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### LEVEL OF KNOWLEDGE AND SKILLS OF SCIENCES TEACHERS REGARDING THE USE OF MULTIMEDIA TEACHING AID FOR SPECIAL EDUCATION STUDENTS WITH VISUAL IMPAIRMENT

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#### Abstract

In following the current of education, special education teachers must prepare themselves with high knowledge and solid skills to convey the subject of the lesson to students. Teachers need to be able to master the learning content and deliver it to the students according to their ability level. Teachers need to understand the topic carefully using clearer language so that the delivery becomes more effective. Studies explained that the quality of teacher teaching can be improved with high teacher knowledge. In-depth knowledge can help teachers deal with the different abilities and needs of students in the classroom as well as create a good and positive learning environment for students. The ability to teach effectively depends on the knowledge of the teacher. Knowledge can take many forms. Special education teachers need to generate learning knowledge ideas and design interactive multimedia BBM that can motivate students' interests. So along with that can create attractiveness in the learning process of the education curriculum. Special.

Keywords: special education, visual impairment, multimedia, teaching aid, knowledge

## **Introduction**

Teachers who have a high level of knowledge in the implementation of the BBM multimedia approach can implement this approach as best as possible to provide a positive impact on the achievement of autistic students. Knowledge refers to familiarity, awareness, or understanding of someone or something. The term knowledge can refer to a theoretical or practical understanding of a subject. The advancement of information technology changes the teaching style of teachers in schools.

Special education teachers don't just rely on chalk and blackboards to teach. In fact, they are urged to improve their information technology knowledge and skills so as not to fall behind with the ever-changing technological developments based on the latest trends. A teacher must be skilled in carrying out teaching and learning tasks according to the passage of time. Teachers need to be proficient in using BBM such as computers and internet software to help deliver subjects more effectively to students with special needs (Siti Hajar & Suguneswari 2016).

A skill is a learned ability to perform an action with a specified result with good execution consistent with time, energy, or both. Teachers are executors and agents of change in the educational process. Therefore, special education teachers need to have a solid quality of knowledge and skills in diversifying the teaching medium to be more interactive and effective (Muhibah & Nurzuliana, 2018). In a study Norfadhilah (2014) explained that special education teachers need to diversify teaching techniques and skills in order to be more creative and attract students' interest.

## **Literature Review**

A quality teacher is a teacher who has competence in PdPc as an effort to produce a generation of students with the knowledge and skills needed in the development of Malaysia. Teachers play an important role in developing students' potential. A professional teacher must have pedagogical, professional and social competence. Through these competencies, teachers can build knowledge and show a good teaching attitude (Dadan Suryana 2013). According to social psychologist Rajecki (1989) divided attitudes into three components namely affective, behavioral and cognition. These three components of attitude are interrelated and function in the formation of individual attitudes. The teacher's attitude is an important element in delivering teaching and learning to students.

A positive attitude can be shown by teachers to accept reforms in the current of education if they get social and emotional support from superiors and colleagues (Kondakchi, 2015). The application of a positive attitude towards the use of BBM multimedia will encourage teachers to integrate the knowledge of the use of BBM multimedia in PdPc. The results of a study conducted by Lai Nan Poh et al. (2019) found that there is a significant

difference in the attitudes of male and female teachers towards the use of BBM. The use of BBM multimedia can make it easier for teachers and students to generate ideas for discoveries in teaching.

## Conclusion

The use of BBM multimedia, among other things, is to promote a variety of teaching strategies depending on the needs and development of autistic students. Teachers need to be wise in determining learning methods because they are faced with students with special needs who have different levels of ability. It is generally known that the cognitive ability of autistic students is different from students with other disabilities. The chosen strategy can produce an active and meaningful learning atmosphere. In this case, the material-centered learning method can help the teacher deliver the content of the lesson effectively. Teachers focus on the use of BBM covering various ways to help students understand PdPc. In the context of autistic students, the use of BBM multimedia can be used as a reference source for autistic students. In fact, in this way students can understand the content of the lesson well and can learn independently without the presence of the teacher.

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