

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

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## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

In this chapter, an effort has been made to present the review of related literature in a manner that is appropriate and convenient. For this reason, the related literature has been organized under eight themes that emerged. The first theme is about the curriculum objective. The studies under this theme were conducted to study the four BTE curriculum objectives. The second theme is about the subject knowledge and pedagogy. This theme includes only the studies that were conducted to study how the BTE curriculum was equipping prospective teachers with subject knowledge and pedagogy to be effective in the classroom. The third theme is about practice teaching. This theme includes studies that deal with how the various forms of practice teaching (on-campus & out-program) were been organized by the colleges for student-teachers to have first-hand teaching experience. The fourth theme which is about Inclusive Education mainly included studies that discussed how student-teachers were prepared to teach in an inclusive classroom. The fifth theme which is about teaching and learning resources considered only the studies that could help to study the available resources in the colleges used to facilitate teaching and learning. The sixth theme is about the assessment of learning outcomes. This theme includes studies that discussed how assessments are conducted in the BTE colleges to determine the learning outcomes of student-teachers. The seventh theme is about revamp needed which mainly includes studies that justify why revamp in needed in the BTE curriculum. The last theme is about curriculum evaluation method which involves studies that were conducted to study the methods that could be used to evaluate a curriculum to arrive at appropriate findings. The theme wise details of the review of related literature are presented as follows.

#### **2.2 Curriculum Objectives**

Under this theme, the researcher found eight studies; consisting of two Doctorate thesis, six research reports and one textbook. The details of the reviewed studies are presented as follows;

**Sirek and Sefton (2018)** explored the ‘effects of institutional constraints on instructional practices in a pre-service generalist teacher music education program in Ontario, Canada’. The researchers adopted the ethnographical design and collected the needed data by analyzing documents of the institutions and self-experience and arrived at the findings that generalist teachers lack content knowledge and pedagogy to plan and teach Music effectively in elementary schools.

**Haworth (2018)** conducted a study entitled ‘specialist English Language teachers in schools: self-perceptions of professional status’ in New Zealand. A survey design was used and a sample of 15 teachers drawn from primary and secondary schools for a semi-structured interview and analyzed by using content analysis and arrived at the finding that; Specialist teachers were equipped with requisite knowledge and pedagogical skills and commitment in teaching as per the needs of the students.

**Swars, et al (2018)** explored ‘the preparation experiences of elementary mathematics specialists: examining influences on beliefs, content knowledge, and teaching practices. The researchers used a mixed-method design and a sample of 32 elementary teachers drawn from the University of south-eastern USA for observation of classroom practices, and interview. The collected data were subjected to both inferential and descriptive statistical analysis by using mean, standard deviation and t-test for quantitative data whereas content analysis were used to analyze the qualitative data. The results showed that the teachers demonstrated knowledge of the subject matter and confidence in the teaching of elementary Mathematics.

**Hyndman (2017)** conducted a study entitled ‘perceived social-ecological barriers of generalist pre-service teachers towards teaching Physical Education: findings from the GET-PE study’. The study was a survey of 175 generalist student-teachers drawn from regional Australian University to respond to the questionnaire (close-ended and open-ended). The collected data were analyzed by using descriptive statistics and content analysis and arrived at the findings that, generalist teachers were lacking knowledge, physical abilities, and confidence to teach PE,

**Pezaro (2017)** studied ‘specialist Science and Mathematics teachers in primary schools are not the solution’. The findings indicate that generalist teachers are fit to teach in primary schools as they have confidence, patience, and can help pupils to consolidate content across all the subject areas.

**Collins (2016)** conducted a study entitled ‘Generalist pre-service teacher education, self-efficacy and arts education: An impossible expectation?’ Reflective learning in five Arts disciplines namely; Dance, Drama, Music and Visual Arts were surveyed. The researcher Bandura’s “Teacher Self Efficacy Scale” was used to collect data from 150 student-teachers. The collected data were subjected to descriptive analysis by using frequencies, mean and standard deviation and arrived at the following findings; 1) Generalist teachers enter teaching profession with limited teaching skills, 2) Generalist lack professional support to deliver lessons effectively in the classroom.

**McKernan (2010)** presented a critique of instructional objectives. It was an analysis of objectives model of curriculum planning in the context of teacher education in Europe countries. Review of curricula document and interview of teacher educators and teachers were used to collect data to arrive at the following findings; (i) Teacher educators in many countries are compelled to comply with curriculum objectives formulated by the central government without question, (ii) The objectives of most of the curricula do not reflect the knowledge structure and values of a program, (iii) Many teacher educators do not plan lessons according to the curriculum objectives.

**Norman Watts (1972)** conducted a study on an evaluation of the objectives of an elementary teacher education program. A quasi-experimental design was adopted whereby a conceptual model was developed to evaluate the curriculum objectives. The study involved 182 teacher educators, 154 student- teachers, and 50 teaching assistance. Data were collected using interview schedule, opinionnaire and questionnaire. Non-parametric and descriptive statistics were used to analyze the data. The following findings were arrived at; (i) Student-teachers needed to have a clear understanding of the curriculum objectives to plan effective lessons (ii) the objectives were placing less importance on the selection and organization of content, and the management and organization of the learning environment.

With a view of foregoing studies related to curriculum objectives, a distinction was drawn between a generalist teacher and a specialist teacher. It was argued that a generalist teacher was made to teach at the primary school where patience and confidence are required (Pezaro, 2017). But not equipped with knowledge and skills to deliver lessons effectively in all the school subjects (Sirek and Sefton, 2018; Hyndman, 2017; and Collins, 2016). On the other hand, a specialist teacher has

confidence and mastery of the subject matter capable of delivering of lessons as per the interest of the learner (Haworth, 2018; Swars, et al, 2018).

### **2.3 Subject Knowledge and Pedagogy**

The researcher came across twenty-eight reviewed studies under this theme, out of which twenty-six were research reports and two were Doctorate thesis. The details of the studies are presented as follows;

**Kidwell (2019)** conducted a study entitled ‘teaching about teaching about culture: the role of culture in second language teacher education programs’ in Indonesia. The design used was qualitative case study a selected teacher education program focusing on the novice teachers’ learning and teaching about culture. The tools viz., interviews and lesson observations were used to collect data from twenty teacher educators and twenty novice teachers and arrived at the finding that a few opportunities were provided for language teachers to acquire teaching skills to teach different cultures in the classroom.

**Kiweewa et al, (2018)** conducted a study entitled ‘Incorporating comprehensive counselling and guidance models into school curricula in Sub-Saharan Africa’. Grounded theory design was used and arrived at the following findings that in-service teacher trainees need to get familiarized with the guidance services while on training, so that they can subsequently improve upon them through workshops when they are implementing in schools.

**Nabie et al (2018)** studied pre-service teachers' perceptions and knowledge of trigonometric concepts. A survey design was used and the convenience sampling technique was adopted to collect data from 119 second-year Science/Mathematics in two Ghanaian Colleges of Education. Trigonometry perception questionnaire and trigonometry assessment test were used to collect data on teachers' perceptions and conceptual knowledge of trigonometry. Data were coded in Statistical Package for Social Sciences (SPSS version 20) and analyzed using descriptive statistics. The results indicated that 1) the student-teachers lacked the knowledge of the basic concepts of trigonometric as it was inappropriate taught at the colleges 2) Appropriate instructional practices at the colleges were critical for developing the interest of the student-teachers in Mathematics.

**Parker et al (2018)** conducted a comparative study of Colleges of Education (CoE) integrated science curriculum vis-à-vis the basic school Integrated Science curriculum in Ghana. The research design adopted was the survey method. Integrated Science teachers in both colleges and schools were purposively selected to provide data. Data were collected using focus group discussion, interview schedule, questionnaire and analysis of curricula documents. The findings indicate that entrepreneurship, technology and development which tend to impact knowledge of constructivist and innovative approach to teaching were not part of the content of the CoE curriculum.

**Suaka, and Kuranchie, (2018)** studied head teachers' professional management needs and concerns: Evidence from an educational district in Ghana. The designed used was a case study and data were collected from 15 head teachers (DBE certificate holders) and 6 circuit supervisors by using semi-structured interview. The findings are presented as follows; 1) Most of the basic school head teachers did not face management and planning challenges 2) Most of the head teachers were lacking competencies in curriculum development, improvement and appraisal related functions, 3) Most of the head teachers having challenges in maintaining school-community relationship.

**Sharon Wolf, et al (2017)** investigated the impacts of fast track transformational teacher training in Ghana. The design used for the study was a descriptive survey. Simple random sampling technique was used to select 135 student-teachers. Data were collected through questionnaire, interviews and observations and analyzed using descriptive statistics via bar chart and content analysis. It was found that 1) the newly trained teachers could not apply appropriate pedagogy in their classrooms, 2) It was also found that basic school teachers required adequate knowledge in psychology to enable them to understand child's development to be able to apply the child-centred approach for teaching and learning in basic schools.

**West Africa Examination Council (WAEC) (2017)** presented Chief Examiners' reports on the Basic Education Certificate Examination for school candidates. According to the report; (i) The candidates demonstrated poor linguistic ability in the languages; (ii) The candidates also demonstrated inadequate knowledge in practical subjects namely, ICT, Pre-technical Skills, and Basic Design and Technology.

**Mungure (2017)** investigated the teaching approach used by tutors to prepare Science and Mathematics teachers during training at Morogoro Teachers' College. The study adopted a case study design where interview and focus group discussion techniques were used to collect data from 32 tutors and 24 student-teachers. Both the tutor and student-teacher were purposively sampled. Data were analyzed through content analysis method. The following findings were revealed; (i) Tutors mostly used lecture, question and answer methods to teach the content of Mathematics and Science in the colleges, (ii) Teaching pedagogy needed to be introduced to the student-teachers at the beginning of the training for more pedagogical skills, (iii) The college's tutors were not adequately equipped with scientific knowledge and approach to teaching Mathematics and Science.

**Ramazan (2017)** conducted a study on the evaluation of the opinions of prospective teachers about the objectives of human rights education. The main aim of the study was to investigate the views of prospective teachers at the Department of Primary Education about the objectives of human rights education as a component of citizenship and democracy education curriculum in Turkey. A descriptive survey design was used. Purposive sampling technique was used to sample 25 prospective teachers for the study. The data were collected through a questionnaire and analyzed using content analysis as per emerging themes. The findings revealed that the mode of transaction the citizenship and democracy education curriculum was predominated by theory while ignoring practical aspect.

**UNICEF (2017)** evaluated the Ghana education program for capacity building in basic schools between 2012 and 2017. A mixed-method design was adopted and collected data through focus group discussions, interview and questionnaire. Ten districts in Ghana were purposively selected; some UNICEF informants in those districts were purposively selected. Further, 10 schools and 100 teachers were selected through simple random sampling. The data collected were triangulated and analyzed using descriptive statistics and found that; school teachers needed excessive pedagogical training particularly in core subjects to align with changing needs of the basic school students.

**Sofa and Asola (2016)** studied barriers to providing quality Physical Education in primary schools in Ghana. The designed was a questionnaire survey of 296 school teachers who were purposively selected from 4 political regions of Ghana to respond

to open ended questionnaire designed by using Likert scale. The data were analyzed by using descriptive and inferential statistics and arrived at the following findings; 1) studying PE helps in the improvement of health, confidence and Physical well-being of the students 2) inadequate resources is a constrain to teaching of PE in Ghanaian Schools.

**Tekyiwa and Amua-Sekyi (2016)** reviewed assessment, student learning and classroom practice in the colleges of education in Ghana. The design was a case study of colleges of education. Four tutors and an assessment officer of each of the selected college were purposively sampled for interview. Three male student-teachers and three female student-teachers were also purposively selected from each college for focus group discussion and interview. Reviewed of interview transcripts and a constant comparative method were used to analyze the data. It was revealed that teaching methods in BTE program ought to help tutors to receive an expected response from the student-teachers about lessons taught. It was also revealed that the teaching methods have to be revised to facilitate the works of the tutors in achieving set objectives.

**Huedenu and Adibi Maria-Goretti (2015)** studied assessment of teaching and learning of art-related subjects in the Colleges of Education in the Central and Western Regions of Ghana. The design of the study was a descriptive survey. Simple random sampling method was used to select 4 Colleges of Education. Also, the stratified sampling method was used to 400 student-teachers to respond to the questionnaire. Data collected were analyzed using descriptive statistics to arrive at the following findings; 1) the most widely used methods of teaching Art were lecture, discussion, activity, fieldwork, and demonstration, question and answer methods, 2) The CoE program needs to be given adequate facilities to influence the use of appropriate teaching methods by tutors to achieve instructional goals.

**Akarawang et al (2015)** conducted a study entitled ‘enhancing ICT competency for teachers in the Thailand Basic Education System. The researchers used a survey design, and randomly selected a sample of 377 teachers and 12 school directors from 33 schools to respond to a standardized questionnaire. The collected data were subjected to descriptive analysis by using frequencies percentages and arrived at the following findings; 1) the lecture method was not appropriate for problem-solving, 2)

Teaching methods for ICT lesson should focus on practicalities by systematically following certain learning steps as per the needs of the learner.

**Donkor (2015)** conducted a study entitled ‘Basic school leaders in Ghana: how equipped are they?’ the aim of the study was to examine leadership capabilities of basic school head teachers in Ghana. The type of research was qualitative and data were collected through BTE curriculum, focus group discussion (30 student-teachers), interviews of 6 tu87tors, 4 experts in education and 5 school teachers. The collected data were analyzed by using descriptive narrative and arrived at the following findings; 1) most of the head teachers were lacking school leadership competencies, 2) the BTE curriculum was not adequately equipping student-teacher with school leadership skills. This was because school leadership was not incorporated as a course in its curriculum.

**Enu et al (2015)** conducted a study entitled ‘factors influencing students’ Mathematics performance in some selected colleges of education in Ghana’. The researchers used a descriptive survey design, and randomly selected 50 student-teachers from three CoE in two regions (central and western) to respond to a close-ended questionnaire. The collected data were subjected to descriptive analysis by using frequencies percentages and arrived at the following findings; 1) A majority (88%) of the tutors used lecture method for teaching Mathematics in the colleges, 2) Inadequate teaching and learning material in the colleges affect the performance in Mathematics.

**Ngman-Wara (2015)** investigated Ghanaian Junior High School (JHS) science teachers’ knowledge of contextualized science instruction. A descriptive survey design was adopted and the convenience sampling technique was used to sample 204 Junior High School Science Teachers. Data were collected through the test and analyzed using descriptive statistics with the help of SPSS. The following findings were arrived at; (i) Basic school teachers did not have the adequate content knowledge to implement science curriculum properly (ii) The basic school teachers failed to demonstrate pedagogical skills to contextualize scientific process to the students (iii) the colleges of education curriculum must be revisited and probably modified in a manner that will prepare student-teachers with content knowledge and teaching strategies.

**Adjei (2015)** studied analysis of subordination errors in students' writings: a study of selected teacher training colleges in Ghana. The study aimed to examine the knowledge and competences of the student-teachers in colleges of education about sentence structure-subordination. The design adopted was a descriptive survey. Purposive sampling technique was used to sample 3 colleges of education while the random sampling technique was employed to sample 300 student-teachers. Data were collected through scripts writing and test. The data was further analyzed by matching correct and incorrect subordinators in sentences. Findings revealed that the linguistic skill among the majority of the basic school teachers was below average as most of them required in-depth training on subordinate clauses in sentences.

**Quashigah et al (2014)** studied evaluation of colleges of education (CoE) social studies curriculum vis-à-vis the junior high school (JHS) social studies curriculum in Ghana. The design used was a descriptive survey. Data were collected using comparative analysis of objectives of Social Studies program at CoE and the objectives of the JHS syllabus. Data were also collected through document review of the content of CoE Social Studies and content of the JHS Social Studies syllabus. The result indicates that the contents of basic school Social Studies and Colleges of Education social studies contents were contradictory. Meanwhile, the content of CoE social studies was appropriately equipping student-teachers with content knowledge to be effective in the classroom.

**Asare and Nti (2014)** studied teacher education in Ghana: a contemporary synopsis and matters arising. The purpose of the article was to identify contemporary trends in all levels of teacher education in Ghana. The study was a survey of student-teachers and teachers. Document review technique was used to arrive at the following findings; (i) Theory possibly predominate the content of initial teacher preparation curriculum, thus making it imbalanced for teacher training, (ii) The BTE curriculum ought to balance the content weightage of the various courses to prepare competent teachers for schools.

**Patti (2013)** conducted a study on how teachers can teach for social justice within the confines of the no child left behind era: an inquiry into tensions between classroom teachers and mandated curriculum and methodologies. The purpose of the study was to observe and understand the tension between present methods of teaching in schools

and to explore as what extent teachers can teach for social justice. The researcher employed auto-ethnography design whereby data were collected through document review, triangulated and analyzed through content analysis. It was found that; (i) Teachers lacked access to a variety of methods and pedagogy to create democratic classrooms for effective teaching and learning (ii) Newly trained teachers from colleges lacked knowledge and solutions to implications of social vices that were usually portrayed by school children.

**Martin Weiler and Martin Weiler (2012)** studied ‘addressing HIV/AIDS Education: A Look at Teacher Preparedness in Ghana’. The design used was a questionnaire survey of 382 University students. The findings that emerged are 1) teacher education curriculum must empower teachers to act against stigmatization and fears 2) teachers of HIV/AIDS Education must have in-depth knowledge and be sensitive to issues related to HIV/AIDS, 3) student-teachers should be able to judge HIV/AIDS related issues in socio-economic context.

**Helen Patrick, et al (2011)** studied the role of educational psychology in teacher education. The study asserted that (i) inadequate involvement of educational psychology in teacher training has a significant defect in learning outcomes and the teacher education program (ii) Some teacher educators ignored the teaching of educational psychology because of a misconception that content of educational psychology was irrelevant to teacher trainees (iii) Educational Psychology in teacher training institutions should be taught by experienced educational psychologists who have extensive knowledge.

**Laren (2011)** conducted a study on preparing teachers for HIV/AIDS education: integrated and interdisciplinary pre-service teacher education. The researcher adopted descriptive survey design and collected data from final year pre-service teachers by using unstructured interview technique and arrived at the following findings; 1) generalist teachers were not adequately prepared to teach HIV/AIDS education 2) concepts that relate to sexually should be taught to matured students, 3) Integrating of HIV/AIDS education is appropriate way of promoting values and social justice.

**Katie (2009)** evaluated the curriculum and instructional approaches employed in Norfolk public schools in Virginia. The following research questions were generated; (1) To what degree have the recommendations of the 2005-06 evaluation study been

implemented in the Norfolk Public Schools district in regards to curriculum and instructional practices? (2) Are there differences between gifted resource teachers and cluster teachers in the use of differentiated instructional practices? (3) To what extent does the Local Educational Plan for the Education of Gifted Students (LEA) for Norfolk Public Schools align with the Curriculum and Instructional NAGC standards? Data were collected through a questionnaire survey, group discussion and interview from 25 gifted resource teachers, 100 gifted cluster teachers, and 13 Directors. Purposive sampling technique was used to sample all the respondents. The data collected were analyzed through descriptive statistics and arrived at the following findings; (i) Most of the elementary teachers needed support as they did not have adequate knowledge in the choice of appropriate strategies to teach all the subjects, (ii) The Norfolk district needed to review the curriculum to include instructional strategies to align with instruction standards.

**Gopinathan et al (2008)** presented a report entitled ‘transforming teacher education redefined professionals for 21st-century schools’. The study was a survey of the quality of teacher education in nine countries namely; Australia, Brazil, Canada, and the People’s Republic of China, Denmark, South Korea, Singapore, United Kingdom, and the United States of America. ‘The Alliance, a think-tank, collaborate to generate ideas on trending educational issues to add to knowledge. It was reported that quality teaching will be characterized by; (1) greater emphasis on teachers’ values, skills and knowledge for teaching and changing lives (2) “personalizing” learning for individual students to accommodate greater diversity in learning contexts.

**Gupta (1982)** studied evaluation of the innovative practices of teaching in the colleges of education. The study aimed to assess the effectiveness of the innovative methods in the direction of better learning and higher achievement in the college of education. The study adopted an experimental design. Therefore, Lecture-cum-discussion, symposium, seminar, workshop, discussion, supervised and assignment methods experimented at Jaipur, Jodhpur, Sardar Shahar, Ajmer, Bikaner and Dabok. Both Control and experimental groups were 50 students each. The finding revealed that discussion, symposium and supervised teaching were more effective. It further revealed that discussion and symposium methods were more useful for low and average achieving student-teachers.

**Butcher (1970)** studied ‘development of materials for a one year course in African music for the general undergraduate student’. The researcher examined audio-visual material and publications about African Music at Howard University to conduct the study and arrived at the following conclusions; 1) adequate time is needed to study Music in African context 2) workshops, projects and performances are appropriate for teaching Music, 3) Studying Music in Africa is constrained by inadequate written notations.

Following the above studies reviewed, the difficulties that have engulfed BTE program concerning subject knowledge and pedagogy need to be addressed. Most of the basic school teachers were not competent to teach all topics in some core subjects such as the English language, Mathematics, and Integrated Science (Nabie et al, 2018; Ngman-Wara, 2015 & Adjei, 2015). Also, the teacher education curriculum was required to prepare prospective teachers in pedagogy and innovative skills to be effective in the classroom (Parker et al, 2018; UNICEF, 2017; Patti, 2013; Katie, 2009). It was further revealed that psychology of education was critical in teacher preparation programme (Helen et al, 2011; Gopinathan et al, 2008). Also, issues emanating from the above studies indicate that most of the teacher educators preferred to transact the curriculum by using a teacher-centred method (Tekyiwa and Amua-Sekyi, 2016; Huedenu and Adibi Maria-Goretti, 2015; Akarawang et al, 2015; Enu et al, 2015). Other studies revealed that teacher-centred method is theory-base and inappropriate for equipping student-teachers with critical thinking skills, pedagogy and practicality (Ramazan, 2017; WAEC, 2017; Asare and Nti, 2014). Meanwhile, many studies advocated for the use of child-centred approach as it is appropriate for equipping student-teachers with the required knowledge and skills as per the needs of the learner (Sharon et al, 2017; Mungure, 2017 & Gupta, 1982).

## **2.4 Practice Teaching**

The researcher came across nine studies under this theme, out of which six were research reports and one was a Doctorate thesis. The details of the studies are presented as follows;

**Bonneyi et al (2018)** investigated the perception of student-teachers towards on-campus teaching practice at the Holy Child College of Education in Ghana. Data were collected from second year teacher trainees who were undertaking on-campus

teaching practice at the College of Education in 2017/2018 academic year. The findings were revealed that; 1) it has helped in developing several skills of the student-teachers such as lesson preparation, presentation, and class control, 2) tutors provided feedbacks to improve the teaching skills of student-teachers, 3) the duration of the on-campus teacher practice is short and should be given a second look.

**Nti-Adarkwah and Ofori (2019)** ‘explored the effectiveness of Out-segment supervision of the In-In-Out program in Colleges of Education in the Ashanti Region of Ghana’. The designed used was a descriptive survey in which a questionnaire (close-ended) was used to collect data from 207 tutors and 334 mentees and subjected to Kruskal Wallis ANOVA and One-sample t-test analysis and arrived at the following findings; 1) Out-program teaching practice was part of the BTE curriculum and transacted incorporate schools 2) supervision of the student-teachers by the tutors was not satisfactory.

**Yeboah and Kwaah (2018)** conducted a study on preparing teacher trainees for field experience: lessons from the On-Campus practical experience in Colleges of Education in Ghana. The purpose of the study was to recognize the experiences and perceptions of student-teachers during On-Campus and Out-Program teaching practice. A descriptive survey design was used for the study. Tutors and student-teachers of 3 colleges of education were purposively sampled. Questionnaires were administered to 232 student-teachers; focus group discussion session was conducted for 12 trainees and interviewed 24 college tutors. The findings revealed that 1) document guidelines for the conduct of the on-campus teaching practice were not available, 2) trainees had limited time to engage with supervisors and critically interrogate and reflect on their practices.

**Akyeampong (2017)** investigated teacher educators’ practice and vision of good teaching in teacher education reform context in Ghana. The study explored teacher educators’ practice and vision of good teaching. It was a survey of 8 teacher educators whereas interview schedule was used to collect qualitative data. The study found that; (i) Good structures for practice teaching are required to equip student-teachers with knowledge and skills to apply the principles of learner-centred pedagogy in the classroom; (ii) Student-teachers relationship with their intensive coordinators is critical and could affect teaching practicum in schools if not properly handled.

**Mohamed, et al (2015)** studied the role of mentoring in the quality of teacher training in Ghana. A case study design was adopted for the study. Data were collected from tutors, final year student-teachers and mentors through a semi-structured interview. The data collected were transcribed and analyzed according to emerging themes and revealed that qualified and experienced mentors in schools were required to make the out-program teaching practice effective.

**Bukari and Kuyini (2015)** studied the role of mentoring in the quality of teacher training in Ghana. The designed used as a case study in which an interview was used to collect data from 8 headteachers of basic schools and 18 final year student-teachers on out-program. The collected data were analyzed by using content analysis and arrived at the following findings; 1) the duration of out-program was overloaded with activities and too much of examination, 2) out-program was appropriate of introducing student-teachers to lesson planning, lesson delivery and classroom management techniques 3) Proper arrangement of the BTE colleges with the co-operate schools was needed for effective out-program teaching practice.

**Abudu and Donkor (2014)** studied the ‘In-In-Out Program of Teacher Education in Ghana: The Perception of Implementers’. The researchers used a descriptive survey design and selected a sample of 7 college principals, 120 tutors, 350 final year student-teacher and 70 alumni and 100 basic school teachers by using stratified random sampling. The collected data were subjected to descriptive analysis by using frequencies and percentages and arrived at the following findings; 1) lack of teaching-learning material viz., science laboratory and teachers’ handbooks, 2) time was inadequate for student-teachers to observe lessons in schools 3) tutors were not committed to conducting on-campus teaching practice in colleges 4) the tutors mostly used traditional teaching method in teaching in the class which was not appropriate for equipping the student-teachers with professional skills.

**Gordon Clark et al (2014)** conducted a study entitled ‘evaluating team project-work using triangulation: lessons from communities in northern Ghana’. Data were collected from students, staff and host communities by using questionnaires and arrived at the following findings; 1) students’ project works are assessed by the staff member only to judge their academic competencies, 2) assessment of project work should involve student, the staff and external assessor from the community to ensure

holistic evaluation, 3) project supervisors were experienced staff members having more than five years work experience.

**Rai (1982)** studied a survey of the problems of teachers training colleges about practicing schools. Random and cluster sampling techniques were used to collect needed data from 730 respondents viz., the principals, teacher educators, student-teachers and school headmasters. Questionnaire and checklist were used to collect data and analyzed by using chi-square test and descriptive statistics via frequencies and percentages and arrived at the following findings; 1) The findings revealed that 50% of the student-teachers of Uttar Pradesh and 31% of Gujarat agreed to have failed to perform their responsibilities satisfactory due to inadequate time, 2) The teacher educators were not competent to guide student-teachers appropriately during practice teaching.

Issues emanated from the foregoing reviewed studies that teacher practice teaching is a requirement of teacher preparation curriculum and in most of the cases there it is faced by the problem of inadequate schools, qualified mentors particularly during out-program stage (Nti-Adarkwah and Ofori, 2019; Mohamed, et al 2015; Rai, 1982). Other studies revealed that lack of document guideline and inadequate time was pernicious to the conduct of practice teaching (Yeboah & Kwaah, 2018 & Rai, 1982). In this situation, the question arises whether the teaching practice in the BTE curriculum in Ghana should be extended? This suggests that a new policy guideline of the program is required to streamline and affirm the relationship between colleges and schools and mentors and student-teachers.

## **2.5 Inclusive Education**

The researcher came across four studies under this theme which are presented as follows;

**Okechukwu and Kuyinin (2017)** conducted a comparative study on teachers' pedagogical competencies in supporting children with learning difficulties in primary schools in Ghana and Brunei Darussalam. The study aimed to compare the competence levels of teachers of primary schools in Ghana and Brunei Darussalam in the light of assisting children with learning difficulties. A descriptive survey design was used for the study. Data were collected using questionnaire, observation and interview from 188 primary school teachers in both Brunei Darussalam and Ghana.

The findings showed that primary school teachers from Brunei Darussalam and Ghana had limited competences in supporting children with learning difficulties in the general education classroom. It was recommended that since schools teachers have been responsible for ensuring inclusive education, both countries should improve their teachers' competencies and instructional strategies through curriculum revision.

**Gyimah and Amoako (2016)** explored pre-service teachers' perceptions of procedures to identify and assess children with special educational needs and disabilities. The design adopted was a descriptive survey. Purposive sampling technique was used to select 3 regions in Ghana. Out of the 3 regions, 13 Colleges of Education were purposively selected while the convenience sampling technique was used to select 235 tutors. Data were collected through a questionnaire and interview. Descriptive statistics via percentages and frequencies were used to analyze the data generated by the questionnaire. Majority of the respondents were of the view that the CoE curriculum has to resource the pre-service student-teachers with knowledge and skills to apply teaching methods to assist children with learning difficulties.

**Nketsia, et al (2016)** studied teacher educators' views on inclusive education and teacher preparation in Ghana. A descriptive survey design was employed for the study. Data were collected from 4 colleges of education. The colleges were selected using convenience sampling technique while the purposive sampling technique was used to select 125 tutors. Both open-ended and close-ended questionnaire was used to collect data from the respondents. The data was further analyzed through descriptive statistics via frequencies and percentages and t-test. It was found that instructional materials were inadequate in the colleges and could negatively effective transaction of the BTE program. It was further commended that a review of the availability of resources in colleges would be useful to redeem the success of the program.

**Kuyini et al (2016)** conducted a study entitled 'Ghanaian teachers: competencies perceived as important for inclusive education'. The sample of 163 regular school teachers was randomly drawn from two geographic regions of Ghana to respond to a 14-item questionnaire. The collected data were subjected to inferential statistical analysis by using ANOVA and t-tests and arrived at the following findings; 1) the curriculum of teacher training institutions in Ghana should emphasize on knowledge and skills in inclusive education 2) the teacher training institutions lacked training resources to support the training of student-teachers in inclusive education.

It can be learnt from the above studies that inclusive education was not given the due weightage as teacher educators were not making classrooms inclusive as the teacher training curricula were not well organized to develop the skill of inclusiveness in the student-teachers (Okechukwu and Kuyinin, 2017; Gyimah and Amoako, 2016). Also, special education classes in teacher education were not furnished with required resources for training student-teachers (Nketsia, et al; Gyimah, 2016; Kuyini et al, 2016).

## **2.6 Teaching and Learning Resources**

The researcher came across six studies under this theme, out of which five were research reports and one was a Doctorate thesis. The details of the studies are presented below as follows;

**Mbaga et al (2018)** conducted a study entitled ‘adequacy of workshop facilities in colleges of education (technical) for the training of trade teachers of technical colleges in northeastern states of Nigeria’. The researchers used a descriptive survey design and selected a sample of 45 college instructors from four colleges of education (Technical) in the north-eastern states of Nigeria. A close-ended questionnaire and a checklist were used to collect the needed data. The collected data were subjected to descriptive analysis by using frequencies, percentages, mean and standard deviation and arrived at the following findings; 1) the performance of the student-teachers in science and technical subjects was poor due to lack of equipped workshops in the colleges 2) the student-teachers were lacking practical skills because of inadequate training facilities.

**Vidergor, et al (2018)** conducted a study on the investigation from curriculum to practicum: Arab and Jewish trainees' perceptions of college preparation for teaching. The purpose of the study was the evaluation of perceptions of Arab and Jewish teacher trainees regarding how their curricula prepare them for teaching. A descriptive survey design was used for the study. The sample size of the study was 314 teacher trainees from two colleges in Israel consisting of teacher trainees studying in a Hebrew-speaking college and those studied in an Arabic-speaking college. Questionnaires were used to collect data from the teacher trainees and analyzed using descriptive statistics. It was revealed that inadequate facilities in both colleges

affected teaching and learning methods. To improve the quality of teacher trainees, the study advocated for immediate teaching and learning facilities in both colleges.

**Filson and Agyekum (2014)** conducted an evaluative study on Colleges of education libraries in Ghana. The design used was a survey of 14 colleges of education. Librarians of each of the colleges were purposively sampled for the study. The data were collected using a questionnaire. The data collected were analyzed through descriptive statistics via pie chart, frequency and percentages. The finding revealed that most of the colleges were lacking functional library were the services of modern books, qualifies librarians and e-library facilities could be rendered to users.

**Agyei and Douglas (2013)** studied analysis of technology integration in teacher education in Ghana. Meta-analysis method was adopted for the study. Data were collected from statistical publications, published works and other related Meta-analyses, policy documents and curriculum materials. The data collected were analyzed using data reduction as per emerging themes. It was revealed that 1) there are inadequate ICT infrastructure in the light of computers and internet facilities for effective teaching and learning in colleges, 2) most of the computers in schools' laboratories were non-functional and not supporting technology integration.

**Ayaaba (2013)** studied the attitude of students towards the teaching and learning of Social Studies concepts in colleges of education Ghana. The study adopted a descriptive survey design. The sample size of the study was 200 student-teachers from 4 Colleges of Education. The simple random sampling technique was used to select 50 student-teachers from each of the 4 selected colleges to respond to Likert type questionnaire. The data collected were analyzed using descriptive statistics via frequency and percentages. It was found that the teaching and learning of Social Studies in colleges has been hampered by a lack of modern books in libraries and resource room.

**Iucu and Platis (2012)** investigated extra-curriculum activities challenges and opportunities. The study was guided by the three objectives as follows; i) to identify the advantages and disadvantages of the extra-curriculum activities, ii) to analyze the students behavior with regard to extra-curriculum activities and iii) to develop a strategy for a better perception of the extra-curriculum activities by both entities: university and students. SWOT analysis method was used and arrived at the following

findings that most students do not participate in extracurricular activities because of lack of interest and motivation.

**Agyei and Voogt (2011)** conducted a study entitled 'ICT use in the teaching of mathematics: Implications for professional development of pre-service teachers in Ghana'. The needed data were collected from 180 teachers by using questionnaire and interview conducted for 6 principals and 14 Department Heads. The data were analysed by using descriptive statistics and revealed that; 1) most of the computers in the schools' laboratories were non-functional, 2) technology integration was constrained by lack of ICT infrastructure like, computers, and internet facilities.

**Slimona (2010)** investigated teacher education program at primary level in Assam, India- an evaluative study. Objectives of the study included; (1) To study the growth and development of teacher education program in Assam at primary level (2) To study the infrastructural facilities of Teacher Training Institutes like BTCs/ DIETs/ Normal Schools (3) To study the curricula of Teacher Education at Primary level (4) To identify the strengths, weaknesses and current issues in teacher training program and respective changes required to revamp the system. Survey method was adopted for the study. Data were collected from the Principals, teacher educators, and student-teachers of teacher training institutions using questionnaire and interview schedule. The data were analyzed through descriptive statistics via percentages, Pie diagrams and Bar-diagrams and arrived at the following findings; (i) most of the training institutions lacked laboratory in areas such as psychology, language and technology (ii) majority of the student-teachers expressed dissatisfaction in the teacher educators' choice of instructional materials during the transaction as they were not in their interest.

**Mahoney et al (2003)** promoting interpersonal competence and educational success through extracurricular activity participation. This was a longitudinal study whereby data were collected annually from 695 students by using interview schedule till completion of school. It was found that 1) extra-curricular activities develop interpersonal abilities and educational aspirations of student.

**Broh (2002)** linking extracurricular programming to academic achievement: who benefits and why? It is a longitudinal study of 24599 student from 1,052 public schools of USA. The data were collected by using questionnaire which revealed that

1) extra-curricular activities promotes students' development, academic achievement and socialization among them, 2) participation in a few co-curricular activities has limited academic benefit to students.

It is evident from the foregoing studies that the availability of teaching and learning resources are crucial in teacher education. The teaching and learning resources such as laboratory, library, tutors and ICT tools were inadequate in teacher training institutions (Mbagu et al, 2018; and Ayaaba, 2013). The lack of the instructional resources had negative effects the mode of transaction of the curricular (Vidergor, Hava, Noga and Salman, 2018; Filson and Agyekum, 2014; Agyei and Douglas, 2013). In the present century, it is important to develop avenues of knowledge creation in teacher education. This can be done through instructional resources. The teacher education should use relevant instructional resources to make lessons lively and to balance the teaching methods. This broadens their knowledge and facilitates generalization of concepts.

## **2.7 Assessment of Learning Outcome**

The researcher came across three studies under this theme which was all research reports. The details of the studies are presented as follows;

**Ayertei, et al (2015)** studied the influence of the type of assessment and stress on the learning outcome. The purpose of the study was to assess whether the assessment procedures used in mid-semester assessment and final assessment produce the required feedback. The study adopted a survey design where data were collected from student-teachers using a questionnaire. ANOVA was used to test the differences and equality of means of the mid-semester assessment scores as well as final assessment test scores. The findings revealed that most of the types of questions used in the assessment did not elicit all-round learning outcomes of the student-teachers. It was also revealed that mid-semester assessment has a positive impact on the final assessment of student-teachers.

**Huedenu and Adibi Maria-Goretti (2015)** studied assessment of teaching and learning of art-related subjects in the Colleges of Education in the Central and Western Regions of Ghana. The design of the study was a descriptive survey. Simple random sampling method was used to select 4 Colleges of Education. Also, the stratified sampling method was used to select 400 teacher trainees to answer the

questionnaire. Data collected were analyzed using descriptive statistics. The finding revealed that; 1) the tutors' choices of teaching methods were influenced by the lack of teaching and learning resources in the colleges, 2) the types of questions in both formative and summative assessments procedure encouraged teacher trainees to recall facts and concepts 3) the types of questions in both formative and summative assessments procedure encouraged what student-teachers could do.

**Bekoe et al (2013)** studied formative assessment techniques tutors use to assess teacher-trainees' learning in Social Studies in colleges of education in Ghana. The design used was a case study of 3 colleges of education in the Central region of Ghana. The colleges were conveniently selected while tutors were purposively selected for the study. Data were collected through interview guide and classroom observation. The data were analyzed using descriptive statistics and qualitative interpretations as per emerging themes. The findings revealed that; 1) an effective teacher should be capable of diagnosing learners' needs and devising appropriate strategy in dealing with them, 2) assessment in the BTE curriculum should be rationalized to emphasize on all the three domains.

According to the studies, assessment in teacher training has always been associated with formative and summative. In the two types of assessment, tutors gave limited attention to questions portraying what student-teachers could do (Ayertei et al, 2015; Huedenu & Adibi Maria-Goretti, 2015). To understand the learning outcomes of the learner, assessment should cover all the three domains via cognitive, affective and psychomotor (Bekoe, Eshun & Bordoh, 2014).

## **2.8 Revamp Needed**

The researcher came across nine studies under this theme, out of which five were research reports, three were Doctorate thesis and one was a conference report. The details of the studies are presented as follows;

**Opoku-Agyeman (2019)** delivered a speech on Inclusive Education for Sustainable Development at the 7<sup>th</sup> lecture series in memory of late President, Professor John Evans Atta Mills, Ghana. For the past many decades, educational reforms in Ghana have not been helpful. Reforms have to be strategically planned, logically implemented and systematically evaluated. Most of the reforms that have taken place over the years were not followed by the systematic evaluation that can help

policymakers to make the right interventions. Existing reforms at the various levels of education have to be systematically evaluated and modified as per the needs of the society.

**World Bank Group (2018)** studied learning to realize education's promise. The study was a survey of elementary teacher education in Sub-Saharan Africa countries. Those African countries were purposively selected while teacher educators and school teachers were randomly selected for the study. Data were collected from school teachers and teacher educators by using questionnaire and document review. The findings revealed that a review of elementary teacher education program in Sub-Saharan Africa was essential for the following reasons: (i) about 40% of primary school teachers in sub-Saharan countries were not knowledgeable in the mastery of concept to teach; (ii) most of basic school students of West Africa could not properly solve problems in Mathematics and English language, (iii) In 14 Sub-Saharan countries, school teachers had inadequate content knowledge and pedagogy which perhaps demonstrated some weakness in elementary teacher education program.

**Cishe (2017)** studied teachers' perspectives on transforming teacher education curriculum for relevance to basic education for sustainable development in South Africa. The main purpose of the study was to ascertain the views of the teacher educators, basic school teachers and teacher trainees on the relevance of the curriculum offered at a teacher training institutions to the school curriculum. A survey design was adopted for the study, collected data from the teacher educators, basic school teachers and teacher trainees using a semi-structured interview. The respondents were all selected through purposive sampling. Data collected were transcribed and organized into themes that emerged. Findings revealed that the approaches to curriculum transaction in teacher education institutions were not according to the needs of the basic schools. Also, the teacher trainees find it difficult to apply appropriate teaching methods in schools due to incompatibility nature of the courses taught in teacher education curriculum and the basic school curriculum. Therefore, majority of the respondents advocated for a review of the teacher education curriculum to make it relevant to the needs of the society.

**Owusu, Adu-Opore and Larbie (2016)** investigated whether politics and Ghana's pre-tertiary curriculum reform program have helped the nation. A survey design was used for the study. Curriculum experts were purposively selected for the study. Data

were collected from historical document analysis of 5 education reform policies in Ghana. Data were also collected from curriculum experts through interviews. The findings revealed that teacher education curriculum in all the levels needed immediate attention as it was not fulfilling the needs of the society due to political interferences. Also, the lack of funds affected regular curriculum reform and innovation in every level of education in Ghana.

**Mereku (2016)** studied education and training of basic school teachers in Ghana. The study aimed to examine alternative approaches that could be employed in the initial training of primary school teachers using a survey design. Teacher educators and school teachers were randomly selected for the study. Curricula materials were reviewed, teacher educators were interviewed while questionnaire and observation were used to collect data from the basic school teachers. It was revealed that teacher training programs in Ghana do not regularly go through reform to produce competent teachers. Also, the teacher training institutions in Ghana, need to adequately empower student-teachers with required skills to enable them to teach effectively in schools.

**Rusman (2015)** investigated curriculum implementation at elementary schools: a study on best practices done by elementary school teachers in planning, implementing, and evaluating the curriculum in Bandung, Indonesia. Ten elementary schools in Bandung city were randomly selected as well as 25 elementary school teachers. The researcher adopted a descriptive survey design so the questionnaire was used to collect data and analyzed through descriptive statistics via frequency and percentages. It was found that (i) A new curriculum in Bandung was the best idea to help equip elementary teachers with teaching strategies (ii) The new curriculum would expose school teachers to the use of a variety of instructional materials for effective teaching.

**Asim (2015)** investigated instructional practices of teacher educators in multicultural classrooms of pre-service student teachers in Karachi, Pakistan and New York. Mixed method was used, needed data were collected from student teachers through questionnaire whereas interview was used to collect data from the teacher educators and arrived at the following findings; (i) Majority of teacher educators from Pakistan, U.S.A and Karachi agreed that regular curriculum review is a necessary tool required to improve instructional techniques in the pre-service multicultural teacher education program (ii) Student teachers in Pakistan, U.S.A and Karachi were optimistic that new

teacher education program would empower school teachers to analytically reflect about the trends of issues in the educational system relating different cultural, racial and socio-economic issues of a multicultural society in their respective countries.

**Amakyi and Ampah-Mensah (2014)** a study entitled reflective practice in teacher education In Ghana. The researchers adopted discourse analytic approach to analyze various document on College of Education and made the following assertions 1) The BTE curriculum should be revamped to integrate theoretical knowledge with craft knowledge for equipping student-teachers with the requisite knowledge and pedagogical skills, 2) The physical resources and material resources were inadequate and needed to be improved.

**Pryor, et al (2012)** studied teacher preparation and professional development in Africa: an analysis of the curriculum of teacher education in the teaching of early Reading and Mathematics in six African countries (Ghana, Kenya, Mali, Senegal, Tanzania and Uganda). The study aimed to survey the impact of the teacher Colleges of Education curriculum in these countries on teaching and learning in schools. The 6 countries were selected by using purposive sampling whereas teacher educators and teacher trainees were randomly selected. Focus group discussion, document review of curricula materials were used for data collection. Also, the interview schedule and questionnaire were used to collect data from teacher educators and teacher trainees. The collected data were subjected to content analysis and descriptive statistics by using frequency and percentages and arrived at the following findings; 1) The basic school teachers in the six developing countries were not sufficiently equipped with content knowledge for teaching Mathematics and the English language, 2) Detailed research on how teachers are prepared in these six countries is essential, 3) the theoretical background of the basic school teachers was not impressive 4) student-teacher skipped macro teaching because it is not being examined 5) student-teachers need to know how to make teaching aids from local material in the environment

It can be seen from the aforementioned studies that teacher preparation requires an effective curriculum to align the changing needs of society. Much has been expressed about enhancing teachers' quality through revamping the teacher training curricula (World Bank Group, 2018; Mereku, 2016 & Pryor, et al (2012). Researchers have envisaged that a revamp of teacher education curricular would incorporate appropriate

content and innovative skills to prepare effective basic school teacher (Asim, 2015; Rusman, 2015).

## **2.9 Curriculum Evaluation Method**

The researcher came across eight studies under this theme, out of which six are research reports and two were Doctorate thesis. The details of the studies are presented as follows;

**Aslam and Saglam (2017)** studied methodological investigation of the curriculum evaluation theses completed between the years 2006-2015 in Turkey. The following aspects were covered in the study; university, year, curriculum which was evaluated, curriculum evaluation model, research method, design, sample type, data collection methods and data analysis technique. The case study design was adopted as well as qualitative methods of data analysis. Total of 306 postgraduate theses was used as data sources. The data were analyzed using descriptive statistics via frequency and percentage about the themes obtained. The study revealed that 1) theses on curriculum evaluation were largely studied between the years 2009-2012, 2) Descriptive model was largely used in evaluating the theses 3) It the majority of the studies used to survey and interview schedule to collect data from teachers and students, 4) The data were largely analyzed by using qualitative and mixed methods.

**Gail, et al (2017)** conducted a study entitled “evaluating the impact of an academic teacher development program”. The study aimed to evaluate the entire academic teacher development program and examine changes in teaching methods and student learning outcomes. The researchers adopted a survey of 9 randomly selected program in the USA. Curricula material via syllabi, course evaluations, grade distributions, program activity reports, interviews and vita were analyzed. It was revealed that 1) the study was useful as it improved teaching competences in teachers, 2) The study further provided the rationale and accurate process for transforming the curricula.

**Imansari and Sutadji (2017)** studied “a conceptual framework curriculum evaluation Electrical Engineering Education” by using the CIPP model. In this model, a questionnaire survey and document analysis were used to collect data. The curriculum experts were selected by using purposive sampling technique to answer a question. The collected data were analyzed by content analysis and arrived at the

following findings; 1) It is essential to incorporate curriculum content that would enhance knowledge generation and skills development in students to fit in the society, 2) The CIPP model is appropriate for evaluating how a curriculum is implemented and the extent to which it has achieved its goal.

**Nyabero (2016)** conducted a study towards a collective approach to course evaluation in curriculum development, a contemporary perspective. The purpose of the study was to find out the relations that exist in the curriculum development process in the context of course evaluation, the process of decision making, and the methodology of evaluation. The study revealed that 1) evaluation is essential in the curriculum development process, 2) it is appropriate to collect qualitative and quantitative data the course content, instructional material, and teaching methods.

**Chinta et al (2015)** studied “a conceptual framework for evaluating higher education institutions”. The authors adopted the CIPP model to examine how higher education performed in the USA. By using a survey design, the sample was drawn from students by using an accidental sampling technique. The tools viz., questionnaire and document analysis were used to collect the needed data. The collected data were subjected to content analysis by comparing institutional performances and arrived at the finding that the CIPP model is appropriate for assessing performances of higher education.

**Gordon, et al (2014)** conducted a study entitled “evaluating team project-work in Ghana”. A survey design was used in the study. Data were collected from students and teachers using a questionnaire, focus group discussion and interview. The study examined the impact of the program and its effects on students, teachers and communities. The data collected were triangulated and revealed that 1) the program was successful 2) the authors suggested modification for improvement in students’ preparation and professional development 3) Data triangulation approach is appropriate for multidisciplinary evaluation.

**Tom-Lawyer (2014)** evaluated “the implementation of the curriculum of English language in the Nigeria Certificate in Education (NCE) at the College of Education in Ogun State”. The author used CIPP to evaluate the effectiveness of the curriculum of the English language on teacher preparation. In this model, a mixed-methods approach was used whereby the sample of 10 lecturers and 20 students were drawn

from the colleges by using convenience sampling techniques. By adopting a survey design, tools viz., questionnaire, interview schedule and observation checklists were used to collect needed. The collected data were subjected to content analysis and descriptive statistics by using frequency and percentage and arrived at the following findings; 1) there were inadequate resources (physical and human) in the colleges to prepare effective teachers, 2) the students showed a negative attitude towards the curriculum with a feeling that the content was inappropriate for preparing effective English language teachers.

**Chiang (1996)** conducted a study entitled "Assessing the Effectiveness of five-year mechanical engineering technology programs of junior colleges in Taiwan R.O.C.: an application of the CIPP evaluation model". The author adopted the CIPP model to evaluate the curriculum framework, the curriculum material, modes of instructions, support services, students' performance. A descriptive survey design was used and the needed data were collected from teachers, and student-teachers by using a questionnaire. The collected data were analyzed by using descriptive statistics via frequency and percentage and arrived at the following findings; 1) the curriculum was appropriate for equipping the students with requisite skills and professional knowledge 2) the curriculum was not susceptible to change 3) the credit hours for the practicum were not appropriate 4) the number of courses was not satisfactory.

It can be seen from the foregoing studies that evaluation is an integral part of any educational establishment. It is essential for examining resources such as the curriculum, and the facilities in teacher training institutions to know how they are effective in achieving the educational goal (Aslam & Saglam, 2017 & Gail, Rathbun, Jane Leatherman and Rebecca Jensen, 2017). To evaluate these resources, many scholars have recommended the CIPP model of curriculum evaluation (Imansari and Sutadji, 2017; Chinta et al, 2015; Tom-Lawyer, 2014; Chiang, 1996; Tom-Lawyer, 2014). By adopting the CIPP model, qualitative data and quantitative data could be collected from multiple sources and triangulated to arrive at appropriate findings (Nyabero, 2016; Gordon Clark and Godfred Seidu Jasaw, 2014).

## **2.10 Implications of the Review of Related Literature**

The researcher gained an insight into the previous studies that were carried out by the various researchers and scholars in the field of education specifically about

curriculum evaluation. Valuable ideas and implications were drawn to help the researcher to arrive at useful findings. The implications that were drawn from the review of the related literature were categorized into substantive implications and methodological implications which are presented as follows.

### **2.10.1 Substantive Implications**

- It can be learnt from the review of related literature that the BTE curriculum is essential for preparing generalist teachers for primary schools. But facts were not revealed about the appropriateness of the semester wise contents of the three main categories of the BTE courses viz., 1) Curriculum and Pedagogic Studies, 2) Educational and Contemporary Studies and 3) Value Added Courses. Here, the question that arises is whether the contents of the BTE courses in these categories are appropriate for preparing student-teachers to be effective in the classroom. The available literature presented above could not provide an accurate answer to this question.
- It can be seen from the related literature that no study was found in Ghana about the BTE curriculum objectives. So, the unanswered question is whether the four BTE curriculum objectives as presented in the chapter-I of the presented study are relevant in terms of meeting the needs of the society. But some studies were found in the foreign countries revealing some facts about generalist teachers (i.e., BTE curriculum objective-I) and specialist teachers (i.e., BTE curriculum objective-II). No study was found concerning objective-III and objective-IV.
- It can further be learnt from the review of related literature that Psychology of Education is critical in teacher preparation. But the question that has not been answered is whether the BTE curriculum has incorporated a course on Psychology to prepare prospective teachers. If the answer is in affirmative, what is the appropriateness of the contents in terms of preparing student-teachers? the available literature could not provide an answer to this question.
- The availability and accessibility of facilities in the BTE colleges have a tremendous effect on the curriculum transaction as found in the available literature. Here, it is expected that the findings of the present study may either contradict or affirm the findings of the related literature. Whatever the findings

may be, the question that did not get an answer is how facilities affect the tutors' choice of instructional strategies in the colleges.

- There is no study found about student-teachers' participation in co-curricular and extra-curricular activities in the BTE colleges. So, the unsolved question here is whether student-teachers participate in these activities in the BTE colleges. If they do, what are the activities and how appropriate are those activities in terms of preparing holistic student-teaches?
- Some studies were found about the practice teaching in the BTE colleges. Most of the studies highlighted some challenges that are confronting student-teachers during practice teaching. But how the various stages of practice teaching viz., on-campus teaching practice and out-program teaching practice are organized by the colleges were not revealed.
- Some studies were found expressing the need to review the BTE curriculum. But no study was found in Ghana evaluating the BTE curriculum which has operated for more than four years. So, it is not known whether the BTE curriculum in Ghana which was stated in 2014 has lost its potency for preparing effective teachers.

### **2.10.2 Methodological Implications**

- The methodologies of studies concerning the model of curriculum evaluation, some of the investigators like Imansari and Sutadji (2017), Chinta et al (2015), Tom-Lawyer (2014), Chiang (1996), and Tom-Lawyer (2014) used CIPP model to achieve their objectives.
- Some investigators like Nyabero (2016), Gordon Clark et al (2014) revealed that qualitative and quantitative methods could be used to conduct evaluation study. Out of the total of 65 related literature reviewed, about 43 of them adopted a descriptive survey design. These researchers collected data by using tools such as questionnaire, focus group discussion, and interview schedule. Also, the collected data were subject to descriptive statistical analysis by using frequency and percentages. But a few of the investigators (24) used experimental design, and case study. It was learnt from the related literature that complex inferential statistics were not used to conduct an evaluation study.

## **2.11 Conclusion**

It can be concluded that the review of related literature took into consideration of studies conducted in Ghana and abroad. The focus of the related literature was directed to elementary teacher education curriculum with the main aim of preparing effective prospective teachers. These related literature have been organized under eight themes. The themes are; BTE curriculum objectives, subject knowledge and pedagogy, teaching methods, inclusiveness, practice teaching, teaching and learning resources, assessment of learning outcomes, revamp needed and curriculum evaluation method. Based on the foregoing presentation, it can be said that this chapter has provided a conceptual understanding of the present study that can facilitate the collection of required data to achieve objectives. The models of curriculum evaluation and appropriate methodologies of curriculum evaluation were also presented. In the next chapter i.e., chapter-III of the present study, plans and procedure of the study would be presented.

