

TECHNICAL AND VOCATIONAL EDUCATION: CHALLENGES TOWARDS YOUTHS EMPOWERMENT IN KANO STATE-NIGERIA

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ABSTRACT

Technical and Vocational Education System in Nigeria is designed to produce competent craftsmen for different sector of the economy who are expected to secure employment, become self-employed as well as employ others after graduation. Though, so many models were employed towards the development of work-related knowledge, attitudes and skills, however, the development of skills for the training of such personnel have not been successful in recent years. The research was conducted using qualitative method with ten participants interviewed (five principals and five heads of department) of technical colleges in Kano State. Content analysis technique was employed in the analysis of data collected from the interviews. The result obtained from the study shows that, the curriculum of Technical And Vocational Education is adequate in terms of content and also covers the skill element needed but it is lacking in terms of implementation towards achieving the desired national goals. The curriculum favors technical colleges to be operated as training institution for the graduates to further their education but not for employment as designed by the policy because of the fewer number of practical periods allocated for the trade subjects. The study recommends for the provision of adequate training facilities as well as training and re-training of teachers for effective skills development for employment.

Keywords: *Technical and Vocational Education, youth empowerment, skills development*

1. INTRODUCTION

Technical and Vocational Education (TVE) is described as the training of individuals for the implementation of technological development of a nation by providing the citizens with the right skills necessary for employment Alam (2008). The contributions of technical and vocational education in any country in the world today is enormous, hence it plays a very significant role on the national welfare. The program enlisted among others ranging from welding and fabrication, mechanical/automobile technology, electrical/electronic technology, woodwork and building technology etc. Technical and vocational education serves as a catalyst for economic, social and political changes of a nation due to its uniqueness in nature (Uwaifo, 2010).

Technical and Vocational Schools in Kano state are faced with the challenges of improving the capacity of their workforce to respond to the national development needs and the demands of a rapidly changing, more globally competitive world. The future success of nations, individuals, enterprises and communities increasingly depends on existence and possession of transferrable and renewable skills and knowledge. Many, both in the developed and developing countries recognize the important role that TVE plays in equipping individuals with relevant skills and knowledge, hence enabling people to effectively participate in social, economic and technological innovation processes. The globalization process, knowledge economy, advances in technology and increased competition due to liberalization are major forces driving change in the world of work. These have important implication for the demand of skills, human resource development and training (UNESCO, 2008).

Uwaifo (2010) observed that, societal problems are expected to be solved by technology in sustainable ways through a sufficient knowledge of technical and vocational education in terms of concepts and application of theoretical principles in order to solve practical problems. This challenge has been facing by Nigeria over decades for its inability to this task which has characterized the country as a low level nation in terms of technology and also classified as developing nation. The ill-equipped program has resulted in producing insufficient trained personnel and ill-equipped technical and vocational education graduates. He further states that, the curriculum of technical and vocational education is based on foreign model which cannot easily be duplicated in developing country like Nigeria. Shortage of competent supporting staff, lack of basic textbooks that could illustrate local examples for better understanding of the students and the overloading of the curricula which is more academic with purely science and mathematics contents instead of basic engineering and technology. This results in inadequate preparation of students with business and entrepreneurship concepts and skills. The teaching methods adopted by the teachers in transferring the knowledge are so conventional where teachers only read out for students to take notes. In the same vain, Adebessin (2006) reviewed the present state and focus of technical and vocational education in Nigeria and mentioned that, the educational system has continued to produce more of individuals who lack job skills and attitudes for employment than those that the economy requires to remain vibrant.

On April 2, 2009, the honorable minister of education at an official ceremony in Abuja delivered an address titled “Nigeria: Education Roadmap” and states that:

“TVET is to be a top priority of his education agenda because of its importance to the realization of vision 2020. Nigeria’s ability to realize its vision of becoming one of the 20 top economies of the world by the year 2020 is largely dependent on its capacity to transform its population into highly skilled and competent individuals. Many advanced economies place a great emphasis on the knowledge and acquisition of technical and vocational skills. Unfortunately our society places a stigma on this type of education, showing a preference for academic track disciplines. Now we are at the point where we are importing labor from all over the world because we do not have Nigerians with the adequate skills to meet the demands of the labor market, such as good artisans”. (Vanguard Newspaper, Thursday, 02 April, 2009).

It is therefore paramount for the Nation to refocus on education, skills development and technical training which are central to economic and technological developments in order to achieve the stated goal. Hence, developing youths with skills will improve output, quality, diversity and occupational safety and improved health, thereby increase incomes and livelihood of the citizenry. It also helps to develop social capital and strengthens knowledge about informal sector associations, rural organizations and governance (Hartl, 2009). The knowledge of technical and vocational skills is the prime mover of economic and social development of any nation; therefore, investment in human capital is an investment for the future of any country. Therefore, skill development and training is central to youth empowerment and enable the youths to be prepared for work in a formal and informal sector of the economy and thus play important role in employment opportunity (Alam, 2008). To this background, the study seeks to explore the challenges facing technical and vocational education in terms of youth empowerment in Kano State.

1.1 Objectives of the Study

- (i) To understand the extent of curriculum implementation towards developing skills for youth empowerment in Kano State
- (ii) To explore the challenges faced in terms of skills development for youth empowerment in Kano State

1.2 Research Questions

- (i) To what extent is the curriculum implementation towards skills development for youth empowerment in Kano State being achieved?
- (ii) What are challenges faced in terms of skills development for youth empowerment in Kano State?

2. LITERATURE REVIEW

2.1 The National Policy on Technical and Vocational Education in Nigeria

In Nigeria, “technical and vocational education at secondary school level is designed to prepare individuals with the knowledge and skills for the purpose of earning a living (employable, self-employed or an employer of labour)” (Onyene, Olusanya, Salisu & Johnson 2007:5).

The policy states that, the goals of technical and vocational education shall be:

- (i) to provide trained manpower in the applied science and business particularly at craft, advanced craft and technical levels;
- (ii) to provide the technical and vocational skills necessary for agricultural, commercial and economic development;
- (iii) to give training and impart necessary skills to individual who shall be self-reliant economically (NPE, 2004:30).

In pursuance of the stated goals, the national policy on education further states that: ‘the trainees completing technical college programs shall have three options’:

- (i) Secure employment at the end of the whole course or after completing one or two modules of employable skills.
- (ii) Set up their own business and become self-employed and be able to employ others;
- (iii) Pursue further education in advance craft/technical program and in post –secondary (tertiary) technical institutions such as science and technical colleges, polytechnics or colleges of education (technical) and universities” (NPE, 2004:31).

Technical and vocational education system in Nigeria is designed to produce competent craftsmen for the different sector of the economy who are expected after graduation to be able to test, diagnose, service and carryout repairs as specified in the national curriculum which was adopted by all technical colleges across the country and accredited by National Board for Technical Education (Olayinka and Oyenuga, 2010).

2.2 Status of Technical and Vocational Education across the Globe

For the purpose of preparing the students for labor market, almost all the high schools operating in the United States offer introductory courses such as technology education, introduction to computers and word processing. About 75% of the students of high schools in the US today offer one or more specialized courses/programs for labor market preparation such as technical and communication, health occupation, business and marketing, agriculture, trade and industrial education, child care etc. The country’s workforce today is having less than 20% of unskilled workers (Lynch, 2009). In China for instance, there is still an extensive system of vocational institutions and different types of skills programs supported by the government. Central to the different models of provision is the country’s vocational qualification and skill assessment system. There are five of the following levels: junior, intermediate, senior, technician and senior

technician grades. However, out of 70 million skilled workers in China, 96 % are in the junior and intermediate grades. When it comes to training institutions the major providers consist of technical schools, vocational schools and technical secondary schools, all of which are supported by Employment Training Centers. These institutions are formal in every region and municipal city in China, providing various types of social training for the unemployed, many of whom are either retrained or new entrants to the labor force. There are estimated to be around 17 000 such institutions across China. Besides the training institutions, China has an extensive range of training programs for pre-employment, on-the-job and support for those between jobs (i.e. retraining). The government has also implemented a program called Preparation Training for Youth (Hao, 2010).

Hong Kong covers a small geographical area and economic success has partly been based on developing the skills and competencies of its people. The largest provider of skills in Hong Kong is the Vocational Training Council (VTC). The VTC is a tripartite body representing the interests of employers, employees and academics. The focus is on pre-employment training and programs of study lead to emphasis on developing practical competencies, with 70% of the time spent on practical activities and the remainder 30% on theory. An estimated 160 000 young people graduate from the VTC each year. In the past emphasis has been given to pre-employment training, but in response to the changing demographic trends, courses are being developed for older people in employment (Martinez-Fernandez and Powell, 2009).

In Nigeria, Technical and Vocational Education and Training (TVET) also delivered by various types of institutions at different levels, these institutions include technical and vocational schools, vocational centers, polytechnics, apprenticeship training centers and enterprises which are delivered by public and private institutions. From the national policy on education, students are required to proceed to technical schools or senior secondary schools based on their performance after three years of junior secondary school education. It also requires the students at senior secondary schools to spend another three more years of study. The general objectives of the program is to provide skills to individuals in order to be self-reliant as well as gain employment with public or private sector of the economy (Afeti, 2007).

2.3 Technical and Vocational Education (TVE) Practice in Nigeria

Nigeria adopts the secondary comprehensive or diversified model which is being offered commonly in secondary schools within United States and Sweden. The program is designed to give opportunity to graduates of vocational training school as well as academic secondary schools to either go for higher education or for labor market. In a general term, students enroll vocational stream after junior/lower secondary education at the age of 9-12 years which is referred to as the basic education. However, towards the end of 1970, the 6-3-3-4 system type of education was introduced by the government in order to correct the anomalies occurred from the last commission's recommendations and focus on training of students towards skilled-oriented program (Adebisin, 2007). The educational policy is the soul bane of the entire educational system of a country with a specific reference to the structure of the curriculum. The country had experienced three different changes in few decades in the educational policy; these changes that

occurred of recent times were the 9-5-4 system, which means a child will spend nine years in primary, five years in secondary and four years in tertiary institutions.

In the same vein, Ofoha, Uchehgbu, Anyikwa and Nkemdirim (2009) explained that, in 1982, Nigerian educational system witnessed the full implementation of the new 6-3-3-4 system of education that emerged with variety of reforms. The reforms brought about the introduction of vocational subjects in curriculum of secondary schools in Nigeria, this include the pre-vocational subjects to be offered at junior secondary schools and the vocational subjects to be offered at senior secondary school level. The main purpose of pre-vocational subjects at junior secondary schools was to expose the students into various vocational areas of technology for them to appreciate and develop future career towards the area of technology. Pre-vocational subjects offered at junior secondary schools include Introductory Technology which comprises of components such as woodwork, metalwork, applied electricity, basic electronics, automobile, basic building, etcetera. There are also subjects under pre-vocational which include Agriculture, Business and Home Economics. The 6-3-3-4 system of education which provides six years of primary education, three years of junior secondary school, three years of secondary school and also four years of tertiary school. The policies were incessantly changed at a mid-way by abandoning the existing policy and jump into another one without conclusion. It is also considered to be a system that discourages practical activities and support memorization of theory as it only favors cognitive domain over other domains. The current system of education in Nigeria is focused towards training individuals with a cultural orientation rather than equipping them towards problem-solving approach (Bolaji, 2007). Nigeria as a nation that aspire to develop technologically and provide employment to its citizens, it is now the right time to empower and inculcate into our youths the culture and attitude of technical and vocational skills through proper implementation of TVE. Implementation of technical and vocational education in this area requires a holistic approach that takes into consideration the curriculum content, teaching method, teaching materials, machinery and equipment as well as industrial participation with emphasis of digging down into the basics of TVE which has suffered from a focus on the basic at post-primary level in Nigeria.

One aspect of the educational change is attached to the curriculum in which the teaching and learning process must be directed towards society and individuals. The curriculum of a country serves like a national constitution and should prepare the citizens to be useful and productive. (Rout, Prisyadarshani, Hussin, Pritinada, Wan Mamat and Zea, 2010). Curriculum delivery in the teaching and learning was recognized by Van Tassel-Baska and Stambough (2008) as a process that require a very careful selection of materials and models over time in which the students are likely to comprehend and digest the processes inherent to each model so that their thinking can be directed towards positive ideas automatically and also be able to transfer new learning situations with ease. Currently, the focus and process of education in Nigeria is too mechanistic, using the lecture method which do not promote or encourage entrepreneurial behavior. The selection of good teaching method by the teacher in a particular situation enables the teacher to achieve specific goals towards the set activities (Kennedy, 2011).

The main goals for teaching technical and vocational education is to teach students the theoretical and practical skills in order to equip the students with necessary knowledge of their various trade areas, but this is not done in our schools today (Omo-Ojugo and Ohiwerei 2008). The use of irrelevant teaching techniques has taken a stand towards teaching and learning, which is focused on rote learning and “memorization and regurgitation of facts” are currently the dominant method employed in technical and vocational education subjects in the country (Oduolowu, 2007). For educational system that adopt such type of method, will dampen the creativity spirit of the students as well as decision making and problem solving ability. Teaching approaches that will make students to be tolerant, cooperative, to have self-expression and self-reliant is highly recommended for the teaching of skilled subjects (Ajibola, 2008). The teaching and learning methods should be aimed at the needs of the child and should also made possible for the child to understand the subject matter very well. Teachers should know that the main idea of teaching is not to quantify how much can be remembered by student but should be how the student understand the phenomenon, should also be able to deduce meaning from what the learner understands as well as making meaning and applying the knowledge for the benefit of mankind. Good teaching method provides useful information and activities to students in order to discover facts by the students for them to make meaningful contribution to the learning activities. It also takes care of various categories of learners such as those below average, average and those above average (NOUN, 2008).

3. METHODOLOGY

The research was conducted using qualitative method which utilized interview with the participants. The researcher used content analysis technique in order to analyze the data from the interview conducted. The data analysis from the audio-taped interviews was done upon receiving the data. Semi-structured interview was conducted with five selected heads of departments as well as all the administrators of Technical/Vocational Schools and one principal of craft school in Kano state. Purposeful sampling technique was employed for the selection of the participants among the five technical schools in order to explore the challenges towards youth empowerment in Kano state-Nigeria.

4. RESULTS

Table 1 shows the data codification in terms the main idea, codes and frequency of the main idea.

Table 1: Data Codification

<i>Questions</i>	<i>Main idea transferred as key word(s)</i>	Code	Frequency of Main Idea
Question 1: From you own position and perspective how will you describe the state of technical and vocational education in terms of skill development in the country?	Skill development in Nigeria is high.	A1	-
	Skill development in Nigeria is low	A2	10
Question 2: Are the human resources needs of the country being adequately met?	Human resources are adequately met in Nigeria.	A3	1
	Human resources are not adequately met in Nigeria.	A4	9
Question 3: From you experience as a teacher, are you convinced that your SS3 students are equipped with technical skills, Entrepreneurship skills and Employability skills to be able to handle jobs in public and private sectors?	Students are equipped with skills to handle jobs and be self-reliant.	B1	1
	Students are not equipped with skills to handle jobs and be self-reliant.	B2	9
Question 4: What are you views now on technical and vocational education at secondary school level in terms of curriculum implementation?	The curriculum is quite okay in terms of implementation.	C1	3
	The curriculum is not okay in terms of implementation.	C2	7
Question 5: Could you please tell me whether the curriculum has covered the areas of technical skills, employability skills and entrepreneurship skills?	The current curriculum covers all the skill areas.	C3	7
	The current curriculum does not cover all the skill areas.	C4	3
Question 6: Do you think the technical and vocational education at secondary school level as preparation for employment or just for opportunity for students to pick a career?	Technical College graduates are trained for employment.	C5	2
	Technical College graduates are trained for career.	C6	8
Question 7: What is your opinion on the adequacy of teaching materials, equipment, infrastructure and other teaching aid in your school?	Technical colleges are provided with adequate and up to date equipment and facilities.	C7	3
	Technical colleges are not provided with adequate and up to date equipment and facilities.	C8	7

<i>Questions</i>	<i>Main idea transferred as key word(s)</i>	<i>Code</i>	<i>Frequency of Main Idea</i>
Question 8: What method of teaching do you and your staff adopt in the teaching of their subjects?	Demonstration method Students' centred method	D1 D2	7 3
Question 9: Is the time allocated for the teaching of technical subjects adequate to cover the syllabus?	Time allocated for the teaching of technical subjects is adequate. Time allocated for the teaching of technical subjects is not adequate.	D3 D4	- 10
Question 10: How about adequate funding from the government and other agencies?	The government provides adequate funds for the running of the colleges. The government does not provide adequate funds for the running of the colleges.	E1 E2	2 8
Question 11: How can you describe the contributions of industries in terms of finance and equipment?	The colleges receive support from the industries The colleges do not receive support from the industries.	F1 F2	1 9
Question 12: In your opinion, do you have any other factor that hinders the effective implementation of technical and vocational education apart from the ones you mentioned?	Any relevant comment as related to implementation of technical and vocational education in Nigeria.	G	10

*A-G = Codes for the sub-themes

5. DISCUSSIONS

The most important aspect for the success of youth empowerment in Kano State is a well-planned, articulated and implemented curriculum that is designed to be taught and learned in schools for the purpose of elevating social consciousness and brings about economic viability. The result obtained from this study shows that, the curriculum of Technical And Vocational Education in the country is adequate in terms of content and also covers the skill element needed but it is lacking in terms of implementation towards achieving the desired national goals. The curriculum favors technical colleges to be operated as training institution for the graduates to further their education but not for employment as designed by the policy because of the fewer number of practical periods allocated for the trade subjects. Likewise, the curriculum of the newly created craft schools in the state is grossly inadequate to have trained students for employment based on the syllabus and age of the students. The time allocated for the conduct of both theory and practical classes are grossly inadequate for them to cover the needed areas provided by the curriculum of craft schools.

The findings show that in previous years, more time was allocated for the trade subjects in technical schools which represent about 70-80% of the time allocation but due to the

introduction of so many general subjects, the periods were reduced and taken away from the allocation given to the earlier trade subjects without any compensation. This agrees with the findings of Onyene, et al (2007) which affirmed that the current curriculum used by technical and vocational education is very much relevant for the training of skilled oriented students for the purpose of national development and self-employment but it is more of theory than practical aspect. In another research conducted by Dike (2009), he lamented that, the failure to meet with national development needs is attributed to the theory-based curriculum in Nigeria as the students are mostly exposed to theory without practical. He concluded that, even the half-baked roadside craftsmen are more equipped in terms of practical skills than the graduates of higher technical institutions in Nigeria.

It is evident that for a country to achieve its national goals for industrial, economic, political and social life-styles emphases should be given to the development of technical and vocational education at all levels. From the results obtained by this study, the policy has failed to realize the first two options due to the inclusion of more general subjects in the system which took over the trade and practical subjects in technical colleges in the country.

For the technical colleges, the results of this study affirmed that students enrolled into technical colleges after junior secondary schools at the age of 15-16 years. They are also expected to complete their study within 3 years of high school in which they are expected to directly go to labor market for employment or set-up their business without any further re-training as applied in most of the developed and developing countries. This has tremendously affected the system and also contradicts the goals of Technical And Vocational Education as stipulated in the national policy on education due to the nature of the current curriculum which is more of general subjects and did not favor skill acquisition. One begins to wonder how the graduates of such institutions could be self-employed without proper skills in their various fields after graduation. However, Ajibola (2008) believed that, copying models in the design and construction of a functional curriculum has always been un-successful to many countries. He therefore, lamented that, models are unique to different countries settings and requires the needs of that particular societies. Therefore, Nigeria should develop its own model that will suit its system.

6. CONCLUSION

Kano state that aspires to train students to acquire knowledge and skills in order to empower its youths for self-employment needs to consider some relevant factors as indicated in this paper. It is now the right time to inculcate into our youths the culture and attitude of being self-reliant through proper implementation technical and vocational education. Implementation in this area requires a holistic approach that takes into consideration the curriculum content, teaching method, teaching materials, machinery and equipment as well as industrial participation.

7. RECOMMENDATION

- i. The state government should provide adequate facilities for the training of youths towards employment.
- ii. Adequate time should be allocated to subjects that require practical
- iii. Training and re-training of teachers should be organized in order to update their knowledge and skills.

References

- Adebisi, M.A. (2007). Adequacy And Utilization of Training Materials as Correlates of Technical/Vocational Students' Employability in Nigeria. *Towards Quality in African Higher Education* P.367
- Adebesin, J.B. (2006). *An in-depth Review of the Present State and Focus of Technical and Vocational Education in Nigeria*. In the proceedings of the Conference of the Nigeria Association of Teachers of Technology (NATT). Lagos: Fembis international. 117-120.
- Afeti, G. (2007). Technical and Vocational Education and Training for Industrialization. Retrieved on 18th October, 2011. Available:<http://www.arrforum.org/publications/documents/Afeti%20Technical%20Education.pdf>.
- Ajibola, M. A. (2008). Innovations and curriculum implementation for basic education in Nigeria: Policy priorities and Challenges of practices and implementation. *Research Journal of international studies*, 8(5), 51-58.
- Alam, G.M. (2008). The Role of Technical and Vocational Education in National Development of Bangladesh. *Asia-Pacific Journal of Co-operative Education*, 9(1), 30-33.
- Babalola, J.B. (2003) Budget Preparation and Expenditure Control in Education. In Babalola J.B. (ed) Basic Text in Educational Planning. Ibadan Awemark Industrial Printers.
- Dike, E.V. (2009). Addressing youth unemployment and poverty in Nigeria: A call for action, not rhetoric. *Journal of Sustainable Development in Africa*, 11(3), 130-133.
- Hartl, M. (2009). Technical and vocational education and training (TVET) and skills development for poverty reduction – do rural women benefit? International Fund for Agricultural Development, Italy Paper presented at the FAO-IFAD-ILO Workshop on Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty Rome, 31 March - 2 April 2009.
- Hao, Y. (2010). China's Vocational Education and Training: The Next Key Target of Education Promotion. Retrieved on 6th September, 2012. Available at: <http://www.eai.nus.edu.sg/BB516.pdf>.
- Kennedy, O.O. (2011). Reappraising the Work Skill Requirements for Building Technology Education in Senior Secondary School for Optimum Performance in Nigeria. *European J. of Applied Sciences*, 3(2), 46-52.
- Lynch L. R. (2009). New Directions for High-School Career and Technical Education in the United States. International Handbook of Education for the Changing World of Work. Springer Science Business Media.
- Martinez-Fernandez,C., & Powell, M.(2009). Emp. skills strategies in south-east Asia: Setting the scene. P 56-69.
- National Policy of Education (2004). Federal Republic of Nigeria. Lagos: NERDC Press.
- NOUN-National Open University of Nigeria (2008). *Business Education Methods*. National Open Uni. of Nigeria.
- Oduolowu, E. A. (2007). A Comparison of the Universal Basic Education (UBE) programme in Nigeria and the Grundskola of Sweden. *Essays in Education*, 20, 90-93.
- Ofoha, D.,Uchegbu, C.N., Anyikwa, B. and Nkemdirim, M. (2009). A Critical Appraisal of the Mode of Implementation of Nigerian Secondary School Curriculum: Towards Socio- economic Empowerment of Youth. *Education Research Network for West and Central Africa*.2009, edition,p.xvi.
- Olayinka, O. and Oyenuga, O.A. (2010). Integration of Automobile Technological Developments into Nigeria Technical College Motor Mechanics Work Curriculum. *Aca. Leadership: The Online Journal*, 8(2),1-11.
- Omo-Ojugo, O. O. and Ohiwerei, O. F. (2008). School Factors Affecting the Teaching and Learning of Business Education Studies in Nigeria Schools. *Pakistan Journal of Social Studies*, 5 (7) 663-675.

- Onyene, V., Olusanya, O., Salisu, R. and Johnson, O. (2007). Indigenous Orientations in Technical and Vocational Education (TVE) Programme: Tool for Sustainable Society. *Educational Research Network for West Africa and Central Africa*. Country: Nigeria.
- Rout, K.G., Priyadarshani, N., Hussin, Z., Pritinanda, A., Wan Mamat, B.W. & Zea, L.G. (2010). Implementation of New Sixth form Geography Curriculum: Concern and Levels of use of Teacher in Malaysia. *International Journal of Educational Administration*, 2(1), 64.
- UNESCO (2008). Education for All Global Monitoring Report. Education for All by 2015 Will we make it? Oxford University Press UK.
- Uwaifo, V.O. (2010). Technical education and its challenges in Nigeria in the 21st Century. *Int. NGO J.* 5(2), 40-51.
- Vanguard Newspaper, Thursday 02, 2009. Nigeria Roadmap: Minister, Stakeholders deliberate on turn around strategies. Retrieved October 10, 2010. Available at: <http://www.iccle.org/newsletter09/0309/index>.
- Van Tessel-Baska, J. & Stambaugh, T. (2008). What Works: 20 Years Curriculum Development and Research for Advanced Learners 1988-2008: Centre for Gifted Education. The College of Williams and Mercy.