

Assessment of the congolese national curriculum of English: strengths and weaknesses

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Abstract

The democratic republic of the Congo being a French country and where English occupies a trivial space in the educational system of the country, and due to the context of the time whereby the world has become a small village; English, as one of the international languages spoken in the worldwide, it was crucial that we look twice at what is forecasted as an English program in the country. In a globalized world, people become citizens of the world, and for these reasons, an international language such as English breaks the linguistic barriers that hinder people getting in contacts with others for numerous purposes. All these factors motivate an idea of assessing the Congolese national curriculum of English so as to point out its strengths and weaknesses. This enables to suggest ways of not only strengthening it but also improving it in order to comply with the actual needs of the millennium.

Key words: *English, National curriculum.*

Résumé

La république démocratique du Congo étant un pays francophone, l'anglais n'occupe pas une place de choix dans l'éducation. Avec la venue de la mondialisation qui réduit le monde à un village, les gens sont devenus des citoyens du monde. Cela étant, les barrières linguistiques deviennent brisées et les gens se fréquentent avec facilité. L'anglais étant une des langues internationales pouvant faciliter cette fréquentation dans différents aspects de la vie, il s'avère ainsi important de pouvoir évaluer le programme national d'anglais dans notre système éducatif en vue de dégager les points forts et les points faibles afin de proposer

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quelques mesures de renforcement et de son amélioration afin de répondre aux exigences linguistiques du millénaire.

Mots clés : *Anglais, Système éducatif.*

1. Introduction

Each country has its own educational curriculum. It conveys the intention that politicians have with respect to the kind of citizens they want to train for the welfare of the nation. This is known as curriculum in its global consideration. The Democratic Republic of the Congo has this type of curriculum, which expresses the global political intentions of the country.

From its global consideration towards implementation, the curriculum takes some restrictions and limits to specific domains of study. In other words, the more there are specific domains, the more specific curricula are put forward. Therefore, one may speak of the curriculum of Physics, Chemistry, Biology, French, History, English etc.

This study is particularly concerned with the Congolese national curriculum of English for secondary schools. It is meant to look into the curriculum of English in the Democratic Republic of the Congo and so the assessment carried out through this discussion revolves around the English curriculum so as to sort out its strong points as well as its weaknesses.

The study is carried out to provide some answers to the following issues:

- (1) What are strengths or positive points of the Congolese curriculum of English?
- (2) What are its weaknesses if any?

A thorough analysis of the national curriculum of English will give insight into the issues.

2. Methodological approach

Assessing a school subject curriculum is a critical process to ensure that the curriculum effectively meets educational goals, aligns with standards, and meets the needs of students.

Some of the common methods and approaches used in the assessment of a school subject curriculum are:

- *Classroom observation*: observing how the curriculum is implemented in the classroom can provide insights into its effectiveness and how well it engages students.
- *Content analysis*: Assess whether the content is up-to-date and relevant to students' current and future needs.
- *Descriptive survey*: which consists of a deep examination of the curriculum. It took time to scrutinize the curriculum with the target of disclosing its strong points as well as its weaknesses.

The above three approaches are the ones we made recourse to in order to evaluate the relevance and responsiveness of the Congolese national curriculum of English. Lesson observation, critical reading and analysis of the Congolese national curriculum of English, together with scrutinizing the curriculum, brought about the results presented in the following lines.

3. Findings

The national curriculum of English has both strengths and weaknesses.

3.1. Strong points of the DRC's national curriculum of English

Though the DRC's National Curriculum is modeled on the metropolitan type, its following positive points can be pointed out.

3.1.1. The quality of national objectives

The Congolese national curriculum presents good objectives; i.e. the objectives reflect the good intentions of the nation. For instance, in the National Curriculum we read the following: "*L'enseignement de l'Anglais vise en premier lieu à rendre les élèves capables de comprendre, parler, lire et écrire correctement cette langue.*" P4. These specific objectives reflect the government's awareness of the role of language which needs to serve

primarily as a tool of communication. Communication hinges on the language for skills that the government highlights in the definition of the course objectives. By emphasizing the development of students' listening, speaking, reading and writing skills in the course objectives, the government wants all the ELT process stakeholders to understand that their main concern should be to contribute to the removal of linguistic barriers likely to hinder sincere cooperation with English speaking countries.

3. 1.2. Acknowledgement of the relevance of English in the DRC

The curriculum designers are aware of the importance and the necessity for Congolese to be open to the world by means of English as a language of broad communication. One of the best way to achieve this objective is to teach languages of broad communication. Nowadays, English has become certainly one of the worldwide spoken languages whose nation is becoming stronger and stronger. In addition, English is the language of international diplomacy. Hence, the need for new developing countries to develop communicative competence in English is no longer to be demonstrated. Nowadays, it is no use to stick solely on one's language. The Congolese National curriculum designer recognizes the relevance of English language and the advantages associated to with for new Congolese generations. This appears clearly from the following assertion: *“L'étude de l'Anglais est d'une importance croissante pour les élèves de l'enseignement secondaire au Congo à une époque où le pays multiplie ses contacts avec les pays d'expressions anglaises... les difficultés de communication dues à l'utilisation des langues étrangères doivent être surmontées p4 ”*

As far as the methodology is concerned, the National Curriculum recommends that English structure be taught in context: *“L'enseignement des structures sera inductif. Ces structures seront introduites d'une manière progressive du simple au complexe et dans un contexte qui en rende la signification suffisamment claire.”P.5*

Here the stress on teaching language structure in context as well as the appeal to sequence their teaching taking into account their degree of difficulty and the learners' level is positive. Another useful element worth mentioning is the stress on the use of Teaching

Aids. The National curriculum designer recognizes the importance of making the language concrete in order to facilitate learning. Learners acquire the language better when there is a language support system. Contextual situations associated with visual aids are encouraged: *“L’utilisation des moyens visuels tels que les images, diapositifs et films, donnent un support favorable à l’acquisition naturelle de la langue. Les moyens auditifs : cassettes, disques, bandes sonores sont aussi importants dans l’acquisition d’une élocution correcte.”* P.5

3.1.3. Variation of skills

The National Curriculum invites teachers of English to fill all the skills ranging from listening comprehension and speaking, to reading and writing. In addition, the curriculum insists that communicative skills be offered more opportunity as specified hereafter: *“Les methods d’enseignement suivront un ordre rigoureux et progressif: écouter, comprendre, parler, lire, écrire. Le professeur donnera aux élèves le maximum d’occasions de s’exprimer.”* P.6

According to the above assertion, the ELT teacher has to emphasize communicative competence. This is only possible if the language teacher becomes creative and flexible in creating small/short and different contextualized dialogues related to the learners’ everyday life, enabling the learners to play them almost in every lesson. i.e each lesson with its contextualized dialogue.

3.1.4. Teaching English in English

Teaching a language in the same language offers more chance to acquire the target language easier, since by so doing, the learning becomes happy learning the language by practicing the language as suggests the principle of the American John Dewey: *pupils should learn by doing.*

3.1.4. Insertion of cultural traits

The National Curriculum asserts that the skills of English taught to learners will enable them to get in contact with the language and the culture of the target language by

means of reading selected books. It recommends : *“Les connaissances acquises permettront d’entrer en contact avec la vie des pays d’expression anglaise par la lecture et l’étude d’œuvres choisies de la littérature contemporaine.”*P.6. Through this quotation, we notice that the National Curriculum encourages DRC teachers to help learners get in contact with the English culture.

The Curriculum designers are aware of the fact that nowadays it is no use to stick solely on one’s culture in the current world which is affected by “globalization”. they recognize that Congolese students should be equipped with relevant knowledge about English language and English culture as well. This is because English being an international language, its speaker is considered a citizen of the world. So, he can come across anybody around the world and communicate with. English and French break the linguistic and cultural barriers among other existing international languages.

3.1. Weak points of the DRC’s National Curriculum

Despite of the positive sides of the National Curriculum of English, a number of weak points are worth mentioning. The following ones may be pointed out:

3.2.1. Insufficient language acquisition support system (LASS)

Language acquisition is a process requiring a great deal of time on the part of the acquirer. He should be allowed to have a lot of opportunities to process the data of the new language through contact with adult speakers, advanced peers, through English films, etc. All the factors that enhance the development of a new language are said to constitute the language acquisition support system.

Referring to BRUNER, J., (1983), quoted by TEMBUE ZEMBELE (2016:9), *“ we should closely watch the way a child interacts with the adults around her/him to acquire her/his mother-tongue. Mother or father provides ritualized scenario – the ceremony of having bath, eating a meal, getting dressed, or playing a game – in which the phases of interaction are rapidly recognized and predicted by the infant.”* By lacking this one more aspect, the curriculum may be said to be incomplete.

The national curriculum fails to provide practical hints on how to create the kind of environment where the learning input is enough. The curriculum does not foresee any period of exposure to the English language and the kind of activities to implement in that period to train the learners' in listening skill. Normally it is only after the learner has been able to differentiate things through listening that she/he can be brought to the stage of utterance. The curriculum opens with activities that train the speaking skill without such prerequisite exposure period. In a nutshell, there is a bad start which may be source of learning difficulties and frustration in the following years of learning.

English teaching in the Democratic Republic of Congo is to be placed in an EFL context. English appears to be a classroom language. Apart from the learners contact with English at school, there are no other occasions on which the target language is practiced. In other words, learners are bound to the knowledge they get from the teacher during class practice and limit to that. Their Language Acquisition Support System (LASS) is a very limited ground, which may not cater for some of the learners' linguistic needs.

Furthermore, not all Congolese schools provide teachers and learners audio materials, English textbook, films... and one of the possible reasons may be that the national curriculum says and avails nothing about the language acquisition support system. The curriculum is totally blind to the kind of environment which would favor the learning of the new language.

3.2.2. Lack of language functions

The Congolese national curriculum of English is somehow blind to language functions. There are very few points where it foresees topics like how to greet, to disagree, to express one's opinion, to offer something, to decline an offer, and the like. A careful scrutinization seems to indicate that the Congolese curriculum of English was designed by people who had a structural view of language. The curriculum designers totally overlook language functions and thus, they slow down the learners' first steps towards oral communication. They seem to confuse grammatical competence and communicative competence. It is worth understanding the difference and the priority among the two.

About this, RICHARDS, J., (n.d(no date): 2 – 3) asserts that *grammatical competence is the focus of many grammar practice books, which typically present a rule of grammar on one page, and provide exercises to practise using the rule on the other page.* This unit of analysis and practice is typically the sentence. He goes on saying that, while grammatical competence is an important dimension of language learning, it is clearly not all that is involved in learning a language since one can master the rules of sentence formation in a language and still not be very successful at using the language for meaningful communication. It is the latter capacity which is understood by the term communicative competence.

Briefly speaking, a language curriculum should include the devices which enable the learners to be successful in oral communication. Preference would be to begin with short oral lessons on how to greet, to apologize, to complain, to offer something or to do something, to decline an offer politely, etc. thus, the teaching of language functions.

3.2.3. Overestimation of grammatical structures

As said above, little is planned for communicative competence. Grammatical structures are dominant throughout the curriculum. The designers of the curriculum overestimate the teaching of grammar right from the beginning level. This way of planning things is indicative of the fact that the curriculum designers think that language is a set of structures; they only seek to promote accuracy in disfavour of performance.

The following distribution of the language components to the pages of the curriculum (1982: 7) for the first year of exposure to English illustrates that overestimation of grammatical structures :

Language components	On page
Elocution -----	-----7
Vocabulary -----	-----7
Composition-----	-----7
Dictation -----	-----7
Structures -----	----9,10,11,12,13,14,15,16,17 and 18

While all the materials on elocution, vocabulary, composition and dictation are described on one page, the grammar structures to teach in the 1st year of English cover ten pages in the national curriculum. This is a very bad start of the English learning process.

Our pupils’ first contact with the target language is not well handled, and is likely to be a source of difficulties in the following years of learning.

3.2.4. English in technical streams and the issue of time

The Congolese national curriculum of English says nothing about what to teach in technical streams classes. The kind of content to present to the learners in technical fields is not discussed. It is still the teacher’s responsibility to find out what she/he thinks matches the technical domain of her/his students. Given the unavailability of the content to teach in technical streams classes, some teachers teach the same materials regardless of the students’ fields of study. For instance, most schools still use ‘English for Africa’ in academic streams such as Agronomy, Electricity, Building, Nutrition, etc. teachers cannot be blamed for this, it is the curriculum designers who are at fault because they have put forward a programme which does provide anything to teach in technical sections.

Some qualified teachers do manage to adjust their teaching to technical classes, but the time allocated to the course remains a problem. In grade four it is one hour. English is generally devoted one to two hours a week in these streams. With respect to the difficulties faced in the learning of a new language, two hours appear to be insufficient. Teachers of English in technical streams classes complain about time. They argue that time is an

important factor in the teaching of a new language and that two hours cannot suffice to train students in a foreign language, particularly in a context like that of the DRC where English is only a classroom language. To sum up, the Congolese national curriculum in technical sections has serious lacunae with respect to the teaching content as well as the time.

3.2. Suggestions for improvement

It is a good thing for the DRC to have a national curriculum of English. It is much better than having no curriculum at all. The current educational curriculum is an important tool that can serve as a basis and a start of discussions for the improvement of the ELT program in the country. The following suggestions are our contribution to its improvement.

3.3.1. Enhancement of primary skills

The curriculum should organize the teaching materials in a way that reflects a real concern for the primary skills. For instance, in the first year of English, the listening skill should be the target of the first lessons. Students should be given the opportunity to listen to the teacher without necessarily uttering words. They should be allowed to look at the teacher who will be producing single items and showing the concrete objects which the items relate to in the real world.

Later on, the students may be asked to utter single words and relate them to concrete things in the real world. They may be asked for example, to say “*pen*” by showing the thing called “*pen*”. Briefly, the development of skills should be handled with much care, and the curriculum should open windows of opportunities for appropriate activities to take place. When the beginning is managed carefully, the subsequent lessons are likely to result in success.

3.3.2. Availing enough Language acquisition support system (LASS)

English is a foreign language in the DRC. Its teaching is not devoted as many opportunities as it is in ESL countries. According to SCHMIED, J. (1991:32), *in an EFL context, learners have a limited chance to speak English. Their English is a classroom*

language. They hardly spread it to other areas of social life. What Schmied .J (1991) says is exactly what applies to the DRC ELT context. There is, therefore, a need for a sustainable language acquisition system.

The curriculum should provide hints on how to create opportunities for pupils to process English beyond the hours allocated to the course. For instance, organizing public shows, sketches performed publicly, English clubs where learners may discuss sensitive and interesting topics of daily life, availing audio-materials and English films could increase the students' interest in acquiring the target language.

3.3.3. Promoting language functions

The curriculum of English should seek to promote language functions for the students to make steps towards oral communication. Learning a language does not mean taking in a set of grammatical structures, it rather involves promoting communicative skills.

For students to communicate effectively, the curriculum should integrate in the course a large number of oral activities involving the practice of language functions such as asking for permission, ordering a meal at a restaurant, asking for the price, expressing satisfaction or dissatisfaction, agreeing and disagreeing, etc. Such functions should occupy an important place in the design of a foreign language curriculum. It is of little use to foresee a set of grammar points if the first steps towards oral communication are not established. Language should be learned practically, with grammar points integrated in the acquisition of language functions.

3.3.4. What kind of English in technical sections?

The national curriculum should at all costs match English with the learners' areas of study. The same curriculum should not apply to all the academic streams. Technical streams should have their specific curricula that reflect the kind of scientific scope the learners have chosen to attend. Language functions as well as grammar points can remain the same for all sections but vocabulary should compulsorily vary from a stream to another. In addition to general vocabulary terms, technical academic streams, students should be initiated into

technical vocabulary words specific to their respective subjects of study. And the curriculum should give clear directions with regard to this. Initiation into technical vocabulary will help the learners to be active and proficient in their specific field of training during professional life afterwards.

3.3.5. The first exposure to English language learning in DRC

English is learned in an EFL context in the DR Congo and for this reason; the first exposure to the English language is delayed. The Congolese student gets in contact with English only after completing childhood education at kindergarten and primary school. English starts just after the 7th and the 8th, to mean in the 3rd year of secondary school cycle. This language learning policy does not really favour the achievement of language learning objectives, which are effective communication.

It is obvious that English is currently taught in the two first years of secondary school before starting the humanities, but this is not official in the country. The ministry of national education has not yet availed any official document acknowledging the English program in the 7th and 8th classes. The field research conducted at the office of the inspection of secondary school in Goma proves that no official document available so far. What is actually taught in these classes is a simple local arrangement of teachers. The late exposure to the language does not allow the learner to benefit the advantages of the critical age for language learning.

Owing to this, there is a need of rethinking the national curriculum of English in the DR Congo so as to comply with the need of the modern world, a globalized world in which the English language occupies a large space in professional life such as business, politics, diplomacy, tourism etc.

4. Discussions

Congolese modern generations should not linguistically be frustrated when failing to compete with the challenges of the time. Language unites people and he who speaks many

languages is a world citizen. English language should no longer constitute a barrier to get in contact with other nations of the world today.

To avoid these frustrations in the future, we, suggest that English be brought back to kindergarten and primary school in DR Congo, and if not due to EFL context as compared to French learned as a second language in the country, Congolese learners of English are to be given the chance of being exposed to English from the very beginning of secondary school cycle. To mean after completing the primary cycle.

As said earlier, the first exposure to English starts is offially 3rd form of secondary school, and the program suggests the studying of the language by texts. While the learners lack elementary English notions that would pave the way to the studying of English texts. Although there is no official ELT program available in basic education, practitioners resort to nowadays English book intended to the learners of the basic education in the democratic republic of the Congo (cfr ministerial order No MINEPST/SG/80/PMD/88/Bnt/0336/2023). The book includes a series of units with prescriptions of basic language functions to be covered in order to develop the learners' communicative skills, but to my view, this remains insufficient not only because all the needed materials are availed in grade 7 and 8, but also, language functions are not well forecasted. Literature is an invaluable tool in language learning. Literature is not only a tool for developing the written and oral skills of the students in the target language but also a window opening into the culture of the target language, building up a cultural competence in the learners. To make this possible in the Congolese language teaching program, a deep re-adaptation of the Congolese national curriculum of English is indispensable. To set a solid basis for the mastery of what is suggested in this study, the following first and second form program of English is crucial to be well taught in elementary classes of secondary school (7th and 8th basic education).

4.1. Proposal of the 1st and the 2nd form program of English at secondary school in DR

Congo

First form program (currently 7th)

Fist month	Week	Language function
	1) English alphabet 2) telling the name and spelling 3) Greetings (in all the three moments of the day) 4) Asking and telling news	Dialogue about greetings Dialogue between two pupils. Asking each other about news
Second month	1- Telling news: if I am fine, if I am not fine 2- Miscellaneous exercises 3- Miscellaneous exercises on preceding combined lessons 4- The objects of the classroom	Recap about greetings and asking one another's news
Third month	The objects of the classroom (all what is used at school)	(playing the lesson)- what is this?, this is..... Showing and telling the object (playing the lesson) Giving order/ command
Fourth month	Giving order/command Playing the lesson Telling about diseases	Playing the lesson: come here, stand up, sit down, close the door, open the door, the window, get in , get out, give the..., give John the.... etc, What are you suffering from? I am suffering from....
Fifth month	2- Numbers – cardinal 1-20 1- Numbers- cardinal 20-50 2- Cardinal- 50-100	Playing the lesson Counting things in the class (desks, pens, books etc.)

	3- Cardinal: 100- 1000	
Sxth month	1- Miscellaneous exercises on cardinal numbers 2- Ordinal numbers 3- Ordinal numbers	Recap on counting different things in the class
Seventh month	1- Telling the time 2- Telling the time 3- Miscellaneous exercises 4- Miscellaneous exercises	Teacher drawing watches and pupils tell or read different times within watches
Eighth month	1- WH- Questions: what, when, where, why, how 2- Repeat the lesson	Miscellaneous exercises Conversations .short discourse who are..., where are...' why is..., what is..., when do you.....?
Ninth month	1- The days of the week 2- The days of the week 3- The months of the year - Food program (breakfast, diner, lunch and supper). today, tomorrow, yesterday, before yesterday, last week...etc.	Which day is today? , today it is..., which day is tomorrow? Tomorrow is.....
Tenth Month	1- The human body (drawing and parts indicated) 2- Use of prepositions (place and direction) 3- Recap exercises 4- (drawings) 5- The verb to have - The verb to be in different forms	Asking the learners to cite the parts of their human body Teacher: what is this? (Touching the part of the body) and learners giving the name.

2nd Form program (currently 8th)

The half of the year in second form will cover the entire first form program. The teacher will spend the time recapitulating all the materials learned last year in order for the learners to internalize the program, and the rest of the year will cover the following materials:

Sixth Month	Week 1- The verb to have 2- Recap verb to have 3- The verb to be in all forms 4- Recap verb to be in all forms - Miscellaneous exercises	Language function Interaction on having and not having something in present, past and future
seventh Month	Week 1- The family members 2- Domestic objects(house objects) 3- Domestic and wild animals 4- Numbers 1000-10.000 -	Teacher asking each learner to cite his family members Teacher asking learners to name all the domestic and wild animals
eigth Month	Week 1- The thing around us 2- The thing around us(studying the environment) plants, insects, birds, stones etc 3- Recap exercises	Teacher asking learners to supply the different things around them (plants, insects, birds, stones) etc.
Nineth Month	1- Adverbs of manner How 2- Exercises 3- Adverbs of place Where 4 – adverb of time When Exercises	Asking each other's questions about How, where , when etc. When do you go...., where do you..... how do you.....
Tenth Month	1- The article: The 2- The article: An 3- exercises 4- exercises	

Once the suggested program is internalized by the learners of elementary level in secondary school, the teacher will make sure he has set a solid foundation to enhance the 3rd and the 4th form program, preparing them for the reading of English texts and answering questions from them.

The proposed overall program in this study together with the deep rethinking of the Congolese national curriculum, and the taking into account of the different recommendations suggested is likely to improve the curriculum noticeably and enhance communicative language competence of Congolese learners of English.

5. Conclusion

This study has been a critical analysis of the DRC's national curriculum of English.

We have analyzed the Congolese educational system to see what is going on better and what is going bad. We have pointed out strengths and weaknesses of the DRC's curriculum of English. In conclusion, we have sorted out a series of proposals that may contribute to the betterment of the educational system if only designers of the national curriculum of English would take them into account.

The national curriculum needs to be revisited and adjusted taking into consideration the actual weaknesses to be corrected. We recommend the curriculum designers to have a look on this paper with much hope, it will meet the need they may have in search for new approaches.

References

- ACTFL. (2012). *American Council on the Teaching of Foreign Languages, ACTFL proficiency guidelines-Reading*. Retrieved from http://actfl.org/files/public/CTFLProficiencyGuidelines2012_FINAL.pdf
- Allan, M. (1997). *Assisting autonomous performance*. *Prospect*, 12 (3), 4-14.
- Au, S. Y. (1988). *A critical appraisal of Gardner's social k theory of second-language learning*. *Language Learning*, 38, 75-100.
- Barrett-Lennard, S. (1997). *Encouraging autonomy and preparing for IELTS: Mutually exclusive goals*. *Prospect*, 12 (3), 29-40.
- Barrette, C. M., Paesani, K., & Vinall, K. (2010). *Toward an integrated curriculum: Maximizing the use of target language literature*. *Foreign Language Annals*, 43, 216-230.

Barone, D., & Barone, R. (2012). *Building Background Knowledge within Literature Circles*.

Benson, P. (2001). *Teaching and researching autonomy in language learning*. London: Longman.

Benson, P. (2003). *Learner autonomy in the classroom*. In D. Nunan (Ed.), *Practical English language teaching* (p. 289-308). NY: McGraw Hill.

Byrnes, H. (2008). *Articulating a foreign language sequence through content: A look at the culture standards*. *Language Teaching*, 41, 103-118. *Innovative Approaches to Teaching Literature 139*.

Chavali, N. (2001). *Learning from Learners: Perceptions of Self-Access Language Learning in a Hong Kong Secondary School*. Unpublished MA Dissertation. The University of Hong Kong, Hong Kong.

Direction de Programme Scolaire et Manuels Didactiques (1982) Revised to 2007, *Programme National d'Anglais*, Kinshasa : EDIDEPS.

SCHMIED, J. (1991), *English in Africa: An Introduction*. London: Longman

RICHARD, J. (n.d). *Communicative Language Teaching Today*, unpublished, M.A Dissertation.

Addison-Wesley. Shavelson, R. J., Ruiz-Primo, M. A., & Wiley, E. W. (1999). *Note on sources of sampling variability in science performance assessments*. *Journal of Educational Measurement*, 36(1), 61-71.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2002). *Working inside the black box: assessment for learning in the classroom*. London, UK: King's College London Department of Education and Professional Studies.

Brown, M. L., Hart, K. M., & Küchemann, D. (1984). *Chelsea diagnostic mathematics tests: algebra*. Windsor, UK: NFER-Nelson.

Cronbach, L. J., Gleser, G. C., Nanda, H., & Rajaratnam, N. (1972). *The dependability of behavioural measurements: theory of generalizability for scores and profile reporting*.

New York, NY:

Wiley. Linn, R. L. (1994) *Assessment-based reform: challenges to educational measurement*. Paper presented at Angoff Memorial Lecture. Princeton, NJ: Educational Testing Service.

Linn, R. L., & Baker, E. L. (1996). *Can performance-based student assessment be psychometrically sound?* In J. B. Baron & D. P. Wolf (Eds.), *Performance-based assessment—challenges and possibilities: 95th yearbook of the National Society for the*

Lord, F. M., & Novick, M. R. (1968). *Statistical theories of mental test scores*. Reading,

MA:

Toulmin, S. (2001). *Return to reason*. Cambridge, MA: Harvard University Press.

Wiliam, D. (1993). *Technical issues in the development and implementation of a system of criterion-referenced age-independent levels of attainment in the National Curriculum of England and Wales*. Unpublished PhD thesis, King's College University of London.

Wiliam, D. (2000, November) *Integrating summative and formative functions of assessment*. Paper presented at First annual conference of the Association for Educational Assessment-Europe held at Prague, Czech Republic. London, UK: King's College London School of Education.

Wiliam, D. (2000b). *The meanings and consequence of educational assessments*. *Critical quarterly*, 42(1), 105-127.

Wood, R. (1991). *Assessment and testing: a survey of research*. Cambridge: Cambridge University Press

