflect on teaching styles. And, with the keen competition between schools for students as a result of freedom of choice in school selection, the exact way in which course content is delivered can become an influential factor in the school chosen.

The Flemish Education Ministry has stressed the need to incorporate a multimedia approach in the teaching of subject offerings (Ministry of the Flemish Community, 1996). Computer-assisted instruction is being explored and is considered experimental at this date. Almost all schools have on-site computer laboratories, audio-visual resources, and science laboratories.

The types of instructional methodologies employed in Flemish secondary schools can be varied. They are similar to the strategies used in American schools attempting to reform
their educational systems. Since Belgium does not require standardized examinations for entry into higher education, teachers can focus their attention on subject content and teaching styles while meeting the requirements outlined by the attainment targets. As mentioned previously, teachers are free to choose their teaching styles and are trained in a variety of methods (prevention, guidance, and support strategies) that can help combat school failure. As a result of the reforms in education, learner-centered pedagogy has also been stressed in the training process for teachers. Kelchtermans (1994) states that teachers need to "connect the contents of their own discipline to those of others in order to help students come to an integrated understanding" (p. 54). Pupil to pupil, and pupil to teacher interactions, discussion, dialogue, and argumentation are methods being recommended to teachers in order to facilitate engaging students in the learning process (Kelchtermans, 1994).

A review of the literature regarding the use of teaching strategies in Belgium and, specifically in Flanders, has produced studies offering some interesting observation about the strategies currently being employed. Waeytens, Lens, & Vandenberghe (1997) have studied the use of the "learning to learn" strategy within Flemish secondary schools. "Learning to learn" is a method used to teach students how to study and requires students to develop higher order cognitive skills. Waeytens et.al. found that many Flemish secondary teachers use
"learning to learn" in three different ways. First, as a supportive function to improve student grades by teaching the efficient processing of subject content. Secondly, as a remedial function, to help solve and rectify learning problems. And thirdly, as a developmental function, a method that makes learning student-centered and teaches the processing of new information. Waeytens and the other researchers' investigations indicate that only the first of these three functions has been employed in a widespread manner.

Goethals (1997) examined the teaching of English in Flanders. According to his investigation, the recent trend in the textbooks is toward a more "communicative approach," which utilizes conversational activities, and task-based learning, utilizing a variety of exercises or tasks to learn content. However, it is his view these strategies are not actually being employed in the classroom. Nonetheless, audio-visual media and role-playing have been incorporated into instructional methodologies since the mid 1970s.

Van Oost, Csincsak, De Bourdeaudhuij (1994) conducted a study regarding the teaching of sexuality education in Flanders. Their research disclosed that teachers utilized recitation, discussion, and lecturing as the primary teaching strategies. Audio-visual aids, as well as printed materials, were also used. Teachers felt more comfortable in providing information and discussing attitudes, norms and values, than
in employing role-playing activities and group work. Given the sensitive nature of the subject matter, this is perhaps explicable.

Visits to several Flemish secondary schools during the final weeks of school in 1998 revealed that many teachers still rely on the standard lecture method. Yet, some innovation in teaching strategies is occurring. Discussion as a strategy for comprehending subject material is being encouraged. Cooperative learning exercises are being pursued. Integrated curricular projects (combining several subjects and taught as a single focused theme) are being explored in some schools.

Perhaps, one of the most interesting strategies witnessed in a community school was the "Freinet Method". This methodology has been used at the elementary level for decades. Yet, it is gradually making its way into secondary education. Freinet's educational doctrine stresses the need for "democracy in the classroom, ... practicality, interaction with nature and life, and work that is meaningful for the students" (Lee, 1983, p. 100). It is Freinet's tenet that "children achieve success in learning from a curriculum based on their individual needs and interests, and where they are active participating members of a cooperative educational community" (Lee, 1983, p. 99). At the Koninklijk Atheneum Redingenhof in Leuven, an inaugural class in the first year of the first stage of secondary education has been taught using
the Freinet method. An individual classroom has been designed to accommodate this technique. According to Freinet, teacher-created tools and techniques must be devised for use in the classroom, for who else should develop these but the practitioners who would use them the most. The students remain in the classroom while the subject area teachers are the ones who do the traveling. The teachers' role is to act more as guides than lecturers, while students work cooperatively and as peer tutors with one another.
CHAPTER V
Integration of Technology in Education

A Brief History of Computer Technology in Flemish Schools

The integration of computers in Flemish schools initially was directed at only technical areas of study. During the 1970s, "familiarization" was cited as the primary purpose for the inclusion of computers (OECD, 1993, p. 61). By the 1980s, some Flemish secondary level teachers had received personal computers for their classrooms. These were to be used as tools for "testing acquired knowledge or intellectual skills" (OECD, 1993, p. 62). With the establishment of the "information age" during the 1980s and 1990s, and the importance of developing a competitive global economy, both "familiarization" have expanded to include the need to prepare children for opportunities in the twenty-first century.

In 1985, the Flemish community published a five year plan based on the progressive development of information technology skills during the three cycles of secondary education. The plan called for all students to acquire basic computer knowledge, and required that a general introduction on the use of computers be taught before the end of students' compulsory
schooling. Since 1989, the Department of Education for the Flemish community has supported this plan both financially and through policy initiatives. All secondary schools are required to provide at least one classroom for the use of teaching information technology.

A study conducted by Plomp & Pelgrum (1991) on computer usage in lower secondary education collected data on Flemish Belgium during 1989. The research found that in the Flemish community six reasons explain why computers have been introduced at the secondary level (Plomp & Pelgrum, 1991, p.255). In order of their importance the reasons are: 1. Computers give students experience for the future; 2. Teachers are interested in computers; 3. Computers keep curriculum methods up-to-date; 4. Computers make school more interesting; 5. Computers improve student achievement; and 6. Computers promote individualized learning. Students received a significant amount of their computer education in separate courses specializing in computer technology. However, they also learned about computers in relation to mathematics, and in general broad-based technology courses.

Plomp & Pelgrum's study also indicated that the software used by schools was designed for drill and practice, tutorial programs, and word processing. Limited subject area software covering mathematics, informatics, foreign languages, and commercial studies was used within the lower secondary schools in the Flemish community. Complaints associated with the
integration of computers at the local level included the lack of software for specific subject instruction, the non-adaptive character of software, the lack of availability of hardware, limited computer access for students, time management problems, limited resources, overall high costs, and staff training problems (Plomp & Pelgrum, 1991; OECD, 1993).

With the 1988 adoption of the policy of educational decentralization in Belgium, it is not surprising to find that school authorities in the Flemish language community have been the driving force behind the integration of computer technology in Flemish schools (Plomp & Pelgrum, 1991). School principals have taken on the role of agents of change in regard to technology implementation. Positive experiences with computers are likely to heighten the integration of that technology within the classroom (Plomp & Pelgrum, 1991).

Teachers have also played an instrumental role in integrating the new information technologies in the classroom. The effective use of computers often depends on a teacher's initiative and commitment to utilize technology in order to advance learning. The amount of training a teacher has had can affect their commitment. Training is a continuous and expensive process. In the Flemish community, much of the training had been run either by the inspectors for the particular subject or on an extra-curricular basis training, where previously trained teachers train their colleagues. According to the OECD (1993), media and information technology
courses have been incorporated into pre-service teacher training in the Flemish community since 1985 for those teachers who were preparing to teach the second cycle of secondary education (p. 62).

Recent Developments in Technology Integration

Within the past few years, many schools and teachers in the Flemish language community have gone beyond the original framework established by the Department of Education during the 1980s, especially in developing elaborate and far-reaching information technology projects. In January 1996, "Scholen Internet Project" (SIP) was launched. SIP is a collaborative effort of nine Flemish schools in western Belgium. Together they share a website homepage on a common Internet server. The objective of the project is to make optimal use of financial funds by spreading-out the costs of hardware and software. Since financial costs for computer technology has generally been incorporated into the schools' budgets or included within operating grants issued to subsidized schools, this project makes good economic sense for schools attentive to financial concerns. The SIP encourages the sharing of information know-how, creates a catalog of educational websites of interest, focuses on providing a forum for discussion on education, and promotes E-mail functions.

"EDU Internet Flanders" is an equally recent project for teachers in the Flemish community. Through the use of E-mail
and Internet websites, teachers are able to share teaching and learning strategies while encouraging communication and cooperation. The EDU website has been designed to acquaint teachers with the Internet and to help them make use of its educational potential. It lists teachers according to subject area, and currently links fifty-three schools with web homepages.

Personal, on-site investigations within the Flemish language community's secondary schools revealed several major points about the integration of computer technology. First, every school has the freedom to develop their own technology plan. At the O-L-Vrouwe College in Tienen, foreign language teachers are integrating computer technology within their curriculum. Students are researching and writing projects in the target language on topics pertaining to their subject area.

Secondly, many of the larger secondary schools have multiple computer labs that are being used for introducing computers to students. Currently, few schools have access to the Internet, yet those that do are utilizing the potential of the information superhighway. Two schools that were visited as part of the research for this paper had won international awards for their participation in several Internet projects (exs. "the Globe Project" and "the History Timeline Project"). Student involvement in projects such as these broaden the skills and knowledge of the Flemish students as well as giving
students around the world access to information regarding the Flemish educational system. According to Collis and de Vries (1994), the application of communication and information technologies to education can help "stimulat[e] a European dimension in education and training and bring[] more flexible and equal access to educational opportunities throughout the European community" (p.83).

Finally, access to state-of-the-art computer technology, software, and the Internet is increasing. Recently, the Flemish Parliament voted to provide one new computer for every fifteen students in each school during the next school year. There after, the Parliament has declared that one computer will be purchased for ten students in each school.
CHAPTER VI

Conclusion

The reforms that have occurred in the Flemish Community as a result of the deregulation and decentralization of secondary education in Belgium during the late 1980s have had few, if any adverse effects on the system. Perhaps the term "devolution" might be more appropriate in describing the type of decentralization that has occurred here. The central authority has given the responsibility of education to the Flemish Community. The community through such networks as ARGO have in turn given more but not complete autonomy to the local levels of the education system (the schools). In addition, the fundamental principles of democracy so cherished by Belgians and freedom of choice have been maintained. The involvement of local authorities, school administrators, teachers, and parents in the governance of their schools attest to the success of the program in principle. As the local groups gain competence and experience in handling responsibilities successfully, it is conceivable that more decision-making opportunities will be granted to them. This may be dependent on whether political motives can be kept checked and all groups have equal participation.
To say that the reforms did not compromise the pre-existent strengths of the Flemish education system, says nothing, however, about the causative factors for that strength. Perhaps several potential reasons might exist. One might be the fact that the Flemish community spends over forty percent of its total budget on education which results in per pupil spending that is among the highest in the world. The portion given to secondary education is divided among the four lines of study. Technical education requires more investment than any of the other lines. Yet, students from all lines perform well on the international standardized tests. Therefore, the success of the Flemish education system may be in part, attributable to the generous financing of education.

The importance of strong academic training and skills in pedagogy for teachers must be considered in evaluating the causes of the success of the system. Opportunities for educators to develop innovative and constructive teaching strategies to fit the needs of their students and subject matter have opened up as a result of more autonomy being given to the schools. In addition, a strong curriculum that sets high expectations for students combined with teachers who are viewed as professionals, should produce knowledgeable and competent students who possess the critical thinking and problem-solving skills that are necessary to compete in a global workforce.

The results from a recent survey of twelve countries'
public attitudes toward secondary education (Pearson, O’Neal, Salganik, & McMillen, 1997) revealed that Belgians attached more importance to the teaching of the native tongue, foreign languages, and mathematics than any other subject area. The studying of information/computer technology was not viewed as important. This too may contribute to the success of the educational system. Yet, as the schools in the Flemish community acquire more technology (as promised by the Flemish Ministry of Education) and have the opportunities to become more globally connected, this emphasis may change. Whether this will eventually affect the academic standing of students remains to be seen.

Two newer additions to the Flemish system may at some point in time add to the quality of education. These are the attainment targets and reforms in teacher training. Though some observers may reference these as contributing to the existing success of Flemish education, they seem far to recent to be in a position to have played such a role. Enhancing teacher training and the attainment targets for the first stage of secondary education came into effect on September 1, 1997. The attainment targets for the other two stages of secondary education will be implemented at a later date.

Whatever the factors are that have combined to produce a sound educational system such as that found in the Flemish community may never be positively identified. Yet it is reassuring to note that considering Flemish general secondary
education's past and present performance, one can only believe that the future beyond the reforms looks promising.
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Title: AN APPRAISAL OF THE EFFECTS ON SECONDARY EDUCATION OF THE REFORMS OF THE LATE 1980s IN THE FLEMMISH COMMUNITY OF BELGIUM: QUALITY MAINTAINED

Author(s):
Catherine Lee Wade, Zedalis

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**Signature:**

Catherine L. W. Zedalis

**Printed Name/Position/Title:**

Catherine L. W. Zedalis

**Organization/Address:**

University of Tulsa Graduate School

**Telephone:**

918-748-0489

**Home Address:**

9020 E. 42nd St.

Tulsa, OK 74135-2738

**E-mail Address:**

zedaliscl@centum.uth.tulsa.edu

**Date:**

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