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## CHAPTER 21

### WHO IS A 21<sup>ST</sup> CENTURY SPECIAL NEEDS TEACHER?

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#### **Introduction**

Special needs education is an aspect of education that makes allowances for the use of special equipment, facilities and instructional methods which will suit the individual's unique needs. Persons with special needs are found in all societies of the world and they have the right to education. Over the years, there existed educational institutions made specifically for students with peculiar learning needs such as school for the visually impaired, school for people with auditory impairment, speech impairment, and albinism among others. Today, it is becoming a common phenomenon to find learners that require unique responses to their education in some institutions. However, it may be difficult for learners with special needs to benefit from the conventional classroom except with the provision of special equipment, instructional methods and materials which will be carefully utilized by a professionally trained special needs teacher to facilitate their learning in order to realize their maximum potential. The Federal Republic of Nigeria (2014) has pointed out that persons with special needs shall be provided with inclusive education services in schools where normal persons attend. Since special needs education is tailored towards Individualized Educational Programme (IEP), the special needs teacher has a great responsibility of individualizing instruction to meet the unique needs of their students. Since the 21st-century teaching is associated with innovations in tools and technology utilization, special needs teachers need to be conversant and skillful to achieve the educational goals irrespective of the multi-challenges in Nigerian society today for a brighter future. The 21st century special needs teacher therefore, is expected to be on top of the new innovation usage in order to achieve the expected learning outcomes.

This chapter therefore, looked at some related issues such as: conceptualizing the 21<sup>st</sup> century education and the teacher, conceptualizing special needs education and the teacher, pedagogical skills of the 21<sup>st</sup> century special needs teacher, Pedagogical methods and strategies of 21<sup>st</sup> century special needs teachers, challenges of 21<sup>st</sup> century special needs teachers, conclusion and suggestions.

#### **Conceptualizing the 21st century education and the teacher**

The 21st century is the present century of the Gregorian calendar which officially began on 1st January 2001 and will end 31st December 2100. A number of thinkers according to Piper (2019) have argued that the 21st century is the most

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important century in human history. The 21<sup>st</sup> century is regarded as an information age that is characterized by knowledge economy, problem solving, critical thinking and practical application of concepts. It is an era marked by rapid adoption of new technologies known as the digital world. The way humans live, work and learn has been completely revolutionized by technology which centers on the utilization of everything that is important in today's world. The basic difference in the culture of the 20<sup>th</sup> and 21<sup>st</sup> century as stated by Obiefuna, Izuagba, Afurobi and Ifegbo (2015) is principally in the context and purposes of learning. The new culture aims at increasing students' ability to learn independently and to construct new knowledge based on constructivist approach and application of multiple intelligences to solving problems in education and the society in general.

Hallerman, Lewis and Dresbach (2019) described the 21<sup>st</sup> century education as one that responds to the economical, technological and societal shifts that are happening at an ever-increasing pace. It is an education that provides students with the skills and competencies they need to thrive in the 21<sup>st</sup> century world. This education is characterized by innovations, creativity, independence, skill acquisition, critical thinking, collaboration, information management, communication skills amongst others.

The 21<sup>st</sup> century teacher therefore, is one who understands the learners' differences, plans, manages, designs and executes instructional strategies as well as evaluates their progress (Young, 2018). Hence, Mohammed and Omonu (2015) described 21<sup>st</sup> century teachers as both planners and mediators of learning through diversity. The teacher in the 21<sup>st</sup> century has evolved from one who gives instructions or imparts knowledge to one who facilitates the learning process (Ikumelu & Ogbueghu, 2021). They apply available technology and various methods to facilitate the acquisition of skills, knowledge, attitudes and ideas that would create the desirable changes in the behaviour of learners. A 21<sup>st</sup>-century teacher is obvious of being up-to-date on the latest in-technology. They can have the characteristics of a facilitator, a contributor, lifelong learner, collaborators, innovative, current or even an integrator (Cox, 2019; Palmer, 2015). In view of this, the 21<sup>st</sup> century teacher would be able to meet up with diversity in education of students with special needs.

### **Conceptualizing special needs education and the teacher**

Special Education is a type of education that takes into consideration the learners' peculiarities and fashions out a programme that suits them. Special Education as in the national policy on education Federal Republic of Nigeria (2014), is formal education/training meant for children and adult with special needs who have learning difficulties because of different types of handicaps such as: visually impaired, hearing impaired, mentally retarded, speech impaired, multiple handicapped, the disadvantaged children, the gifted and talented amongst others due to the circumstances of birth, mental and physical health patterns or accident in later life. This education ensures that everyone has equal opportunity



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irrespective of any physical challenge to participate in the classroom and take active part in the teaching/learning process (Bryd & Alexander, 2020). This education is premeditated to ease the difficulties encountered by individual learners that need extra assistance in the teaching-learning process that leads to desired outcomes (UNESCO, 2011).

The main purpose of Special Education service is to provide the independent living skills necessary for individuals to continue their lives in the society without being dependent on others.

According Federal Ministry of Education (2015, p.9) the objectives of special needs education include the following:

1. To take care of total service delivery of the physical, mental and emotional disabilities of the Nigerian child, irrespective of setting (school, home and hospital).
2. To provide adequate and qualitative education for all Persons with Special needs in all aspects of national developmental endeavours.
3. To ensure that all persons with special needs develop at a pace commensurate with their abilities and to contribute to the nation's socio-economic and technological development.

As a special needs teacher, he/she should be able to meet the objectives of teaching children with special problems if they possess those qualities or characteristics needed by them.

A special needs teacher should be intelligent, responsive and empathetic to help students with disabilities succeed, and help everyone feel proud of choosing them to serve children with special needs. A special needs teacher must be highly intelligent especially in general education according to Webster (2022), in order to adapt to the ability of their students in an inclusive setting, access students both formally and informally, understanding their strengths as well as their needs and weaknesses. Special needs teachers create safe places according to Webster (2022) because of the nature of the students. Special needs teachers should be ready to face the reality and challenges children with different disabilities have such as: messiness, autism amongst other disabilities. The teacher pays attention to what motivates their students and doesn't judge them when they don't conform to their expectations. The ability to keep deadlines is critical to avoiding due process. According to Webster (2022), the legal assumption one takes, evaporates when one fails to follow Federal Law, and failure to meet timelines. The special needs teacher requires a diversity of skills which include: understanding complex disabilities, applying evidence-based interventions and practices, intensive assessment, data collection and monitoring techniques and developing individualized programs to suit learners' learning needs. The special needs teacher needs the capacity to have a command over technology and competency that will increase the quality of the process while facilitating the learning process.



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## Pedagogical skills of the 21st century special needs teacher (SNT)

The 21st century special needs teacher is a lifelong learner that is aware of the ever-changing trends in education, has an open mind to adopt changes and is in tune with what the future may bring to education. In order to make the learners acquire quality knowledge, the right values, attitudes and relevant skills for lifelong learning, there are vital skills the teacher needs to possess (Aslan, 2018). Teachers must be equipped with the necessary pedagogical skills that will facilitate the learning process. Generally, the 21st century special needs teacher according to Forte and Flores (2014) has the ability to recognize the need of the learner to prepare learners to meet the challenges of the future. The teacher inspires creativity, encourages collaboration, motivates learners to think critically and creates a platform for effective communication among learners (Forte & Flores, 2014). This forms the backdrop of the skills they acquire according to Partnership for 21st century skills (2010, p. 34) as described thus:

1. **Critical-thinking skills** are about using various forms of reason, such as inductive and deductive, analyzing how parts of a whole interact with each other, evaluating major points of view, and reflecting critically on learning experiences and processes.
2. **Creativity skills** refer to using a wide range of ideas and creating techniques, such as brainstorming, creating new and worthwhile ideas, being able to analyze and evaluate original ideas and working creatively with others.
3. **Collaboration skills** involve the ability to work effectively and respectfully within a team, the willingness to compromise to accomplish a goal, and assume shared responsibility.
4. **Communication skills** entail being able to articulate ideas and thoughts effectively through oral, written, and non-verbal methods; possessing the ability to decipher meaning through listening; using communication for a range of purposes and being able to converse in diverse environments. Every system of education, special needs education inclusive, that exists in the 21st century is expected to align with the learning skills in order for learners to develop skills that will enable them thrive in today's dynamic workplace.

The special needs teacher requires a diversity of skills which include: understanding complex disabilities, applying evidence-based interventions and practices, intensive assessment, data collection and monitoring techniques and developing individualized programs to suit learners' learning needs (Rock et al, 2016). A study by Aslan as noted in Yilmaz, Karabulut, Ucar and Ucar (2021), shows that many teachers working in the field of Special Education utilize several assistive technologies such as computers and the internet in their classes. As a means of improving teacher instructional quality in special needs education, development of pedagogical skills of the 21st century is very vital.



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## **Pedagogical methods and strategies of 21st century special needs education teachers**

Special needs education teachers have adopted various kinds of methods and strategies to teach children with special needs based on the child's weakness and area of deficit. The curriculum and instructional methods for special needs education should be inventive in such a way that will create a variety of learning environments beyond the traditional concept of the class in the 21<sup>st</sup> century. Some of the methods and strategies employed by Special Education teachers according to Bharmal (2019) include:

1. ***Thematic linking***– This method is very effective in Special Education classrooms. A single theme is tied into multiple subject areas, so that they are no longer regarded as distinct subjects.
2. ***Multi-sensorial approach***–Engaging all the senses activates learners with diverse modalities. Having multiple sensory approaches (e.g. pictures, audio recordings, diagrams, video clips, real objects etc.) to teaching would help the learners to capitalize on their preferred modality.
3. ***Mnemonics and graphic organizers*** – Some special needs learners struggle with memory, hence mnemonic devices like acronyms and acrostics help aid retention of multiple points particularly where sequence matters. Acronyms are formed using the first letters of the items you want to remember to form one word while acrostics take the first letter of each item you want to remember and use them to make a memorable sentence or phrase. In like manner, graphic organizers such as web diagrams present the matter in a visually appealing form; reducing the pressure of content and helping learners sift out relevant details.
4. ***Project-Based Teaching***– This allows the learners to move beyond the borders of books and carry out research and present them in any medium of their choice. They are provided with the opportunity to express themselves in a way they are comfortable with. It also gives room for in-depth discussion and learning as other learners are invited to pose questions.
5. ***Rapport Building*** – Dedicating enough time to develop a bond of trust and unconditional acceptance between the teacher and learners is the fundamental basis for any learning. Once the learners feel heard, understood and not criticized, they will be unafraid of information.

### **Other methods/strategies include:**

6. ***Forward chaining***– It begins with known facts and moves forward using rules to uncover more information. It is data-driven, and as such requires asking questions or known facts from the user's knowledge base. It simplifies a complex task by dividing it into several simpler tasks that a computer may carry out synchronously or sequentially, much like in a chain process.
  7. ***Errorless teaching***– Errorless teaching is an instructional strategy that ensures learners always respond correctly. As each skill is taught, children are provided
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with prompt clues immediately following an instruction. The immediate prompt prevents any chance for incorrect responses.

**8. Scaffolding**– It is a process through which a teacher adds support for students in order to enhance learning and aid in the mastery of tasks. The teacher does this by systematically building on students’ experiences and knowledge as they are learning new skills.

**9. Cooperative learning** – Cooperative learning is a teaching strategy to reward groups instead of individual learners. Positive interdependence in cooperative learning allows each group member to contribute their own strength to the final outcome of the learning activity.

**10. Individual educational plan (IEP)** – It is a pedagogical and development plan drawn up for each child with special needs by adapting the curriculum in conformity with the child’s abilities and needs.

### **Challenges of the special needs education teacher in the 21<sup>st</sup> century**

There are possible challenges that the special needs education teacher faces in the 21<sup>st</sup> century classroom. In research carried out by Hashir (2021, p. 310), the followings were pointed out as the challenges of the special needs teacher as:

1. **Teaching materials and curriculum structure** – The way the curriculum is organized may require instructional materials that may not be easy for the teacher to locate. To locate relevant instructional materials that are suitable for each learner’s need, could be a challenge to the teacher.
2. **Lack of time** – Sometimes, teachers do not have enough time to attend to each learner’s needs. They also face trouble in delivering what they really want to do because of the lack of time.
3. **An expectation from parents** – Over expectation from parents is another challenge that teachers face. Some parents are not open-minded about their children’s issue and so do not play an active part in their learning process; rather they expect teachers to make their children’s learning rapid.
4. **Behavioral issues** –How to control learners with behavioral issues is another challenge of the teacher. It stresses the teacher most times to make some learners behave well in the classroom. Sometimes the learners are inattentive, hyperactive and impulsive thereby, having difficulty in social interaction in the classroom.
5. **Motivating the students** – Motivating Special Education learners is a complex task where the teachers try to create competence in task completion and academics. To begin the teaching and learning process, the teacher has to motivate the learners to create engagement.
6. **Building self-esteem** – Naturally most learners with special needs battle with low self-esteem and the teacher is faced with the responsibility of giving them a supportive space to bring them out of boundaries to explore their abilities.



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7. *Emotional issues* – Special needs learners sometimes exhibit emotional issues such as mood swings, sadness, lack of interaction, and emotional distractions which leave the teachers confused and at the same time affect their performance.
  8. *Lack of appreciation*– Special needs education teachers in most cases do not get as much appreciation as their general education colleagues. Regardless of the complexity of their job description they do not get the appreciation they deserve either by the government, school or parents.
  9. *Variability of learners need*– The burn-out rate for special needs education teachers is very high compared to other teachers. Differentiated instruction and individualized teaching practices are challenging for teachers because the learners have different ability levels, learn in different ways and understand concepts at different times.
  10. *Non availability of modern instructional materials* – In most inclusive schools, the needed instructional materials that will accommodate all learners are not always available.
  11. *Lack of training* – It is necessary that the special needs teacher engage in training such as seminars and workshops to learn new skills and trends in their profession. But the reverse is always the case because most special needs education teachers are not exposed to such training.

### **Conclusion**

Learners of all ages irrespective of their different disabilities such as: attention difficulties, intellectual retardation, disordered communication, hearing impaired, visually impaired, behavioural problems and other physical and health related problems need a learning environment that enables them to develop the 21st-century skills necessary for success both in and out of the classroom. The teacher is a very important personality that has the skills and key roles to actualize this through innovative methods and strategies put in place. However, challenges are bound to occur that call for intervention.

### **Implications of 21<sup>st</sup> century education to special needs education**

The 21<sup>st</sup> century education which is associated with innovations and technology has implications for special needs teacher preparation, to enable them to face the challenges of teaching using skills and tools to enhance teaching and achieve the educational goals in the global community.

It also has implications for curriculum planning and development of special needs education technologies by specialists for effective curriculum implementation in a 21<sup>st</sup> century special needs education classroom.

This will assist and enhance special needs students of various categories in learning using advanced technologies independently to be able to fit into the society globally.



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## Suggestions

- Instructional materials should be made available by NGOs and the Ministry of education to enable teachers to align with the 21<sup>st</sup> century innovative teaching.
- Training in workshops should be organized for teachers' continuous update with current technologies in teaching methods by the school authorities and government establishments in order to fit in with the innovation in vogue.
- Motivation of students and teachers should be encouraged by parents and governmental bodies by appreciating every effort made to discourage low esteem of students and even at times teachers.
- Sufficient time should be included by the Ministry of education and curriculum planners to enable learners with disability to adjust and learn properly.

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