The study looked into the relationship between training and small and medium-sized enterprises' growth in Kenya. Lack of basic skills in business management and entrepreneurship seems to be a major drawback in the growth and development of the SME sector. Despite the various research studies conducted in the past on SME training, there has been poor coordination of the effect of the training offered. Service providers in the SME are not clear to what extent the entrepreneurs benefit from the business management training, specifically in terms of training and growth of the enterprises. The objectives of the study were to establish the relationship between business management training and small and medium-sized enterprises' growth in Nairobi, Kenya. The specific objectives of the study were to establish the nature and types of training offered to enhance SME growth; investigate the relationship between factors that influence the transfer of learning/training and SME growth in Nairobi and establish the relationship between business management training and SMEs' growth. The research design for this study was the descriptive method. The target population for this study were Nairobi based entrepreneurs who had successfully received business growth training under the Mwezi Kali II Project. The population consisted of 400 entrepreneurs who had operated their business in Kenya. Systematic and Stratified sampling strategies were used to select the sample of 80 respondents in this study. The researcher collected data by administering questionnaires to the entrepreneurs in the target group. The data was analysed using both descriptive statistics, such as the mean, percentage and frequencies and inferential techniques, such as multiple regression analysis. SPSS was used to aid the analysis process. The results were that business management training had a positive effect on the entrepreneurs and such, new products and services were introduced in the enterprise after the training. The businesses were also able to hire more employees after the training as compared to before the training. The main conclusions were that appropriately timed and designed training programmes are likely to have positive effects on business growth; Most entrepreneurs value training, but cannot afford it; owner-managers need training most but have least time to attend management training in finance, production, marketing, ICT and human resources management are very vital to SME growth and there were positive changes in the businesses after the training. The changes were as a result of attending the business management training. Finally, the key recommendations were that business management training should be provided to a larger number of enterprises at affordable costs; business management training programmes should meet the needs of the clients and should be tailor-made and networks and linkages amongst various support agencies should be promoted so that training providers can refer their clients for further support.