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The macramé patterns that were used to produce fashion accessories were created using practical means based on adaptation of the successive approximation model (SAM). It was observed during the research that the production of the accessories with the patterns needed some additional knotting which brought in the Chinese knots to complete the accessories based on the SAM model as a guide.

Again, the clove hitch knot that was the basis of creating the patterns had to be manipulated by tying in other ways with the help and guide of the SAM model. It was realized that they could be mounted horizontally, vertically, and diagonally and even be knotted from the middle depending on the type of pattern to be achieved. It has proven to be very versatile, effective and reliable in developing strong and secure patterns.

It was concluded that the clove hitch knot could be used in developing a lot of patterns in macramé. It was discovered that instructional design models do not only have to apply to eLearning systems but also can be incorporated into art and design projects to achieve results. This was achieved by designing a knot guide that helped guide the researcher in achieving those patterns. The patterns created were also designed to depict the meanings from existing African and European symbols. For example, the African symbols like the Adinkra symbol, which signifies hypocrisy was achieved through the development of macramé patterns. Other designs like the chess pattern, which is popularly used for playing games, as well as the star, and kite patterns which were derived from the shape, were thus achieved using the SAM model.

## **Recommendations**

Users of this project report should follow the step-by-step procedure and illustrated demonstration to produce similar projects and also develop their own patterns by adapting instructional system designs and models.

Fashion design and textile lecturers can teach macramé techniques for accessory making and also learn to use SAM to design more flexible course materials to guide the teaching and learning of art and design courses for both regular and e-learning modes to expand access to vocational skills development through higher education.

Macramé is part of the fabric construction techniques, which are studied in various educational institutions. Therefore, the attention of teachers and institutional heads must be drawn to favour the teaching, learning and application of macramé techniques.

Other basic macramé knots can be used for knotting patterns or can be explored in the production of other items to expand their scope. The study employed the square knot and clove hitch knot techniques of macramé but advance research can be done using other basic knots to create unique patterns and designs. Further research must be carried out on how to develop more patterns from other basic knots in order to bring out and create new patterns.

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