

MANAGING CHANGE IN EDUCATION: EXPLORING EARLY CHILDHOOD EDUCATION TEACHER COMPETENCIES FOR' FOR SUSTAINABLE DEVELOPMENT

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Abstract

In recent years, growing knowledge of the critical importance of childhood development for lifelong learning and growth has led to increased calls for professionalism of early childhood educators including higher standards for training and education. As part of this renewed attention to professional development, professionals in the field should develop the na early childhood care and education, with the goal of assuring that all educators of young children have the necessary knowledge and skills to meet children's development needs. This study was done at Nandi County, Rift Valley. The study sought to answer the following research question: Which dimensions of early childhood teacher manifest competences can be observed that contribute to pupil achievement? What resources are available for ECDE program and educators in order to meet new competency standards? This study adopts a cross sectional design in which data are collected predominantly by questionnaire, structured interviews and official statistics and that qual documents relating to a single period will be used. Respondents' are identified through simple ran from field was analyzed both qua and presented in form of discussi ministry of education, teachers, parents and other education stakeholders in understanding various Early childhood teacher required competencies towards expanded vision of education

**for life that was first agreed upo
Education for all that was held in Jomtein, Thailand.**

Keywords: *Competence, teaching*

Introduction

Education is the most important instrument for human resource development. Education is the process of providing information to an inexperienced person to help him or her develop physically, mentally, socially, emotionally, spiritually, politically and economically. It is the process through which individuals are made functional members of their society. It is a process through which Boys and Girls acquire knowledge and realize their potentialities and use them for self actualization to be useful for themselves and others in the society. It is a means of preserving, transmitting and improving the culture of the society. In every society, Education connotes acquisition of something good worthwhile, Ocho (2005).

All Children Should have the right to Education since the child is born helpless and has to rely entirely on the parents and other older members of the society to survive and satisfy their growth needs in their entire ramification. The degree and qualit the society depends to a large exten education. This will enable them perform their political, social and other

citizenship duties and exercise the right pertaining thereto effectively.

Since every citizen benefits from the citizens and since every generation receives its education from an older generation it has a duty to reciprocate by educating the generation that comes after it, Ocho (1988). No nation can afford to toy with the education of her citizens, especially, the child, who will be the father or mother of tomorrow, because education is the bedrock of all facets of development.

Role of Education in Society

Education is a process of equipping individuals with knowledge, skills, values and attitudes to participate fully in social, economical activities meaningfully and being in position of obeying the law and maintain

order, Rodeo, (2002). Acquired skills and abilities by members of society through schools, significantly sha This scholar laid the basis for ins

Shultz (1961), Deniso (1962), Psacharopoulos (1973). All these scholars undiscovered the need of investment in reducing poverty, increasing individuals earnings plus its spill cover's as enhancing good governance and democracy to mention a few. These are health, nutrition which enrich lives directly e.g. the pleasure of intelligent thought and social development.

The main objective of preschool education is to build a strong foundation for holistic development that will enable the child to maximize his/her learning potential when they get to pre-primary school and primary school. The ministry of education have very brief and in adequate policies on guiding the early childhood teachers on children school readiness. This means that the ECCE teachers are not equipped with the necessary skills, knowledge, attitudes and abilities that will enable them handle the child appropriately and help them cope with their new environment as well as the new school curriculum that is being introduced. There are a number of factors that influences the lea developmental status at kindergarten entry. These include children's skills and prior school related experiences which includes social skills, play behavior and communication skills; children's home lives i.e. parental influences and early childhood prog environment (McCubbins; 1994)

The environment goes hand in hand with the curriculum. The learners should actively be involved in a stimulating environment which should ensure active participation and also be learner friendly such that learners can adjust and cope in a given environment. As children move from a relaxed learning environment where centre of learning is on play to task related learning as it is in primary schools, they feel uneasy about it as they are not used to the latter way of learning, and this requires a teacher to be equipped with the necessary knowledge, skills and attitudes to aid the children achieve the necessary learning.

Teacher competences

In recent years, growing knowledge of the critical importance of each childhood development for lifelong learning and growth has led to

increased calls for professionalism of early childhood educators including higher standards for training and education. As part of this renewed attention to professional development, India education sector should develop the national competence for early childhood education, with the goal of assuring that all educators of young children have the necessary knowledge and skills to meet children's development needs.

Based on the 5 domains of ECE competences focus on what educators need to know and be able to do to demonstrate that they are all rounded and well prepared to educate and care for the young children.

Competencies should be such as cornerstone of assuring professionalism and stability for early child hood, care and education workforce.

'Competence'

The ministry refers to Hagen & Skule (2004), who emphasise that 'the concept of competence includes knowledge, abilities and attitudes that can contribute to solving problems or completing tasks. The expression 'teacher competence' can, therefore, be seen as 'a combination of something one has (knowledge), what one does in the classroom (abilities) and which values one bases teaching on (attitudes).' (Ibid.2004)

Clearinghouse has pointed out that it can be an advantage to differentiate between 'formal competence' and 'manifest competence'.

1. '*Formal competence*' presupposes that an individual has completed formal education or training and a to the fact that this has been done satisfactorily. The acquisition of 'formal competences' through formal education or training can, for example, be a prerequisite for having the legal right to practice a teaching profession.

In using the expression

2. '*manifest competence*', Clearinghouse attempts to establish the notion that an individual does, in fact, manifest competence in exercising his/her profession regardless of how that competence has been acquired.

With reference to a study by Thomas J. Kane et al. (2007), showing that no clear link can be observed between the teachers' formal competences

and the pupils' learning, the ministry was looking for 'a comprehensive approach to what is meant by 'teaching staff competence'. In addition to formal qualifications, it is though background, classroom management, commitment and communicative abilities might constitute aspects of the concept 'staff competence'. The list is in no way exhaustive, and it would be desirable for the ministry to be involved in working to defin should be operationalised.' (Ibid, 2004)

Therefore, the current investigation solely concerns manifest competences, in other words those dimensions of competences that can actually be registered/ observed in an empirical study.

Conceptual framework and definit

From the outset the review was governed by the desire to answer the following question:

- Which dimensions early childhood teacher manifest competences can be observed that contribute to pupil achievement?,
- What resources are available for ECDE program and educators in order to meet new competency standards

Teacher competence is understood to mean manifest competences. Competences are given a broad interpretation, i.e. comprising knowledge, abilities and attitudes, as these are evidenced in actions in given contexts.

Children and young people's learning that is linked to dimensions of competences in the teacher does not comprise solely the learning gains acquired by the average pupil but also includes whether particular competences can be shown to have a pupils with learning difficulties. is given a broad interpretation and comprises knowledge, skills and

attitudes.

Teacher Competency Model Example

Domains and Components of the Framework for Teaching

Domain 1: Planning and Preparation

- a. Knowledge of Content & Pedagogy
- b. Knowledge of Students
- c. Selecting Instructional Goals
- d. Knowledge of Resources
- e. Designing Coherent Instruction
- f. Assessing Student Learning

Domain 2: The Classroom Environment

- a. Creating an Environment of Respect & Rapport
- b. Establishing a Culture for Learning
- c. Managing Classroom Procedures
- d. Managing Student Behavior
- e. Organizing Physical Space

Domain 3: Instruction

- a. Communicating Clearly & Accurately
- b. Using Question & Discussion Techniques
- c. Engaging Students in Learning
- d. Providing Feedback to Students
- e. Demonstrating Flexibility & Responsiveness
- f. Using Student Assessment Data

Domain 4: Professional Responsibilities

- a. Reflecting on Teaching
- b. Maintaining Accurate Records
- c. Communicating with Families

- d. Contributing to the School & community
- e. Growing & Developing Professionally
- f. Showing Professionalism

Source: Danielson, C. (1996). *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, VA: Association for Curriculum Development.

ECDE Core Content Areas

The areas of competency address the development and learning of the “whole” practitioner and correspond in early childhood education and care. Each content area describes the knowledge and skills practitioners need in order to work with children from birth

through age eight and their families. The core competencies are applicable in a wide variety of settings and programs, including child care, family child care, school readiness and preschool, early childhood family education, Head Start, early childhood special education, school age child care, and others. The core competencies recognize the primary and central role of families in the growth and development of children and the strong influence of culture on all areas of early childhood education and care.

I. Child Growth and Development: understand how children acquire language and develop physically, cognitively, emotionally, and socially.

II. Learning Environment and Curriculum: establish an environment that provides learning experiences to meet each child’s needs, capabilities, and interests.

III. Assessment and Planning for Individual Needs: observe and assess what children know and can do in order to provide curriculum and instruction that addresses their developmental and learning needs.

IV. Interactions with Children: observe children and guide them as individuals and as part of a group.

V. Families and Communities: work

agencies/organizations to meet children's needs and to encourage the community's involvement with early childhood education and care.

VI. **Health, Safety, and Nutrition:** e that ensures children's health, safety, and nourishment.

VII. **Program Planning and Evaluation** and enhance operation of an early childhood education and care program

VIII. **Professional Development** and families in a professional manner and participate in the community as a representative of early childhood education and care.

Levels of Competency

The levels of competency establish a continuum from the preliminary skills necessary to

enter the field to an advanced level experience. Practitioners progress from one level to another through a combination of formal study and refl the practitioner's role, setting, or experience, she or he may have skills at

varying levels in the different core content areas.

The five levels are intended to be c working at Level 3

has knowledge and skills to meet the competencies at Levels 1, 2, and 3. At all levels, adults who educate and care for young children continue their participation in professional development activities and advance their knowledge and skills within each of the core content areas.

Level 1 includes the knowledge and skills expected of a practitioner new to the early education and care fiel education.

Level 2 includes the knowledge and skills of Level 1 plus knowledge and skills commensurate with a Child Development Associate credential, a certificate or diploma in child development, or equivalent training, education, and relevant experience.

Level 3 includes the knowledge and skills of Levels 1 and 2 plus knowledge

and skills commensurate with an associate's degree in early childhood education or child development, or equivalent training, education, and relevant experience.

Level 4 includes the knowledge and skills of Levels 1, 2, and 3 plus knowledge and skills commensurate with a bachelor's degree in early childhood education or child development and experience working with young children.

Level 5 includes the knowledge and skills of Levels 1, 2, 3, and 4 plus knowledge and skills commensurate with an advanced degree in early childhood education or child development and extensive experience working with young children.

Environments and Materials

The physical environment provides young children with expectations for behavior. When educators are mindful of the aesthetics, organization, and function of each area in the space, challenging behavior is likely to decrease while constructive, cooperative behavior increases. A program's vision for learning and philosophy of care dictate how an environment is designed. For example, if the curriculum is based on the view that children are competent directors of their own learning, educators develop a physical setting and activities that reflect easy access to meaningful play materials. Shelves for manipulatives and

other materials are readily accessible.

Special areas in the room are designed for individual, small-group, and larger-group interactions. Play materials and other materials are carefully selected to reflect children's emerging play and conversation. In this environment, adult-child interactions

can expand children's questions and comments. This broader vision for children's learning and care thus helps to promote synchrony between the environment, routines, and teacher-child interactions.

High-quality learning environments set the stage for social-emotional exploration and growth. When children are presented with a warm, inviting, and culturally familiar environment, they feel comfortable and secure. The attractive spaces adults prepare for children communicate expectations of responsibility and cooperative care (we all play in and care for this beautiful place together). Preparing a variety of learning

areas with open-ended materials encourages each child to participate in meaningful play experiences that match their individual temperaments and abilities. Incorporating- elements from the home creates an atmosphere of community while simultaneously- acknowledging the presence of individuals.

A physical environment that supports social-emotional learning has the following- characteristics:

Challenging and developmentally appropriate materials It provides children with challenging, developmentally appropriate materials that encourage both creative, flexible us blocks and art supplies) and practice- in problem solving (e.g., closed-ended materials such as puzzles and matching games).

Ample supply of materials It offers plenty of mater between children or long waiting- for a turn. Materials are labeled in the languages of the children in the group (e.g., using pictures, words, and symbols) to offer children a menu of opportunities for play.

Organized learning areas The space is organized with designated learning areas for large-group activities (e.g., circle time), small-group explorations- (e.g., a work table or science project), and individual activities from which children can choose, ensuring that all children physically have access to all areas.

Appropriately sized small-group activities It limits the size of small-group activities- to promote peer interaction and struggles over turn-taking and use of materials.

A variety of small-group activities Activities are planned so that a range of adult supervision exists: from activities- that children can do with minimal adult supervision (e.g., dramatic play, familiar books, and puzzles) to ones that require close adult supervision (e.g., messy art activities, preparing food, learning to use new toys, materials,- or games).

Aesthetically appealing The aesthetics (e.g., colors, textures, furnishings, other physical elements of the environment) are designed so that children are comfortable and their energy and attention are focused on the activities. An overstimulating environment- is avoided.

Public and private spaces There are both public spaces that encourage peer interaction and private spaces where children can take a break from sociability (areas with materials such as storybooks, pillows, blankets, or stuffed toys)

Curriculum content

The domain of “learning environments” include early childhood educator competencies related to the design of classroom or home ECE settings for young children and to the content of the learning areas.

It is noted that the curricular ‘content’ of learning.

Early childhood education professionals need to understand and utilize strategies that are characteristic of high quality early childhood environments such as:-

- Consistent schedules and routines
- Transition activities from one activity to another.
- Interesting materials and
- Activities appropriate for age
- Well arranged classroom to enhance children’s learning.

The ECD educator must know and understand and be familiar with a variety of developmentally appropriate curriculum models to prepare young children for school.

Planning framework.

Follow daily schedule

1. Give children choices
2. Encourage children learning through play
3. Is familiar with and assists with implementing planned curriculum.
4. Supports and encourage children’s participation in variety of activities.

5. Provide an interesting and secure environment that encourages play, exploration and learning using space, relationships, materials as routine as resources.
6. Develops an appropriate schedule that includes a balance of active and quiet, child directed, individual and group, indoor as outdoor activities.
7. Use observations to provide appropriate choices and adapt environment for children.
8. Ensures that the environment facilitates learning for all children in each developmental domain for example:
 - Cognitive
 - Physical
 - Social
 - Emotional
 - Creative domain

Teachers should tell others about development appropriate curriculum.

Plans, implements and evaluates learning environments and curricular to maximize learning potential.

Advocates for appropriate curricular and learning environment.

Articulates, analyzes, evaluates and applies current research and effective practice on use of technology.

Other general competency includes:

- Participating with learners and communicates in robust dialogue for the benefits of the learners achieve
- Actively engaging in respectful working relationships with learners, parents and the community.
- Showing integrity, sincerity and respect towards children's beliefs, language and culture.

- Affirming and providing contexts identity and culture
- Taking responsibility for their own learning and their students.

Professional competencies

- Acting ethically and responsibly in the performance of functions
- Becoming involved in an individual and collective project of professional development.
- Acting critically as a professional, interpreting the objects of knowledge, or culture in performing ones functions.

School competency

- Cooperating with the school staff, parents and with various social agents.
- Working in cooperation with other members in the pedagogical team.

Source: mastinet Raymond, and gauther (2001.)

Evidence shows that high quality te the education system can have on high-quality outcomes for students with diverse learning needs. Evidence also shows that effective teaching and learning depends on the relationship between teachers and learners and learner's active engagement.

Methodology

Mixed method approach has the intention of understanding “the world of human experience” (Cohen & Ma the mixed method approach in this research will be to gain deeper understanding through discovering convey quantitatively. Thus, the use of both quantitative and qualitative

methods will be appropriate in this study because the quantitative measures will adequately describe or interpret the research problems, it is framed in “how” and “why” qu of new information. This study will adopt a cross sectional design in which data are collected predominantly by questionnaire, structured/

unstructured interviews, official st in time and that both quantitative and qualitative content analysis of a

set of documents relating to a single period will be used. The researcher will adopt purposive sampling to identify the respondents'. All the 56 pre-school teachers in the school were involved in the study. This design is appropriate for the study because it will enable in-depth generation of information on ECDE teacher competencies' for teaching young children.

Stratified simple random sampling wa and ten 5year olds children and gave questionnaires to take them to their parents/guardians caretakers / to participate in the study. The study did

not cover the whole population of children, due to the limited time and resources available.

Scope of the study

This study was conducted at Nandi County ECDE school

Population and Sample

The target population of this study consists of 20 school principals, 30 Preschool teachers and 16 Parents/guardians/caretakers. Preschool school teachers were chosen because they interact with their learners directly and have records of their growth and development. The school head were chosen since they understand their learners' progress through their teachers and are they interact with the children's parents/ guardians/ caretakers. Parents/caretakers have deep knowledge on the children.

The study adopted a Non-probability sampling technique which is useful in exploratory research where the ai exists. Critical case sampling will also be used.

Critical case sampling

is a type of purposive sampling technique that is particularly useful in exploratory qualitative research, where a single case (or small number of cases) can be decisive in explaining the phenomenon of interest.

Research Instruments

Both quantitative and Qualitative data collection techniques will be used for the study. This method will provide a richer base for the analysis. The methodology will be viewed as complementary, each contributing to a better understanding and interpretation of the data generated and to the

ultimate(Yin, findings1994&Breitmayer et al., 1993). The main data collection instruments will include Interview schedule, questionnaire and document analysis.

Questionnaire

Silver (1983), defines questionnair self administered in that the respondents are responsible for reading and responding to the items prepared. Questionnaires were administered to 80 questionnaires were given out during the research process. 60 respondents' were to take part in the study while 20 questionnaires were to ensure the target of 60 respondents were attained, the researcher wanted to examine the opinions of parents/guardians/caretakers on children competency in learning.

Interview Schedules

An open ended interview schedule was used to gather information from the school principal. The interview schedule were administered to 20 respondents' during the of the research process. 20 respondents' were involved because the researcher wanted to examine the opinions of head teachers, parents/guardians/caretakers on children competency in learning.

Document Analysis

This study used institutional records showing enrolment, dropouts rates and children's school entry behavior. These were found in admission records, monthly reports, class registers and end of year results. While perusing through these documents, unstructured interview was used to pose questions to officers who

The questions were meant to seek for clarity through interpretation of the documented information about ECCE teacher competencies in handling young children.

Administration of Research Instruments

To ascertain the validity and reliability of the research instruments, the researcher undertook a pilot study in Uasin Gishu county, with subjects reminiscent of those to be observed in the actual research exercise

in Nandi county. This process proceeded as follows: The researcher identified particular primary schools questionnaires to both head teachers and classroom teachers purposively

because they had a wealth of experience about the ECDE. The QASOs were chosen for interviews because t are also custodians of documents kep in the division. On the actual dates of the study, the researcher visited

individual schools in Nandi County to conduct the research.

Ethical Considerations

The researcher explained to the respondents the purpose of the study and all the respondents were assured of they gave. The researcher assured them that the name of the school and all the respondents' names would not be revealed. The respondents were also assured of getting the feedback from the researcher if they needed it after the study. This was aimed at securing cooperation from them. The researcher also established a rapport with the respondents which facilitated the collection of data.

Data Analysis and Presentation

Procedure for data collection

The study will use both primary and secondary data. The secondary data will be sourced from journals, internet and other educational reports. The primary data will be obtained from the study which will investigate the ECCE teacher competencies by the use of questionnaires and interview schedule which will be administered to the respondents. The questionnaire was objectively constructed and particularly will be a 5 point likert scale. where 1 will represent strongly disagree and 5 will represent strongly agree (Appendix II) Questionnaires is a key tool to the study since it will be an inexpensive tool and helps in collecting data from a potentially large group.

Data analysis and Interpretation

Data will be collected using a 5 point likert scale questionnaire which will be coded and entered into a computer using the SPSS (Statistical Package for Social Scientists) programme. Multiple regression model will be applied to analyse the relationship between single dependent variable and several independent variables (Hair et al, 2005).

Bibliography

- Alexander, K., Entwisle, D., & Dauber, S. (1993). First-grade classroom behavior: Its short- and long-term consequences for school performance. *Child Development*.
- Bar-Tal, D. & Bar-Zohar, Y. (1977). The relationship between perception of locus of control and academic achievement. *Contemporary Educational Psychology*.
- Bernard, M. E. (1995). Improving student motivation and school achievement: A professional development program for teachers, special educators, school administrators and pupil service personnel. Ontario, Canada: Hindle & Associates.
- Bernard, M. E. (2001). Program achieve: A curriculum of lessons for teaching students how to achieve success and develop social-emotional-behavioral well-being. Beach, Calif.: You Can Do It! Education.
- Bernard, M. E. (2002). Providing all children with the foundation for achievement and social-emotional-behavioral well-being. 2nd ed. Priorslee, Telford (UK): Time Marque.
- Bernard, M. E. (2004). The You Can Do It! early childhood education program: A social-emotional learning curriculum (4–6 year olds). Oakleigh, Victoria, Australia: Aus
- Bernard, M. E. (2004, October). The relationship of young children's socialemotional competence to their achievement and social-emotional well-being.
- Paper presented at the Annual Research Conference of the Australian Council for Educational Research, Adelaide, Australia.
- Bernard, M. E. & Cronan, F. (1999). The child and adolescent scale of irrationality. *Journal of Cognitive Psychotherapy*.
- Bloom, B. S. (1976). Human characteristics and school learning. New York: McGraw- Hill.

- Brooks, M. (1999). Achievers and underachievers in regular and special education: An examination of their mindset for achievement and foundations for learning. Unpublished master's thesis, California State University, Long Beach.
- Brown, L. J. (1999). The effects of the "You Can Do It! Education" program on achieving and underachieving middle school students attending an after-school homework club. Unpublished master's thesis, California State University, Long Beach.
- Elbaum, B. (2002). The self-concepts of students with learning disabilities: A metaanalysis of comparisons across different placements. *Learning Disabilities Research and Practice*.
- Everson, H., Smodlaka, L., & Tobias, S. (1994). Exploring the relationship of test anxiety and metacognition on reading test performance: A cognitive analysis. *Anxiety, Stress and Coping*.
- Fantuzzo, J., Perry, M., & McDermott, P. (2004). Preschool approaches to learning and their relationship to other relevant classroom competencies for low-income children. *School Psychology Quarterly*.
- Marsh, H. W. & Yeung, A. S. (1997). Causal effects of academic self-concept on academic achievement: Structural equation models on longitudinal data. *Journal of Educational Psychology*.
- Martin, A. J., Marsh, H. W., & Debus, R. L. (2001). Self-handicapping and defensive pessimism: Exploring a model of predictors and outcomes from a self-protecting perspective. *Journal of Educational Psychology*.
- Yen, C., Konold, T., & McDermott, P. A. (2004). Does learning behavior augment cognitive ability as an indicator of academic achievement. *Journal of School Psychology*.
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, R. P. (2004). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.
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