Skills Attainment through an Online Learning Module

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Abstract: The world of higher and further education has been changing rapidly and there has been a shift towards online education. Professional and regulatory bodies are indicating the importance of catering for online higher education. However, it is important to consider the effectiveness of online education in the development of skills required by the employers. As South Africa is facing high unemployment, graduating students should be equipped with more than just the qualification they registered to complete; they need to be employable. This article attempts to evaluate the effectiveness of a business related online learning module in order to develop skills in graduates which are desired by employers.
Keywords: Online learning, Business simulation game, Skills, Employability.

INTRODUCTION

Online learning has become the way forward for education. In America, 75% of all courses offered, are online or blended learning [1]. Online learning for higher and further education offers the student a variety of learning opportunities that can be competitive in nature. As such, online learning allows the student to participate in diversified activities which allows for a personal learning experience [2]. Thus, the inclusion of an online learning module in higher or further education contributes to the development of business skills [3].

However, as the unemployment rate in South Africa is high and rising [4], it is important to evaluate the effectiveness of online learning in terms of the attainment of skills which are considered as valuable by employers. As such, the value of an online module in a qualification should be considered.

This article aims to identify the effectiveness of a business related online learning module in the attainment of skills desired by employers in graduating students at a private tertiary institution in South Africa. This module is used as a Work Integrated Learning (WIL) module to the rest of the subject and qualification. The online module completed by students considered for this study was in the form of a business simulation game.

Problem statement

Online education does not support the attainment of skills required for graduates to be employable. As such the skills and knowledge cannot be enhanced if a student actively engages with an education and training [5].

Research objectives

Primary research objective

- The primary research objective is to evaluate the effectiveness of online education in the development of skills required by graduates to become employable. Online education takes away from traditional methods of learning by decreasing growth experienced by students – especially with regards to communication and interaction skills. As such, it reduces their ability to become workplace ready [5].

Secondary research objectives

- To determine whether an online learning module promotes an understanding of decision making knowledge and skills.
- To determine whether an online learning module leads to an improvement in communication as a management competency.
- To ascertain whether an online learning module can lead to an understanding of dependability as a management competency in the business environment.

The third interview question attempted to evaluate the knowledge and skills learned in the online learning module which relates to interaction within a team. Two themes were identified for this question. Students stated that they have an increased understanding of listening and communication skills as a team and as a manager within a team as this has an impact on the running of a business.

LITERATURE REVIEW

In order to establish if an online learning module can contribute to the attainment of skills which may make students more employable, the desired skills must be identified.

Skills

"Skills are defined as the proficiencies needed to perform a task. Skills are usually enhanced through practice" [6]. It is important to consider the skills desired by employers. Moreover as the unemployment rate in South Africa is forecasted to be 27.8% for the second quarter of 2017 [4]. This necessitates the requirement for students to have more than the knowledge attained when they were completing their qualification. Students need to be employable. The University of Kent defines employability as: "the capability of getting and keeping satisfactory work" [10]. Furthermore, employability refers to the ability of the learning institute to provide graduates with the necessary knowledge, skills, attributes and identify for graduates to be successful in starting and maintaining a job [7].

According to the University of Kent [10], the following are the top ten skills employers' desire in employees. These top ten skills are: verbal communication, teamwork, commercial awareness, self-motivation, analysing and investigating, drive, written communication, planning and organising, flexibility and time management

Furthermore, Adams [7], a Forbes employee, identified the following ten skills as desired by employers. These skills are: teamwork, decision making and problem solving, verbal communication, plan, organise and prioritise work, the ability to conduct an analysis of quantitative data, technical job knowledge, obtain and process information, report writing as well as selling and the ability to influence.

If the skills identified by both the University of Kent and Forbes are considered and compared, the most important skills desired for employability is verbal communication, teamwork and skills related to the achievement of the four functions of management.

As a result, the online module attempted to investigate the effectiveness of an online training module, in contributing to the students' skill set in terms of verbal communication, teamwork and skills required to achieve the four functions of management.

Online learning and skills attainment

According to Williams [8], traditional education frequently leaves gaps in a student's education. The gap is firstly in that formal academic learning does not include sufficient job relevance. Secondly, on the job training which can then take place

in order to attain the required skills, is slow and domain-restricted? Kinash [7] stated that employers require graduates to have a student experience aimed at developing transferable skills in students. However, there are currently limitations on how transferable skills can be delivered and taught to students. Furthermore, certain strategies derived by the learning institutes include internships and placements. The problem posed by these strategies is the limitations and difficulties it poses to students. As such, a more effect strategy needs to be put in place.

An effective strategy which can assist students with developing certain transferable skills and achieves this in a more flexible and convenient manner than traditional strategies, is online learning. Due to the nature and form which online learning can take on, students can attain more skills than through traditional methods of learning through the active learning process it provides [8]. Jakab [9] is of the opinion that students obtaining transferable skills through an engaging learning platform which can contribute to their employability.

As such, online learning may result in students developing a specific skill set required for employability in a flexible manner.

RESEARCH METHODOLOGY

For the purpose of this study, students completing the online module of the qualification were requested to participate in focus group discussions in order to establish if they have felt that an online learning module contributed to the attainment of various skills which they did not previously possess. The focus group discussion comprised of ten students per campus and two campuses were involved in the study. The interviewer and the interview questions where phrased in such a way to establish if students are only able to provide the interviewer with a theoretical answer or if a deeper understanding and attainment of skills are identifiable. The student did not demonstrate their practical knowledge and skills during the interview as they did not engage with the online learning module.

Third year, Business Management students from two campuses where selected to complete in the focus group interviews. Students were selected by means of purposive sampling which were based on the test results of the participating students. The test results comprised of a pre-test and a post-test obtaining regarding the module. The students were divided into two groups, namely, group one and group two. The students participating in group one, performed better in their assessments after the completion of the online learning module, whereas the members of groups showed the least improvement in their assessments after the online learning module was completed. The online module took the form of a business simulation game

and the students participated in this online module in groups. The analysis was conducted by means of inferential and descriptive statistics.

FINDINGS

The section below indicates the findings of the study.

Table-1: Decision-making in a business simulation game

Interview question: In what ways do you think this business simulation game improved your decision-making abilities within a business environment?	
RESPONSES	**THEME**
The students displayed knowledge and comprehension of the concept on a theoretical level. Both groups were able to relate practical scenarios from the game to real life scenarios. Both group one and group two had similar responses and the same themes for this interview question.	Decision-making
Students felt their decision-making abilities improved by allowing for various perspectives of a scenario prior to making a decision.	Different perspectives
Students stated that the business simulation game presented in the online learning module allowed them to comprehend and improve their decision-making abilities through its requirement of sequential decision-making.	Sequential decision-making
Lastly, students mentioned that the business simulation game presented in the online learning module allowed them to understand that decision-making affects the overall business operation and not just a specific scenario.	Decisions affect the business as a whole

Table one considers the methods in which students participating in this study perceived the online module, which is in the form of a business simulation game, to contribute to an improved understanding of their decision-making abilities within a business environment.

The students from the two focus group interviews had four underlying themes for this interview question. Firstly decision-making was the golden thread for this question. Secondly, the effect those different perspectives have on decision-making within a business environment surfaced. Moreover, the concept of sequential decision-making was identified as an important concept and occurrence within a business environment. Lastly, students identified the impact that every decision has on the entire business.

Table-2: Principles of decision-making in a business simulation game

Interview question: What principles of decision-making contained in the business simulation game could you apply in practice?	
RESPONSES	**THEME**
Students from both group one and group two displayed a thorough theoretical comprehension of the concept.	Decision-making
Students from group 1 felt that the reality of the online learning module, created by the business simulation game allowed them to become more aware of the time component of making decisions. Consequently, they are able to apply improved time management when making decisions.	Time management
Both groups commented on the financial consequences of decision-making. Students mentioned that they were able to experience the adverse effects of the finances of their business after making certain decisions. As a result, students understand the practical implications of decision-making.	Financial consequences

Table two attempted to identify if students would be able to apply any of the business principles learned through the online module, in a place of work. Students from both focus groups indicated a solid theoretical understanding of decision-making and its impact on a business environment. Students from one of the focus groups displayed an understanding of the role of time management in a business. The students from this focus group indicated that they would be able to apply time management in a place of work. Students from both focus groups advised on the adverse effects of poor decisions on the financial security of a business.

Table-3: Team interaction in a business simulation game

Interview question: In what ways do you think this business simulation game improved your decision-making abilities within a business environment?	
RESPONSES	THEME
Group one stated that they made use of a team approach to the management role. Thus, the business simulation game administered in this online learning module allowed them to see the importance of continuous communication and open communication channels for all team members so that they could make decisions as a team rather than one manager.	Listening skills
Additionally, they reported that they understood the value of listening skills as they could not have worked and made managerial decisions as a team if they did not listen in order to fully understand the perspectives of all the team members.	Communication skills
Group two indicated that its members were part of teams in which a manager was selected. In general they felt that the team management did not necessarily communicate decisions and listen to their contributions. They felt that team managers should consult with team members.	Managers should consult team members Team approach to management

The third interview question attempted to evaluate the knowledge and skills learned in the online learning module which relates to interaction within a team. Two themes were identified for this question. Students stated that they have in increased understanding of listening and communication skills as a team and as a manager within a team as this has an impact on the running of a business. Students of group two elaborate on the adverse effects of insufficient communication as they experienced it in throughout the online learning module.

Table-4: Judgement and decision-making in a business simulation game

Interview question: In what ways do you think this business simulation game improved your decision-making abilities within a business environment?	
RESPONSES	THEME
Both group and two indicated that their ability to make good judgments or decisions have improved by enhancing their team working skills during the business simulation game administered in the online learning module.	Team work
Additionally, both groups stated that their listening skills have improved as they had to communicate with each other on a regular basis.	Communication skills
However, even though both groups continuously communicated with each other, group one indicated that they did not feel the need to communicate as much as they felt that they are able to create their solutions individually. Group two stated that they consulted with each other on a regular basis regarding various solutions. Group two is of the opinion that "two heads are better than one".	Opposing ideas of consulting and team discussion between group one and group two.

This interview question attempted to evaluate if students obtained an increased ability to make good judgements and decisions within a business environment.

Students from both focus groups stated that their ability to make good judgements and decisions have enhanced as a result of the business simulation game, the online module for these students. As a result of the enhanced judgement and decision-making abilities the following themes were identified for this interview question. Firstly, the concept of team work within a business environment was discovered by students. In addition communication and the method in which discussion occurred during the business simulation game resulted in the development of communication and team work according to the students in the focus group interviews.

Table-5: Awareness of the back-end functions of a business through a business simulation game

Interview question: Explain which components of this Strategic Management simulation game allowed you to become aware of the "behind-the-scenes" functions within a business.	
RESPONSES	THEME
Group one and two stated that the game required continuous decision making and as such, their decision making skills have improved.	Decision making skills
Group two indicated that their time management skills improved as they had to learn how to make many decisions in a short period of time.	Time management skills
In addition group two believed that motivation played an important role in the success of a team as they had to work hard and this required motivation from the team.	Motivation

This interview question considered the aspects of Strategic Managements that assisted students in obtaining a deeper comprehension of the functions occurring behind the scenes for a business. Again, students indicated the importance and effects of decision-making. Furthermore, the importance and ability of making timeous decisions were improved according to the students participating in the focus group interview. Students identified the important role motivation played in the success of a team. According to the students of group two obtained enhanced motivational skills.

Table-6: Development of business functions in a business simulation game

Interview question: In which of these functions do you feel like you have developed the least and most by participating in this business simulation game?	
RESPONSES	THEME
Both groups stated that they were pleased with the skills, knowledge and competencies they gained after they have played the business simulation game administered in the online learning module.	Conditions of decision making
Additionally, both groups stated that they felt as if they made choices but did not necessarily know if this choice was the correct or incorrect choice for the given scenario.	Conditions of decision making
Both groups stated that they did not know how to rectify the decision, or make an alternative decision in future and felt that the decision making skills were dampened by this.	Conditions of decision making

The interview question discussed above the aspects which students believed developed the most during the course of the business simulation game. On overall theme among the students participating in the focus group interview is the importance of and the improvement of their personal decision making skills. Furthermore, the conditions under which decisions are made in a business environment.

Table-7: Business analysis through a business simulation game

Interview question: What principles of this business simulation game could you use to analyse a business as a whole?	
RESPONSES	THEME
Group one and group two both stated that the business simulation game assisted them to see the business as a whole by creating the vision of their business, mission statements for their business and by following all the objectives and goals in order to try and achieve their visions.	Vision , Mission, Goals, Objectives
Group one stated that by creating their own vision they constantly knew to what they were attempting to work. As such, the principles of vision statements for promoted and utilized in order to derive the actions they needed to analyse their business as a whole.	Vision , Mission, Goals, Objectives
Group two indicated that they were always aware of the objectives of each section of the game and how that contributed to the goal of the game; increasing the share price.	Vision , Mission, Goals, Objectives

The above interview question called for the students to explain the principles from the business simulation game which will assist them the most in the performing an analysis of a business. Students indicated that they believed the attained a deeper understanding of the vision, mission, goals and objectives within a business and how these principles affected the business.

Table-8: Team communication in a business simulation game

Interview question: In what way did the Strategic Management simulation game alter the way in which you communicate with your team members?	
RESPONSES	THEME
Group one said that it made them more aware of the presence of the team members as each person had to provide ideas. However, group one indicated that they disregarded ideas of some individual as the game progressed. They believed that the ideas posed by certain individuals at the start of this online learning module were unsuccessful, and if they use ideas from these individuals again, it will be unsuccessful again.	Key individuals All individuals
Group two stated that the business simulation game administered in the online learning module made them actively listen to their team members and brainstorm on solutions for the business. The individuals of group two stated that they believe their communication skills have improved as they no longer focus on the ideas and solutions of a few individuals, but on the ideas and solutions of all individuals.	All individuals

Table-9: Managerial communication in a business simulation game

Interview question: In which way did the Strategic Management simulation game lead to your understanding of the use of communication by management?	
RESPONSES	THEME
Both groups indicated that the use of communication by management must be aligned with the objectives of the business and management must always ensure that all individuals are aware of all things in the business.	Communication aligned with the objectives of a business.
Group one said that it was important for the members of their groups to listen and obtain information from the "leaders" in their individual groups.	Continuous communication
Group two stated that people became afraid when there are things happening in the business simulation game and not all individuals understood why these things were happening.	Transparency

This interview question was aimed at establishing the extent to which the business simulation game aided students in their understanding and skills development relating the management communication within a business environment.

The students from both groups indicated that they comprehend the importance of aligning communication to the objectives of a business. Moreover, their comprehension of continuous communication and transparency was improved. As a result this impacted the manner in which they will operate within a business environment. The importance of a leader or manager's role in communication was emphasised as team members look towards efficient and adequate communication from a manager or leader.

Table-10: Team leadership and interaction in business simulation game

Interview question: In which way did your team members rely on your input and effort during the Strategic Management simulation game?	
RESPONSES	THEME
Members of both groups indicated that they made use of the opinions of their respective team members in order to analyses problems and decide on solutions.	Disregard of opinions from the students identified as "weaker".
In addition, group one stated that they generally disregarded the opinions of some of their members as the majority of their respective groups concluded which team members have more valuable opinions.	Contribution of all members is required.
Group two stated that they identified which individuals were the various categories. Consequently, everyone's input was required but as a whole the members of the respective groups relied more heavily on the inputs of the members they identified as stronger candidates for the specific task at hand.	Students rely more on the "stronger" individuals for a specific task or variable.

This interview question aimed to establish the extent to which team members relied on the input and effort of each individual member within their virtual business established in the business simulation game.

Students belief that is their opinion is regarded as less valuable, their input and effort will not be a contributing factor to the business. The opposite is also true.

However, students indicated that the business simulation game resulted in them realising the importance of a contribution of each team member.

Table-11: Business positions in a business simulation game

Interview question: In your opinion, explain what types of positions may be omitted from a business after participating in this Strategic Management simulation game?	
RESPONSES	THEME
Both group one and group two stated that no position should be omitted from a business. However, group one stated that the number of management roles should be limited as decision making can be centralized.	Roles in a business
The members of group two indicated that the business simulation game has taught them to view a business holistically and see each part within a business is important.	Roles in a business

The last interview question was aimed at identifying if students perceive certain role within a business as permissible. Students indicated that the business simulation game allowed them to see a business and the various role players as a holistic entity. As such, all role players are important,

As can be seen from the tables above, students completing the online learning module benefited and attained the skills as identified as desirable by employers. This can be seen in students indicating the importance and improved abilities with regards to decision-making within a business. Moreover, the vital role that adequate communication, especially from management plays in a business. Furthermore, students indicated and deeper understanding an ability to apply various functions relating to the four management functions within a business. These enhanced abilities were perceived by students in the areas of time management, interaction, decision-making, communication as well as business principles to name a few.

RECOMMENDATIONS

Theory has contradictory viewpoints with regards to the effectiveness of online learning in skills attainment. Berler [5] states that online learning does not allow for the development and attainment of skills. However, online learning is also considered as effective in further and higher education [3]. Findings from this study indicated that online learning can have a positive effect on the development of knowledge and skills amongst students. However, it must be noted that online learning considered for this study was a business simulation game. Consequently, more research must be conducted to determine the holistic effectiveness of online learning.

Literature indicated various skills as desirable for employability. However, findings from this study do not address all the desired skills as indicated in the literature review [11]. Moreover, the business simulation game facilitated as online learning for this study proved effective in the development of various

skills such as decision-making, communication, time management and management functions [12]. Consequently, additional research should be conducted in order to determine if the remaining skills are developed through online learning.

CONCLUSION

This study provided insight into skills attainment as a result of utilising the business simulation game as administered as an online learning module. Students found the business simulation game in this online learning module to be useful and enjoyable.

In addition, the findings also indicate that there are similarities between the results of the study and the theory reported in the literature review. It suggests that the theory underlying the online learning is valid, and that students can attain various skills including teamwork related skills, communication skills and skills related to the four functions of management.

In conclusion, the findings of this study proved the problem stated as incorrect.

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