Measuring student perceptions about the use of a computer programme as a teaching aid in Auditing

Nestene Botha

21090734

Submitted in fulfillment of the requirements for the degree

Magister Commercii in Accountancy

at the

Potchefstroom Campus of the North West University

Supervisor: **Prof JP Fouché**

Co-supervisor: **Prof A Nel**

January 2014

It all starts here ™

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the following people and organisations, without which this dissertation would not have been possible:

- My Heavenly Father, for giving me the ability, creativity, strength, courage and human resources to complete this dissertation
- My fiancé, Johan, for his patience, continued assistance and support during the time of this study
- My brother, Ockert-Johan, who provided valuable pre-programming assistance and recommendations, assisted with the animation process, programmed and re-programmed the educational game until all technical clichés were eliminated and provided technical assistance during the experiential group experiment
- My best friend, Elsabe Roux, who developed the animated content for the educational game and provided technical assistance and moral support on the day of the experiment.
- Chante Ollewagen, who assisted with developing the animated content for the educational game.
- My parents, Christoff and Doret, who provided technical and moral support on the day of the experiment and assisted (also academically) me throughout the process of developing and completing both the educational game and dissertation
- My supervisors, Prof. Jaco Fouche and Andre Nel, for their wealth of knowledge, insight, continued support and professional guidance throughout this project
- All the research participants, for offering their valued time to play the educational game, complete the case study and complete the questionnaires
- All my colleagues at the North West University's School of Accounting Science, for their interest and support and for participating in the pre-test of the educational game and providing valuable feedback
- All my colleagues at CAP Chartered Accountants, for their interest and support.

- Ms Laetitia Bedeker, for the professional manner in which she conducted the language and reference editing

- Mrs Susan van Biljon, for the professional manner in which she conducted the technical and typographical editing

- Mrs Suria Ellis of the Statistic Consultation Service of North-West University, for her professional statistical guidance and support

OPSOMMING

Sleutelwoorde: eksperimentele leer; inligtingstegnologie; rekeningkundige onderwys; opvoedkundige speletjie; ouditkunde onderwys

Oudit, as ’n sub-vak van die rekeningkunde-dissipline, is inherent ’n moeilike vak om te leer en te onderrig. Die tradisionele onderrig van oudit en rekeningkunde is die bron van talle uitdagings, probleme en kritiek. Oudit dosente het dus ’n verantwoordelikheid om metodes of hulpmiddele te ondersoek wat dosente kan help om hierdie uitdagings, probleme en kritiek die hoof te bied ten einde toekomstige ouditeurs op te lei wat die nodige kennis, begrip en vaardighede het om doeltreffend in die werkplek te funksioneer. Die primêre doelstelling van hierdie studie was dus om te evalueer of die leer- en onderrigprobleme wat ervaar word doeltreffend aangepak kan word deur die gebruik van ’n opvoedkundige inligtingstegnologiegebaseerde speletjie, wat met verloop van en op grond van hierdie studie ontwikkel is. Die persepsies van derdejaar oudit studente aan Noordwes-Universiteit rakende die gebruik van hierdie speletjie as ’n opvoedkundige hulpmiddel in die onderrig van oudit is aan die hand van ’n vraelys getoets, wat ook as deel van hierdie studie ontwikkel is. Die deelnemers is in ’n eksperimentele en ’n kontrolegroep verdeel. Die eksperimentele groep het die opvoedkundige rekenaarspeletjie gespeel, terwyl die kontrolegroep die gevallestudievraag voltooi het op grond waarvan die opvoedkundige speletjie ontwikkel is. Die studente het daarná dieselfde vraelys voltooi. Die vernaamste bevindinge van die studie was dat die opvoedkundige rekenaarspeletjie van gelyke opvoedkundige waarde as die gevallestudiemetode was, terwyl faktore soos genot, betrokkenheid en motivering hoër aangeslaan is met betrekking tot die rekenaarspeletjie as die gevallestudiemetode.

ABSTRACT

Keywords: accounting education; auditing education; educational game; experiential learning; information technology

Auditing, as a subset of the accounting discipline, is an inherently difficult subject to learn and teach. There have been various challenges, problems and criticisms regarding traditional auditing and accounting education. Auditing lecturers therefore have a responsibility to investigate methods or aids that can assist lecturers in addressing these challenges, problems and criticisms in order to educate future auditors who have the knowledge, understanding and skills to function effectively in the workplace. The primary objective of this study was therefore to evaluate whether the learning and lecturing difficulties experienced may be addressed effectively through the use of an educational auditing information technology-based game, which was developed during the course and as a result of this study. The perceptions of third-year auditing students at North-West University regarding the use of this game as an educational aid in auditing education were tested through a questionnaire that was also developed as part of this study. The study involved dividing the participants into an experimental and control group. The experimental group played the educational computer game, while the control group completed the case question from which the educational game was developed. The students then completed the same questionnaire. The main findings of the study were that the educational computer game was equal in educational value to the case method, while factors such as joy, engagement and motivation were rated higher for the computer game than for the case method.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AECC	Accounting Education Change Commission
ATO	Approved Training Office
CA(SA)	Chartered Accountant South Africa
IFAC	Internation Federation of Accountants
IRBA	Independent Regulatory Board for Auditors
ISA	International Standard on Auditing
iVISiCE	Interactive Visualisations in Civil Engineering
LAN	Local Area Network
NWU	North West University
PAAB	Public Accountants' and Auditors' Board
PBL	Problem-based learning
PWC	PriceWaterhouseCoopers
RTO	Registered Trainging Office
SAICA	South African Institute of Charterted Accountants
UK	United Kingdom
USA	United States of America
VAT	Value Added Tax
WWTB	Who Wants to Be a Millionaire
WWW	World Wide Web