

**HJ STEYN**

## **THE CONCEPTS 'BENCHMARKS AND BENCHMARKING' USED IN EDUCATION PLANNING: TEACHER EDUCATION AS EXAMPLE**

### **Introduction**

Planning in education is a structured activity that includes several phases and steps that take into account several kinds of information (Steyn, Steyn, De Waal & Wolhuter, 2002: 146). One of the sets of information that are usually considered is the (so-called) 'benchmarks' and 'benchmarking' regarding the focus of a particular planning project.

Benchmarking for quality teacher education is not only an exercise of comparing teacher education in different countries in order to identify the best teacher education programmes or qualifications on different levels, for example in terms of high pass rates and/or competencies acquired by students. The qualifications, programmes and student achievements may be the core of such benchmarking exercises, but it should not be the only focus regarding benchmarking. The quality of teacher education is determined by the whole environment of teacher education and it should comply with all the other determinants of the education system in order to deliver quality teacher education.

The concepts 'benchmarks and benchmarking' is the result of a particular methodology following the sequence of identifying positive and negative lessons to be learned from different education systems, after which best practices in and for particular situations are defined that can be formulated as benchmarks and benchmarking guidelines, which informs theory that can be applied in a particular setting.

Therefore, the aim of this paper is to shortly explain the nature of planning in education, the methodology to determine benchmarks regarding a particular topic, the position of teacher education in the education system as well as the different important determinants of teacher education. The paper will conclude with some examples of international perspectives regarding benchmarking for quality in teacher education.

### **Strategic planning in the education system**

#### ***Introduction***

The establishment of an education system is a complex exercise, because insight and knowledge in terms of the theory underpinning the purpose and structure (components and elements) of the education system, as well as the requirements for the effective practical functioning thereof are essential. In order to provide the developers and planners of an education system with a basic point of departure, the following exposition of education system planning and the explanation of the steps in planning steps serve as contextualisation (Steyn & Wolhuter, 2012: 46).

The establishment of an education system may be planned according to the following framework for strategic planning which has specifically been developed for education systems. The framework for planning comprises three phases, namely the phase of planning-preparation, the phase of planning-analysis and the phase of

planning-operationalisation. Each of these phases in turn comprises various steps (Steyn, Steyn, De Waal & Wolhuter, 2002: 143). It should constantly be noted that this instrument is a framework for planning. By implication, the framework should not necessarily be strictly emulated, but the chronological order and content of steps should be adapted in order to suit the specific situation.

#### ***Phases of the strategic planning framework***

The phases of the planning framework include the following steps (Steyn, Steyn, De Waal & Wolhuter, 2002: 143-164):

- **The phase of planning-preparation** comprises the following steps, namely the description of the motivation for planning, the establishment of a planning team, the discussion of the niche under consideration and the projected outcomes that should be attained.
- **The phase of planning-analysis** consists of the following steps, namely the identification of the target group and an analysis of their specific educational needs; the explanation of the purpose of the education that should be provided as well as an analysis of the different external determinants, including the demographic tendencies, the geographic and climatic aspects, the economic and technological aspects, the social, political and language trends, the relevant legal and institutional factors, the philosophical and religious trends and competitors and collaborators. The phase of planning-analysis also includes an analysis of the internal determinants that refers to the internal determinants of historical nature, the internal determinants of reciprocal nature and the internal determinants of educative nature. The SWOT-analysis, referring to the analysis of the strong- and weakpoints as well as the opportunities and threats, can be concluded from the planning analysis and forms the final part of the analysis of the determinants.
- **The phase of planning operationalisation** follows the phase of planning analysis and consists of planning the different components and elements of the particular education system. The components and elements of the education system include the following:
  - The component '**education system policy**' with elements policy formats, education aims, objectives and vision and policy making procedures.
  - The component '**education system administration**' with elements organisational management structures, financial framework and budget and internal and external communication.
  - The component '**structure for teaching**' with elements education levels, education institutions, curricula and programmes, educators, learners, language of teaching and learning and physical facilities.
  - The component '**education support services**' with the three elements, namely support services to the learners, to the educators and to the teaching-learning situation.

#### ***Benchmarking for use in the planning***

In the planning process, benchmarking is important during the phase of planning analysis as well as during the phase of planning operationalisation. During the phase

of planning analysis the issue of benchmarking will particularly be in the focus during the discussion of the niche as focus of the planning and during considering the internal determinant of educative nature. In both these steps the 'generally accepted minimum criteria for a particular situation' is determined and will guide the further thinking about the topic. In the phase of planning operationalisation the 'benchmarking' situation will tend to explicitly or implicitly serve as template regarding the plans that should be made.

As stated in the introduction, benchmarking is the result of a particular methodology. This methodology follows a particular sequence, namely firstly the step of identifying lessons to be learned from different education systems, after which secondly best practices in and for particular situations are analysed and which can thirdly be formulated in benchmarks for a particular situation or context, that can be applied in a particular setting. These sequential steps can be explained as follows:

- **Lessons that can be learned**, should be identified from different education systems: The way in which a particular situation occurs in different education systems are being identified and described. However, it is not only a description of the particular situation, eg the level of teacher education, but the situation is being described in the context of the relevant external and internal determinants. From this description positive lessons, which can be followed, and negative lessons, which should be evaded, regarding the own situation that should be planned can be described.
- **Best practices** in and for particular situations: Departing from the lessons that can be learned in different applicable and relevant education systems, best practices in and for particular situations are identified, analysed, motivated and described through comparison of different examples. Thus, the best practices represent the best solutions or applications that can be identified from different situations in different education systems.
- **Benchmarks** for a particular situation or context: From the best practices, 'benchmarks' can be formulated that can serve as 'generally accepted points of departure' to find solutions for similar situations in different settings. However, it is important to remember that even benchmarks should be implemented according to the particular context.

Therefore, it is important to understand that benchmarking for teacher education will be, most probably, applied differently in Finland than in South Africa.

#### ***Examples of benchmarking guidelines regarding teacher education***

Teacher education realizes particularly in the elements of the component 'structure for teaching' of the particular national education system. The following features of teacher education in the education system can be identified as the analysis of best practices in teacher education according to lessons that can be learned:

- Best practices refer to the fact that teacher education is positioned on a particular level of education provisioning, which is (usually) fully placed on the tertiary level. On this level the decisions should be about the positioning of teacher education on either the certificate level and/or diploma level and/or graduate and post-graduate level and about complying to the general requirements of these qualifications.

Lessons were learned from Japan and the Netherlands. In Japan the lowest level of certification is temporary of nature, valid for 15 years, and available to graduates of a junior college teaching program. The highest, or “advanced level”, certification is available to teacher candidates who hold master’s degrees. The vast majority of Japanese teachers hold at least a bachelor’s degree (NIEB, 2014b). In the Netherlands teachers in primary school need to have a teaching license for primary education, which can be obtained by following a 4-year course aimed at primary education. This course is offered at a Hogeschool and covers an integrated curriculum with didactical and educational subjects in the different subject areas. Teachers in lower secondary education need to have a second-degree teaching license, which can be obtained by following a 4-year course at a teacher education for secondary education. This course covers an integrated curriculum both pedagogical and educational subjects and one subject area that has to be taught in secondary schools. Teachers in upper secondary education need to have a first-degree teaching license, which can be obtained by following a 1-year postgraduate course (1600 study hours). This course is offered at a university after finishing a four-year academic study in a (school) subject and covers both pedagogical and educational subjects. (CIEB, 2014a; Snoek & Wielenga, 2001: 13-14).

- Best practices indicate that decisions should be made regarding which education institutions will take the responsibility to provide teacher education. For example, in Ghana the initial teacher education preparation (Diploma in Basic Education) is offered in 38 public and 3 private colleges of education (Asare & Nti, 2014: 5).
- Best practices point to the fact that relevant teacher education recognised programmes and curricula should be properly developed and implemented for pre-service, in-service and post graduate education opportunities. A vast array of programmes for teacher education exists in different countries.

From the lessons to be learned, the one commonality is that these programmes link to the school pattern and to qualifications and levels provided for in higher education in the particular country. In Ghana teachers are prepared for first cycle schools (nursery, kindergarten, primary and junior high schools), second cycle schools (senior high, vocational and technical schools), and the Certificate of Education (initial teacher training institutions) (Asare & Nti, 2014: 3). In Britain the training of primary and secondary school teachers is the same, namely teachers must hold a first degree and a Postgraduate Certificate of Education awarded by a university or college of higher education. Alternatively, they must hold a Bachelor of Education (BEd) degree and have a qualified teacher status (QTS). Teachers in Germany receive their training in two stages, namely a first phase at a university and a second phase as a two year practical training at teacher seminars and selected training schools. The structure of teacher training and the contents varies in some aspects in the different *Länder* (Humboldt, 2014). Another characteristic of teacher education programmes is that, similar to the situation in Japan, continuing professional development is

required for the teaching profession and particular education programmes are planned and provided for this need (NIEB: 2014b).

- The language issues regarding teacher education should be clarified and decided on. At present, the policy in Ghana states that English should be used as the medium of instruction from primary one, with a Ghanaian language studied as a compulsory subject to the Senior Secondary School. This policy determines the use of languages in teacher education in Ghana (Asare & Nti, 2014: 4). In South Africa the majority of teacher students receive their education through the medium of English, although it is not their home language, and some teacher students are served through the Afrikaans as medium of teaching and learning.

Although an analysis and study of teacher education in a particular country will primarily focus on the elements of the component 'structure for teaching', the elements of the other components will also be affected directly. For example, the structure for teacher education should be put in policy, the required finances should be provided and particular education support services should be provided for the personnel and students involved in the teacher education.

### **Some determinants of quality teacher education, with reference to South Africa**

#### ***Introduction***

Internal and external determinants can be identified. It is important to carefully consider the different determinants in order to find lessons to be learned and to analyse best practices to understand particular situations for which benchmarking should be provided. The determinants provide the benchmarking reasons for particular practices in teacher education.

#### ***Some external determinants in reference with teacher education***

##### **1) Demography**

In the case of teacher education, the demography as external determinant refers to the number, settlement and movement of teachers and teacher students. Because the number of teachers is determined by the number learners, the number of teacher students will be determined by the number of learners and the number of teachers in the particular education system. For example the number of teachers on the different school levels and school subjects as well as the applicable attrition rates will determine the number of teacher students that should be recruited and enrolled in the different teacher education programmes (McLaughling & Burnaford, 2007: 331; Nkengbeza, 2014).

##### **2) Science and technology**

The level of scientific and technological involvement of the target group of a particular education system, will determine, for example, the level of scientific and technological content in the school curriculum as well as the use of technology in teaching. For example, internationally it is the trend in the education system of the developed and developing countries to use modern communication technology in education. Therefore, these contents are included in their teacher education programmes and technology is actively used in teacher education programmes.

Distance education is also becoming a general trend in several education systems (Townsend & Bates, 2007: 21; Jansen, 2007: 25).

### **3) Language**

The language of learning and teaching and the language competencies are very important aspects that determine the quality of education achievements. The teachers and students should have sufficient competencies in the language(s) of teaching and learning. In all education systems special measures are in place regarding the applicable languages for teaching and learning. In the majority of developing education systems, the local or home languages are not used for teaching and learning, but an European language are usually used. This affects the quality of teacher education in the sense, for example, of duration of programmes and the success ratios of students. In Cameroon, for example, because of the use of English and French in the economy and in the 'learned society' the only languages of teaching and learning in the universities are either English or French and students have to choose universities according to their competencies in either English or French. However, in the majority of developed countries the language of teaching and learning is the home language of the majority of students (Nkengbeza, 2014). This contributes directly to the level of success in teacher education in different countries.

### **4) Political and institutional tendencies**

The political and institutional tendencies refer to the influence of government and other political institutions and groups on the nature and content of teacher education. As major actors in education provisioning, it is obvious that the education of teachers will include particular aspects to equip them with relevant competencies in order to support the development of balanced citizens in schools. The involvement of government and other political organisations is typical of all national education systems in the world and is differently managed in different education systems (Jansen, 2007: 27-29; Reid, Brain & Boyes, 2007: 79).

#### ***Internal determinants***

The internal determinants refer to the aspects within the education system that determine the nature and functioning of that particular education system. The following internal determinants can be identified, namely the internal determinants of educative nature, the internal determinants of historical nature and the internal determinants of interactive nature.

#### **1) The internal determinants of educative nature**

The internal determinants of educative nature refer to the relevant educational theory, as **benchmarks**, that should guide teacher education and the relevant practise in other education systems from which lessons can be learned. The following is examples of some of the theoretical proposals regarding guidelines for quality in education (Townsend & Bates, 2007: 5; Newby, 2007: 116-119; Angus, 2007: 141; Greenberg, 2010: 20):

- Teacher education should include the concrete findings of the best research in education and a rich academic foundation of the fundamentals required in education.
- External quality assurance bodies are established to ensure quality in teacher education.

- The theoretical and conceptual base of teacher education should be consistent with beliefs and evidence about what makes a good teacher.
- Teacher education programmes usually include the so-called academic studies that is devoted to an advanced study of selected school subjects; professional studies that are intended to give the students a thorough grounding in the principles and practice of teaching and practice-teaching that constitutes the practical part of the teacher education course.
- A shift occurs in teaching namely the change in educational focus from teaching to learning and this focus should be reflected in teacher education.

### **2) The internal determinants of historical nature**

When planning a renewal or the maintenance of teacher education in a particular education system, the present situation and past experiences of teacher education system should be analysed and described. New developments should be built on these by recognising the present capacity and how the present structure come around in order to make sure that teacher education developed towards a commonly agreed-upon future and not working in a circle exercise of development.

### **3) The internal determinants of interactive nature**

The third type of the internal determinants is the internal of interactive nature. In this case the planning or maintenance of one aspect of teacher education in the education system, will have an effect on (usually) more than one of the other elements regarding teacher education. This is a determinant that is often forgotten and the focus is completely put on the particular aspect or element that is under scrutiny.

## **Some benchmarks for quality teacher education**

From the exposition above it is clear that it is not easy, not even possible to benchmark teacher education in all the different aspects thereof. The following can be explained as some of the results of such benchmarking exercises:

- Teacher education is part of higher education.
- Differentiated qualifications are provided for the education of teachers in order to assist students to prepare themselves to teach in the different levels and specialisations of school education.
- Different types of teacher education institutions exist for the delivering the different types of teacher education programmes and qualifications.
- Differentiated programmes exist for the education of teachers regarding the different school levels and school specialisations.
- The theoretical and conceptual base of teacher education should be consistent with beliefs and evidence about what makes a good teacher.
- Teacher education programmes usually include the so-called academic studies, professional studies and practice-teaching.
- A shift occurs in teaching namely the change in educational focus from teaching to learning and that the modern communication technologies should be incorporated as need required.
- Continuing professional development is required for the teaching profession and particular education programmes are planned and provided to satisfy these needs.

- The language of teaching and learning and the languages learned as subjects in teacher education should be applicable to the challenges at school level.
- The government and other political organisation should make sure that their involvement in education is always for the sake of education and to ensure quality education.

## Summary

In this paper the methodology to identify relevant international guidelines or benchmarks regarding the teacher education is provided. It was also explained that international benchmarking is only one of the relevant issues to be considered. Other important aspects to ensure the quality of teacher education is the education system as such, the structure of teaching, the linkage of teacher education to the schools of the particular education system as well as the different external and internal determinants of teacher education in the particular country.

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Prof. Dr. HJ Steyn  
North-West University  
Potchefstroom Campus  
South Africa  
Hennie.Steyn@nwu.ac.za