



The Evaluation of Blended Learning and Training Interventions

FINAL REPORT

26 March 2021



**WHOLESALE AND RETAIL SECTOR EDUCATION AND TRAINING
AUTHORITY (W&RSETA)**

FINAL REPORT ON BLENDED LEARNING

THE EVALUATION OF BLENDED LEARNING AND TRAINING INTERVENTIONS

Prepared by

Underhill Corporate Solutions (UCS)



Project Manager & Lead Researcher:

Dr Eddie Mahembe, PhD
28 Brecher Street
Clydesdale, Sunnyside
Tell: +27 (0)12 751 3237
Cell: +27 (0)83 757 3733
App: +27 (0)60 532 8754
Fax: +27 (0)86 540 7052

E-mail: eddiem@underhillsolutions.co.za /
info@underhillsolutions.co.za

Website: www.underhillsolutions.co.za

Pretoria, South Africa

25 March 2021

CONTENTS

LIST OF ACRONYMS	3
EXECUTIVE SUMMARY	4
INTRODUCTION AND BACKGROUND	6
1.1 Introduction.....	6
1.2 Overview of the Wholesale and Retail Sector.....	6
1.3 Trends in Training Delivery	7
1.4 Purpose of the Study.....	7
1.5 Study Objectives.....	7
1.6 Significance of the Study.....	7
1.7 Study Limitations	8
2. LITERATURE REVIEW	9
2.1 Introduction.....	9
2.2 Definition of Blended Learning.....	9
2.3 Challenges in Implementing Blended Learning	11
2.4 Advantages and Disadvantages of Blended Learning.....	11
2.5 Strategic Framework for Building Blended Learning Capacity	12
2.5.1 Vision and Philosophy.....	12
2.5.2 Curriculum.....	13
2.5.3 Professional Development.....	13
2.5.4 Learning Support.....	14
2.5.5 Infrastructure, Facilities, Resources and Support.....	14
2.5.6 Policy and Institutional Structure.....	14
2.5.7 Partnerships	15
2.5.8 Research and Evaluation	15
2.6 Experiences with Blended Learning.....	15
2.6.1 Canadian University.....	15
2.6.2 South African Universities.....	16
3. RESEARCH APPROACH AND METHODOLOGY.....	17
3.1 Introduction.....	17
3.2 Research Approach	17
3.3 Methodology.....	17
3.4 Sampling.....	17
3.5 Data Collection.....	18
3.6 Data Analysis.....	18
3.7 Ethical Considerations.....	18

4.	RESEARCH RESULTS	20
4.1	Introduction.....	20
4.2	Response Rate.....	20
4.3	Understanding of Blended Learning.....	20
4.3.1	W&RSETA Management.....	20
4.3.2	SDPs	21
4.3.3	Employers	21
4.3.4	Learners	23
4.4	Readiness for Blended Learning.....	24
4.4.1	W&RSETA Vision and Policy.....	24
4.4.2	Training Provider Capacity to Implement Blended Learning.....	25
4.4.3	Employer Readiness to Offer Blended Learning.....	27
4.5	Challenges with Blended Learning	28
4.5.1	Training Providers	28
4.5.2	Employers	28
4.5.3	Learners	28
4.6	Stakeholder Recommendations on Blended Learning.....	29
4.6.1	W&RSETA Management.....	29
4.6.2	Training Providers	29
4.6.3	Employers	29
4.6.4	Learners	30
5.	CONCLUSIONS AND RECOMMENDATIONS	31
5.1	Introduction.....	31
5.2	Summary of Findings	31
5.2.1	Findings from Literature	31
5.2.2	Findings from Primary Research	32
5.3	Conclusions	32
5.4	Recommendations	33
	REFERENCES.....	34
	ATTACHMENTS.....	35

LIST OF ACRONYMS

HEI	Higher Education Institution
ICT	Information, Communication and Technology
LMS	Learner Management System
NSFAS	National Student Financial Aid Scheme
QCTO	Quality Council for Trades and Occupations
SDPs	Skills Development Providers
SSA	Sub-Saharan Africa
W&RSETA	Wholesale and Retail Sector Education and Training Authority

EXECUTIVE SUMMARY

1. Purpose

The purpose of this study was to conduct an evaluation on blended learning and training interventions in the Wholesale and Retail Sector. The study sought to explore current practices in blended learning, establish what is and what is not working, and make recommendations on necessary future interventions to enhance the efficacy of blended learning interventions in the sector.

2. Approach and methodology

In order to meet the research objectives, the study mainly utilised a qualitative research approach in the collection and analysis of data. For this research, a non-probability purposive sampling approach was used. The study population comprised of Wholesale and Retail sector employers, skills development providers (SDPs), learners and W&RSETA Managers. Through the use of a purposive sampling technique, 24 employers, 10 SDPs, 120 learners and 6 W&RSETA Managers participated in the study through completion of semi-structured questionnaires. Due to the impact of the Covid-19 pandemic, all interactions with stakeholders were conducted remotely using on-line platforms. Thematic Content Analysis was used in the analysis of data collected from the study.

3. Main Findings

The following were the key findings of the study:

- W&RSETA has developed an e-learning policy but the sector lacks a clearly articulated policy on blended learning i.e., incorporating face-to-face, distance and ICT platforms in an integrated fashion
- 40% of W&RSETA management respondents view the SETA as not having a clear vision and policy on blended learning
- 80% of SDPs are currently using some form of blended learning
- There are varied approaches to blended learning at SDPs and Employer level, resulting in different areas of focus
- 80% of SDPs have a Learner Management System in place
- 80% of respondent SDPs do not include distance learning in their blended learning offerings
- Up to 80% of SDPs still rely on using hard-copy training material, while only 20% use e-textbooks
- 80% of learners appreciate what blended learning is about, while an estimated 20% are ignorant of its meaning

- Learner participation in blended learning is constrained by access to computers (laptops/desktops) and connectivity (data/Wi- fi)
- 89% of Workplaces have not been capacitated to understand and implement blended learning
- Lack of adequate resources is constraining access to blended learning for people living with a disability, posing a risk of exclusion
- Learnerships and skills programs are perceived as easily implementable using blended learning approaches by both SDPs and W&RSETA Management
- SDPs view blended learning as more demanding from an assessment point of view.

4. Recommendations

The following recommendations are made:

- The W&RSETA needs to more clearly articulate sectoral policy on blended learning within the context of the guidelines provided by DHET encompassing face-to-face engagement, distance learning and online platforms. Such guidelines must address the roles of different stakeholders and issues of inclusivity to ensure none of the learners are left behind;
- W&RSETA must promote a new curriculum approach, one that de-emphasizes simply transmitting information and puts emphasis on developing competencies for identifying problems and enquiring after solutions. In particular, such curriculum must consider the learning needs of the Net Generation learner who is comfortable multitasking on mobile devices and social media
- W&RSETA must provide SDPs with policy guidelines and training on blended learning, in order to encourage a more structured approach at skills delivery level;
- W&RSETA must provide Employers with guidelines and training on the blended approach to skills development, to ensure a more consistent approach at their level;
- W&RSETA, together with other stakeholders, must develop clear guidelines on learner support specifically to address issues such as access to computers and connectivity;
- W&RSETA must convene a Blended Learning Skills Development Indaba/Conference with stakeholders to explain its vision, policy guidelines, provide an opportunity for sharing of industry best practice and facilitate stakeholder on-boarding;
- W&RSETA must develop a monitoring mechanism to ensure common understanding and application of blended learning approaches across the sector
- W&RSETA must champion establishment of Communities of Practice (CoP) on blended learning across the sector to encourage partnerships and sharing of best practice.

INTRODUCTION AND BACKGROUND

1.1 Introduction

Technological advances have impacted the way skills are developed across various sectors of the economy. Whereas face-to face was perhaps the single most common method of skills development in the 1980s, the later years have seen a consistent shift towards adopting a combination of methods for skills delivery. The term blended learning started to emerge as part of the skills development lexicon in the late 1990s and has now assumed prominence particularly in the context of the global Covid 19 pandemic. This study seeks to evaluate blended learning and training interventions in the Wholesale and Retail Sector. The evaluation intends to identify current practices on blended learning and training interventions, map what is and what is not working, and offer recommendations on necessary interventions based on findings.

1.2 Overview of the Wholesale and Retail Sector

The Wholesale and Retail Sector Education and Training Authority (W&RSETA) was established in 2000 in terms of the Skills Development Act (as amended). The public entity exists to facilitate skills development within the sector through implementation of learning programmes, disbursement of grants, and monitoring of education and training as outlined in the National Skills Development Strategy. The W&R SETA Strategic Plan for 2021-2025 outlines the strategic priorities of the sector in line with national imperatives. Key to the strategic plan is the need to ensure focus is on the following strategic priorities from the National Skills Development Plan:

- Identification and increasing production of occupations in high demand;
- Linking education with workplace;
- Improving the levels of skills in the workplace
- Increasing access to occupationally directed programmes
- Supporting the growth of public colleges
- Supporting skills development for entrepreneurship and cooperative development
- Encouraging and supporting worker-initiated training
- Supporting career development services

In order to fulfil the above strategic priorities, the SETA has developed, amongst other policies and initiatives, an E-Learning Policy for the sector. The SETA's e-learning policy outlines the processes and methodology for the evaluation of e-learning programs for all Skills Development Providers. To this extent, the policy outlines the following:

- E-learning programme application requirements;
- E-learning Assessment (formative and summative);
- E-learning internal moderation
- E-learning Recognition of Prior Learning (RPL)
- Process for External Moderation of e-learning programmes

Critically, the e-learning policy indicates that a skills provider must have an e-learning policy at the time of application. Such policy must meet stipulated requirements.

1.3 Trends in Training Delivery

Since the late 1990s, technological advances have been impacting on the way work is done in basically every facet of human activity. Skills development has also not been spared from this impact. New information technologies have found their way into training delivery, resulting in a shift from previous focus on face-to-face delivery to approaches that combine a number of methods. While there is no doubt that technology has improved efficiencies in skills development, it is also true that it has negatively impacted on critical interpersonal aspects of training delivery. Ultimately, skills development must continue to be seen as a value for money proposition and to respond appropriately to approaches such as blended learning which are increasingly defining the “new normal” in skills delivery.

1.4 Purpose of the Study

The purpose of this study is to evaluate blended learning and training interventions within the Wholesale and Retail Sector.

1.5 Study Objectives

The objectives of the study are:

- a) To establish if W&RSETA has a clearly articulated vision and policy on blended learning
- b) To establish the extent of preparedness by stakeholders in implementing blended learning and training interventions
- c) To identify obstacles (if any) in implementing blended learning and training interventions
- d) To make recommendations on the way forward regarding blended learning and training interventions for the sector

1.6 Significance of the Study

Technological advances have had a major impact on skills development across the whole economy. To accommodate technological developments, training delivery has largely shifted from face-to-face to a combination of a number of methods resulting in what is commonly referred to as blended learning. To

ensure effective skills delivery and to secure value for money in training interventions, it is critical that an evaluation of blended learning and training interventions be undertaken with a view to identifying areas that need improvement. Outputs from this research should provide guidance to the sector on what has worked, what has not worked and what should be done differently in future.

1.7 Study Limitations

According to Marshall and Rossman (2006), no research project is without limitations and there is no perfectly designed research. As such, the researcher needs to state what he intends to do and what he does not intend to do. What the researcher intends to do is stated in the research objectives and what he does not intend to do is articulated in the delimitations. This study is situated in a specific context (i.e., blended learning) and the researchers do not intend to make generalizations over other knowledge areas, with the exception of areas where the results may be transferrable with the necessary qualifications.

This study is limited to evaluation of blended learning and training interventions in the Wholesale and Retail Sector.

2. LITERATURE REVIEW

2.1 Introduction

Rapid advances in information and communication technologies have left an indelible mark on virtually every aspect of human endeavour. Technology has been, and continues to be, a fundamental driver in the quest for inclusive and equitable quality education and in promoting lifelong learning opportunities for all. For the African continent and Sub-Saharan Africa (SSA) in particular, these technological advances have offered hope towards meeting the present-day educational challenges of lack of access to quality higher education (Boitshwarelo, 2009). Undoubtedly, advances in information and communication technologies have impacted on the way we learn, unlearn and relearn. Although blended learning was already in vogue well before 2019, the Covid pandemic that engulfed the world over the past year has given further impetus to the need for transformative change in learning delivery across different sectors. As expected, the Wholesale and Retail Sector has not been spared from this challenge.

Guided by the evaluation purpose this research report will, amongst other issues, discuss the policy and legislative framework informing the blended learning approach in the sector, explain what blended learning entails, discuss challenges with blended learning as well as share international experiences in delivering blended learning. Informed by experiences gleaned from literature and by the results from primary research, this report will conclude by highlighting key research findings and making recommendations on how the sector can better address issues around blended learning.

Evidence from literature reviewed indicates that, in implementing blended learning, there is need to focus on learning inputs, processes, assessments. Effective implementation also requires that training providers be well prepared, resourced and motivated. On the other hand, learners must be provided with adequate resources (such as laptop, computer labs and internet connectivity) and learning opportunities for them to benefit from blended learning. It has also been noted that, in the absence of positive peer pressure and the immediate support of a learning facilitator some learners may lose motivation to continue learning, an issue that impacts on sustainability of blended learning. Indeed, as UNESCO aptly noted, sustainability and scalability of blended learning remains a persistent challenge for most organizations (UNESCO, 2017).

2.2 Definition of Blended Learning

As is typical in behavioural sciences, there is no universal definition on blended learning. For Marsh, although blended learning is one of the leading trends today, the concept has been around for decades (Marsh, 2001). Graham (2005) points out that, depending on which definition one chooses, blending

learning may mean combining instructional modalities (or delivery media), combining instructional methods or on-line and face-to-face training. From this perspective, not all blended learning should assume use of technology. In addition, it has to be noted that there are other terms that have been used to refer to similar approaches to training and learning such as “hybrid learning”. It is however evident that most researchers have generally accepted that blended learning implies a blending of technology with face-to-face learning and that its growth can be traced to the 1990s when on-line tools that could readily support it emerged (Parsons, 2011).

Blended learning can be defined as the deliberate fusion of the on-line and face-to-face contact time between a learner and a facilitator of learning and/or between students in a course (Dziuban et al., 2011). “Blended learning is balanced learning. This balance is achieved by combining the advantages of two learning modalities” (Voci and Young, 2001). In blended learning, the web-based technologies are transferred to the face-to-face classroom (f2f) to enhance interaction and student-based activities (web-enhanced classrooms) or to enhance online education through classroom contact (classroom-enhanced online education (Dziuban et al., 2004). Blended learning can also be conceptualised as referring to both software and hardware or installed devices in physical learning spaces (i.e., DVD players, Document Cameras, whiteboard capture systems, videoconferencing, web cameras) and mobile devices (cell phones, laptops, iPods, iPads, digital cameras, USB drives) to enhance interaction, flexibility and to increase student engagement (Milne, 2006). According to Kuh et al., 2005, technology has the potential to improve learner-to-training provider interaction, student-to-student interaction, time spent on task as well as in meeting the needs of learners with diverse learning styles. Blended learning helps to better meet the learning needs of the Net Generation students who are accustomed to multi-tasking with mobile devices and social media (Spiliotopoulos, 2011).

According to the Department of Higher Education and Training (DHET), blended learning is the provision of structured learning opportunities using a combination of contact, distance, and/or Information and Communication Technology (ICT) supported opportunities to suit different purposes, audiences, and contexts. (DHET, 2012). As Kilfoil et al., (2017) observe, this definition implies that blended learning includes modules with a combination of contact and distance components; contact and ICT supported opportunities; distance and ICT supported opportunities; or contact, distance and ICT supported opportunities.

Blended learning is a formal education program in which a student learns at least in part through online learning with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home. The modalities along each student’s

learning path within a course or subject are connected to provide an integrated learning experience (Christensen et al., 2013).

Blended learning is also about creating a more flexible learning environment. Collis and Moonen (2001) observe that too often flexible learning has been associated with distance learning, a point they argue gives a wrong impression. For them, flexibility can entail options in course resources, in types of learning activities, and in media to support learning. Collis and Moonen contend that flexibility requires technologies because they enable students to overcome limitations of time, location, delivery method and the communication style offered in many face-to-face courses. Graham (2006) contends that blended learning creates an environment that allows for a shift towards a more learner centred approach in training.

2.3 Challenges in Implementing Blended Learning

Despite the potential benefits of blended learning, there are challenges associated with its implementation (Tshabalala et al., 2014). Based on their case studies at Higher Education Institutions (HEI) in South Africa, the researchers note that among challenges is the fact that front-line teaching staff may not share the institution's vision for blended learning practices to enhance teaching and learning. The implication of this lack of shared vision is that there may be resistance from front-line staff on implementation of blended learning. Within the Wholesale and Retail Sector, it is plausible that implementation of blended learning may be hampered by resistance to change by training providers who may not be comfortable with new ways of doing things.

Fishman (2001) observes that there may be gaps between teaching staff capacity for blended learning and the expected level of engagement in learning practices. Limited institutional level support may decrease the motivation of teaching staff to transform a course into blended format and may discourage their commitment to change (Kenney and Newcombe, 2011). Although the concept of blended learning may be simple in theory, it is complex in practice (Wang et al., 2015). For Garrison and Kanuka (2004), the effectiveness of blended learning depends highly on the context in which it is adopted and how it is implemented.

2.4 Advantages and Disadvantages of Blended Learning

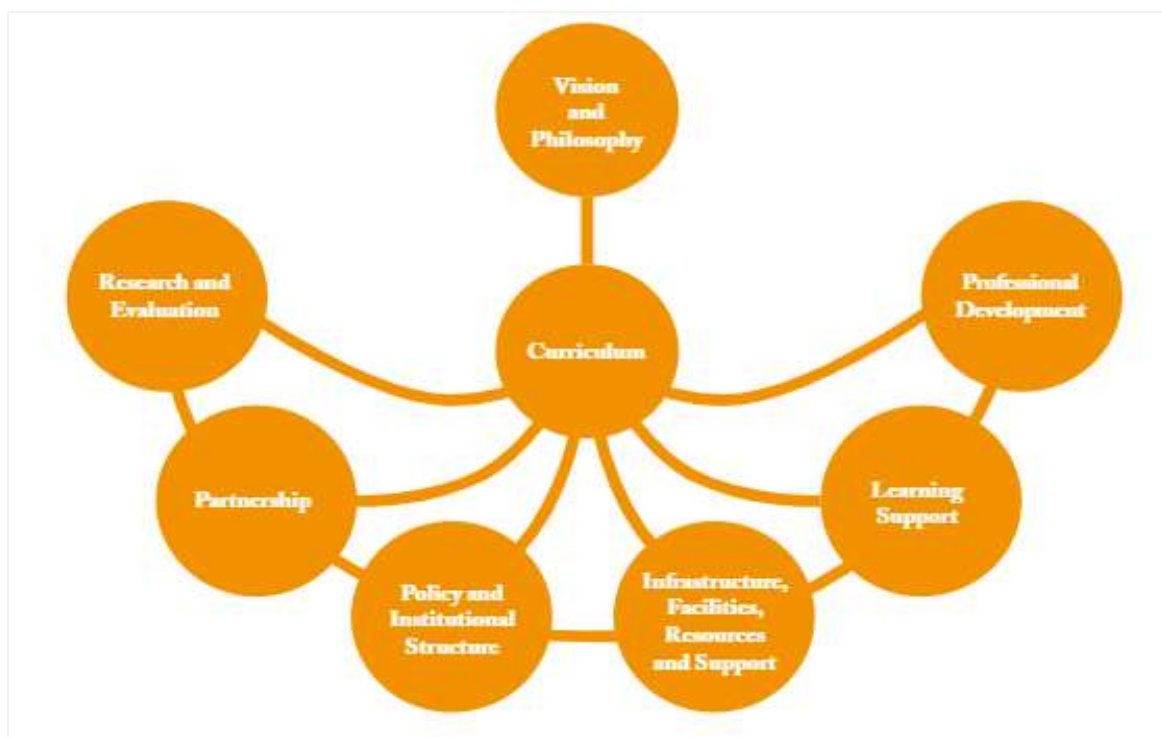
As indicated in Table 1 below, blended learning has both advantages and disadvantages. In implementing blended learning, organizations must therefore be cognisant of some of the advantages and disadvantages as identified by Poon (2013).

Table 1: Advantages and Disadvantages of Blended Learning

Advantages	Disadvantages
<ul style="list-style-type: none"> Minimizes costs and saves resources 	<ul style="list-style-type: none"> Institutions face numerous technological problems
<ul style="list-style-type: none"> Flexible for both students and academic staff 	<ul style="list-style-type: none"> Students face technological problems
<ul style="list-style-type: none"> Has a lower dropout rate among students 	<ul style="list-style-type: none"> It is not easy to acquire new teaching and technological skills
<ul style="list-style-type: none"> Learning outcomes are enhanced 	<ul style="list-style-type: none"> Students feel isolated
<ul style="list-style-type: none"> The Learning environment is professional 	<ul style="list-style-type: none"> Some student's expectations are unrealistic
<ul style="list-style-type: none"> Improved research skills 	<ul style="list-style-type: none"> Limited support for course design
	<ul style="list-style-type: none"> Commitment pertaining to time is challenging

Source: Adapted from Poon (2013)

2.5 Strategic Framework for Building Blended Learning Capacity



Source: UNESCO, 2017

2.5.1 Vision and Philosophy

Lim and Wang (2017) note that vision is a descriptive picture of the future of an organization. The researchers aptly observe that successful implementation of blended learning requires a clear vision grounded on the institution's philosophy of training and learning in blended learning environments. For Bates and Sangra (2011), the institution must create a shared institutional vision for how it can transform

technology-enhanced learning environments for the purposes of student engagement and the development of twenty-first century competencies.

2.5.2 Curriculum

As factual knowledge is now constantly evolving and new knowledge is generated quickly, the modern-day curriculum should move away from transmission of factual knowledge (Jonassen, 2011). The researcher argues that the orientation and the design of the curriculum should contribute to the balance between the acquisition of the relevant knowledge that learners need to apply in the context of their life and the development of twenty-first century competencies. Levy and Murnane (2005) contend that the modern world requires students to possess competencies for identifying problems and inquiring after solutions. Significantly, the blended learning curriculum must actively seek to accommodate the needs of the Net Generation¹ learner who is adept at using a multiplicity of mobile devices and social media. The curriculum for blended learning must create flexibility for learners, while capitalising on advantages offered by available technologies (Mirriahi et al., 2015). In their proposed framework, the researchers propose a curriculum design approach that takes into account the following factors:

- **Resources:** availability of course resources
- **Activities:** selection of activities for online and face-to-face engagement
- **Support:** support for student digital literacy skills
- **Assessment:** design of tasks for assessment of learning (formative and summative)

As Volker Wedekind observes, a curriculum that is not able to adjust to changes in knowledge field, in technology, in the conditions of the labour market or the needs of students very soon becomes irrelevant and consequently the students enrolled in the programme are not deemed employable (Volker Wedekind, Undated Draft). Wedekind also argues that the involvement of a multiplicity of stakeholders in the curriculum development process constrains frontline staff in crafting curriculum that they deem relevant to their environment.

2.5.3 Professional Development

The role of training/teaching staff is crucial for blended learning (Garrison and Vaughan, 2008). The researchers observe that even though trainers/teaching staff are experts in their fields, they may not have the capacity to implement blended learning in their courses. This therefore calls for a specific targeted program of professional development for trainers/teachers. SDPs must be equipped on how to implement blended learning and encouraged to participate in communities of practice to continually

¹ The Net Generation is defined as the cohort of young people born between 1982 and 1991 who have grown up in an environment in which they are constantly exposed to computer-based technology.

share learning and experiences on the subject. A key area of professional support for SDPs should be on data management and analysis. With learners using different electronic tools, there is information/data generated that could potentially assist the trainer in skills development. The available data however needs to be managed and manipulated. Skills development of trainers should therefore not overlook this critical skills component.

2.5.4 Learning Support

Despite the pervasive nature of technology in today's world, access to devices is still a major limiting factor for most learners. This may hamper the learners' ability to learn in a blended environment. To assist learners, support may include loaning laptops and tablets to those deserving such support. It is noted that such intervention has been implemented in South African universities in response to the Covid pandemic. There is also a need for a Learner Management System (LMS) to improve learning support.

2.5.5 Infrastructure, Facilities, Resources and Support

According to Boitshwarelo (2009), the limited Information, Communication and Technology (ICT) infrastructure in Africa means that it is not feasible to run full-scale on-line programmes even if it is the best thing to do pedagogically. The integration of blended learning into current learning and training practices requires an appropriate plan for technological infrastructure. Key issues to be addressed include infrastructure, technology and resources. Key constituents of infrastructure and facilities include wireless networks and digital learning devices (laptops/tablet/mobile). In addition, there is need for technical support for training providers.

The term e-learning came into popular palace in the 1990s with the emergence of technology-based education (Bystrova et al., 2015). In South Africa, Queros and de Villiers (2016) contend that e-learning was introduced to reach disadvantaged and side-lined students. While this contention may be debatable, there is no doubt that online platforms have the potential to enhance learning opportunities for students who may otherwise suffer from be exclusion by virtue of their location. Regrettably, implementation of e-learning cannot ignore the challenges of infrastructure and resources whose impact is more visible on disadvantaged communities.

2.5.6 Policy and Institutional Structure

Effective blended learning programs need to be supported by appropriate policies and organizational structures. For the Wholesale and Retail Sector, it is therefore important that a clear policy on blended learning be developed and communicated by W&RSETA Management.

2.5.7 Partnerships

Partnerships are key to blended learning. These may be both internal and external. For the Sector, there should be a deliberate effort to encourage partnerships within the sector to learn from each other as well as across other sectors. This approach ensures sharing of best practice and avoidance of unnecessary mistakes.

2.5.8 Research and Evaluation

Blended learning practices have to be informed and driven by research and evaluation; revisions and refinements are always required for quality enhancement of learning and training (Fry et al., 2011). The W&RSETA needs to integrate research and evaluation into blended learning interventions, in order to anchor continuous improvement in skills delivery.

2.6 Experiences with Blended Learning

2.6.1 Canadian University

Research on engaging students and enhancing their learning experience indicates that this model can be effective as long as adequate support is provided to faculty and students (Dzuiban et al., 2004). Information and communication technologies offer opportunities to enhance interaction with students from different cultures by eliminating the barriers of time and space. Although there is increased participation in on-campus activities by off-campus students, the technology does not always meet expectations in terms of sound, video quality and ease of use (Coady and Gibbs, 2009).

Blended learning has proved to be a valuable tool in managing issues of diversity. Technology, for example, enables students that have a disability to work at their own pace and use the most suitable tools to communicate with their teacher and other learners. With blended learning, it is also possible to develop e-Portfolio for completion by learners and their mentors. Some of the challenges faced with blended training include faculty motivation and development, instructional design resourcing for blended approaches, and coordinating academic culture with information technology culture.

Professional development in the use of educational technologies in blended contexts should be systematic and strongly encouraged or even compulsory (Bates, 2010) Insufficient support and a lack of development support may lead to blended learning interventions that are driven more by technology than pedagogy.

2.6.2 South African Universities

Nelson Mandela University implemented a blended learning program for off-campus students coming from under-resources communities. In recognition of the resource limitations, the institution decided to use DVD technology as an ingredient in the blended learning approach as it was deemed to be more accessible and affordable to the majority of the target learners (Padayachee and Harding, 2011). Although the learning program was implemented in 2006 when mobile technology penetration was much lower than what it is now, it is a relevant case study in highlighting the need to carefully consider the resource capacity of the learner and the institution prior to implementing blended learning.

For the University of Pretoria, the approach to blended learning means students can expect contact with their lecturers in traditional classroom settings but will also find that some classroom interactions will have technology elements added, some assessments will be done online and modules will have a technology-based component to them (University of Pretoria website, 2021)

Most South African Universities have had to fast track implementation of blended learning programs in response to the Covid 19 pandemic. At the University of Witwatersrand, for example, it was noted that a significant number of learners did not have access to a computer or connectivity. Together with other universities facing the same predicament, an intervention strategy to secure laptops and provide data bundles had to be put in place through the Department of Higher Education and Training and the National Student Financial Aid Scheme (NSFAS). At the University of Witwatersrand, skills gaps were identified for both learners and lecturers who had never been adequately prepared for blended learning. Capacity development initiatives had to be implemented to address the skills gaps. The Learner Management System was also found inadequate for the new needs and therefore had to be updated. There is no doubt that similar challenges were experienced at other universities, perhaps to varying degrees.

3. RESEARCH APPROACH AND METHODOLOGY

3.1 Introduction

This section of the report discusses the methodological approaches employed in the study into blended learning in the Wholesale and Retail Sector. The section includes an overview of the approach used, sampling processes, data collection, analysis and ethical considerations of the study.

3.2 Research Approach

Implementation of the project proceeded in sequential phases to allow for an evaluation of deliverables from each phase and to capitalise on the resultant information and knowledge. The study mainly employed a qualitative approach in the collection and analysis of data from training providers, employers and learners within the Wholesale and Retail Sector. Results from different stakeholders were triangulated as well as compared to findings from literature, with a view to obtaining a clear picture of the key issues affecting blended learning in the sector.

3.3 Methodology

To achieve study objectives, a qualitative research approach was used. Qualitative research is fundamentally exploratory research; and is used to obtain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem and helps to develop ideas or hypotheses for potential quantitative research. For data collection, the study relied upon semi-structured questionnaires. These allowed respondents to reflect and include their own comments and views for better understanding.

Due to Covid-19 pandemic and lockdown restrictions, all interactions with participants were virtual. As would be expected in such an environment, Researchers relied upon on-line questionnaires to obtain respondent input.

3.4 Sampling

The study population and participants comprised of W&RSETA Management, employers, SDPs and learners within the sector. Given study imperatives, a purposive sampling approach was employed to identify and engage stakeholders that are most relevant to participate. Bazeley (2013) posits that purposive sampling enables researchers to meet the goals defined by the research aim in conjunction with controlling the level of variation among interviewees. Key to the sampling process was fair representation; and researchers made all effort to ensure relevant stakeholders were given an opportunity to participate in the study. Table 2 shows the final sample sizes per stakeholder group.

Table 2: Sample sizes per stakeholder group

Stakeholder Group	Sample size
W&RSETA Management	6
Employers	24
Training Providers	10
Learners	120
TOTAL	160 participants

Source: W&RSETA (2021)

As indicated in Table 1 above, 6 W&RSETA Managers, 24 Employers, 10 SDPs and 120 Learners participated in the study. In view of the Covid 19 requirements, all participants responded to on-line questionnaires. While Focus Group Discussions (FGD) could have proved invaluable in results triangulation, these could not be convened in the current environment of the pandemic. However, exclusion of FGD did not compromise research internal validity as triangulation of results was adequately considered through use of a diversity of respondents for data sources.

3.5 Data Collection

Research instruments for the study were designed based on the knowledge and information collected from document and literature review. Based on the understanding of different stakeholder groups, four (4) research instruments were designed focusing on each of the participating stakeholders. Questions in each instrument were designed and customised to each participant group's unique role in implementing blended learning within the sector.

3.6 Data Analysis

Data generated from completed questionnaires was analysed through the use of Thematic Content Analysis (TCA). Researchers sought to identify, classify and present main arguments arising as well as any other discussions on blended learning interventions within the sector. Data collected was entered into relevant software for analysis. In addition, to thematic analysis supporting respondent quotes were extrapolated and included in the analysis report.

3.7 Ethical Considerations

Researchers appreciated the importance of observing ethical considerations throughout the study process. In light of the Covid-19 pandemic, all data collection proceeded virtually, and at no point did the data collection team physically interact with a study participant. In addition, participation in the study was indicated to be voluntary and none of the participants were pressured into taking part in the

study. Data collectors sent initial emails inviting stakeholders to participate in the study, and followed up by sending reminders in the event of lack of response to the initial email. Where personal information was provided, the respondent's privacy was respected and such information was not recorded in the report.

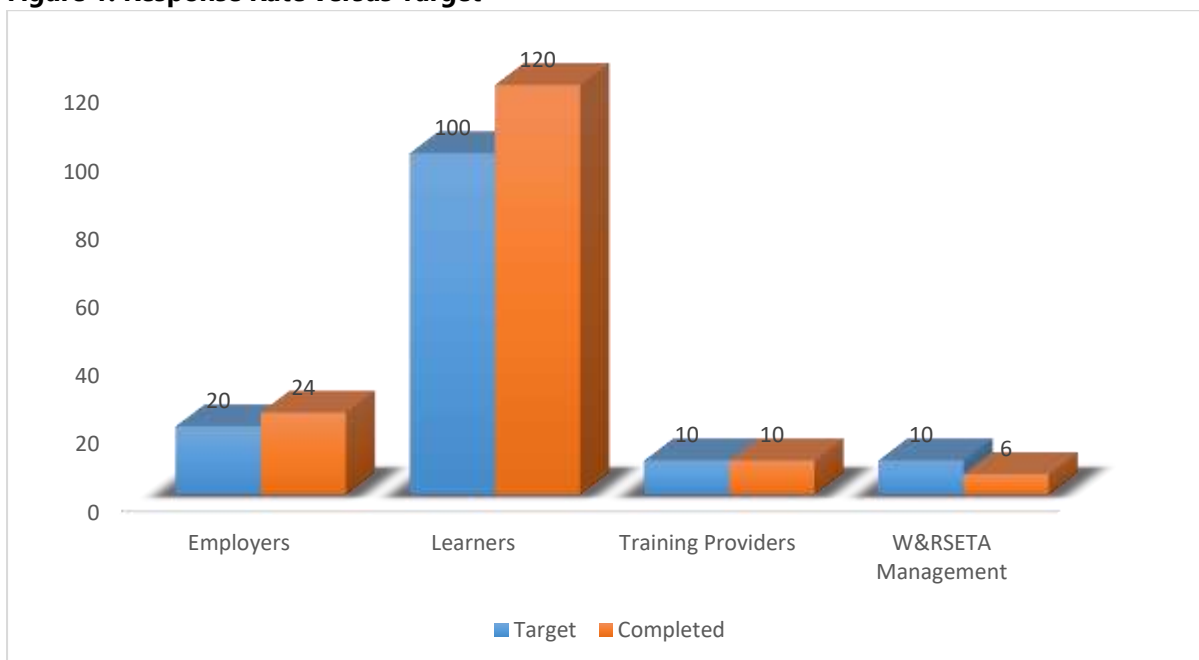
4. RESEARCH RESULTS

4.1 Introduction

This section of the report provides a summary of the results obtained through primary research. Analysis of responses from questionnaires completed by respondents was guided by previously determined themes. As indicated in Figure 1 below, responses were satisfactory and met the threshold for statistical significance.

4.2 Response Rate

Figure 1: Response Rate versus Target



Source: W&RSETA 2021

4.3 Understanding of Blended Learning

4.3.1 W&RSETA Management

Based on responses from management, there seems to be some understanding of what blended learning entails. This is gleaned from management responses on what they consider to be the key aspects of blended learning, where respondents included classroom training, online and self-study. However, as indicated below, management responses were varied and thus give the impression that there is no consistent understanding of blended learning in the organization. The following are management responses on what they understand to be blended learning:

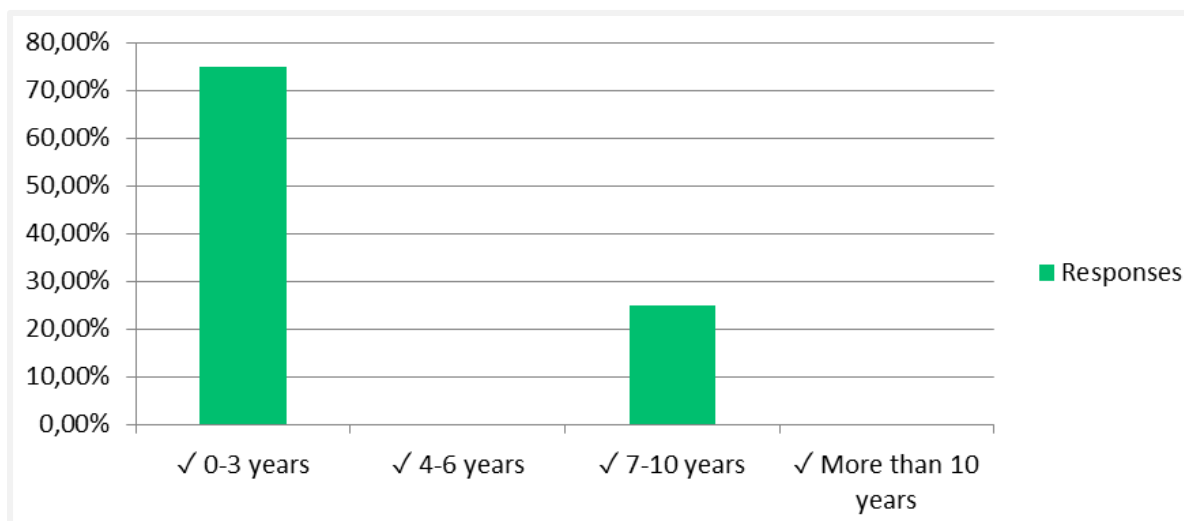
- "A comprehensive learning management system, clear learning objectives, good communication"

- “Both physical and online learning”
- “Blended learning should be fluid. The user should be able to choose at anytime between the different types of learning for each course. So study material should be available in print and online”.
- “Combination of classroom training and assessment, online training and assessment, and self-study”.

4.3.2 SDPs

Responses from SDPs indicate that they have a good understanding of blended learning. This is further confirmed by the fact that more 80% of respondents are offering some form of blended learning. In addition, more than 80% indicated that they currently have a Learner Management System (LMS). However, it is noteworthy that more than 70% of respondents have only been using blended learning for a period of not more than three (3) years. This may be indicative of limited experience and understanding of blended learning interventions. Figure 2 below indicates SDPs experience with blended learning.

Figure 2: Training Provider Duration Using Blended Learning

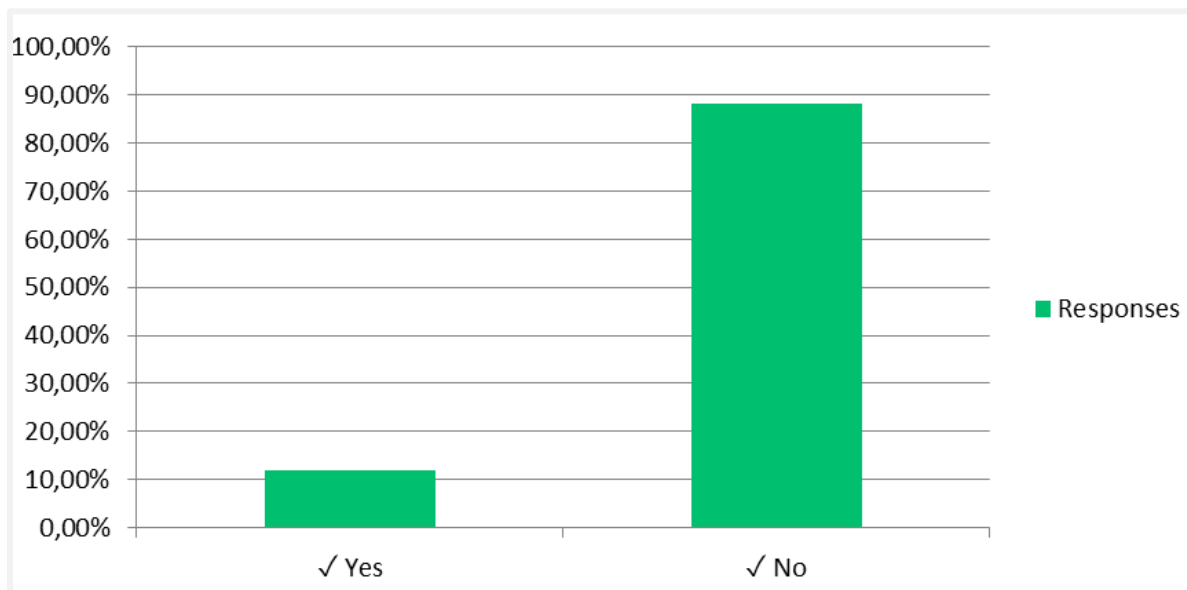


Source: W&RSETA 2021

4.3.3 Employers

A review of employer responses indicates that the majority of respondents believe they are not ready to implement blended learning. Figure 3 below indicates that approximately 88% of respondents have not received training on blended learning.

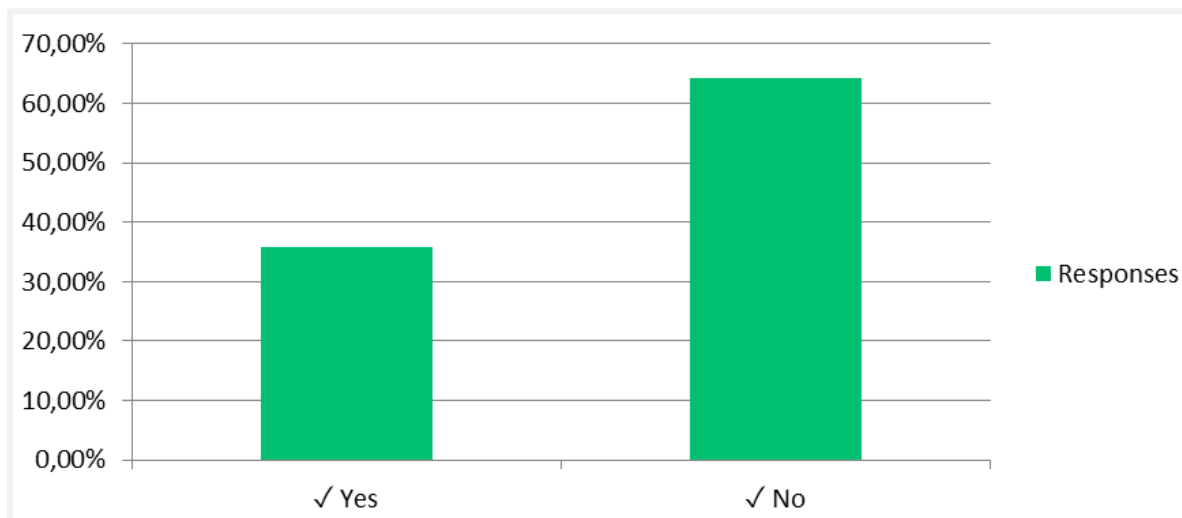
Figure 3: Training of Employers on Blended Learning



Source: W&RSETA 2021

In addition to lack of training, and perhaps because of it, 62% of respondents indicated they currently do not have learners participating in blended learning programs in their organizations. Those who do have learners participating in blended learning indicated that this is for learnerships and skills programmes such as for computer skills baking and retail operations. Interestingly, more than 70% of those currently participating have only done so for not more than three years. This indicates that the experience level on blended learning is still very limited and possibly many errors are being made. With so many not participating in blended learning, there is limited readiness to implement this approach to skills delivery. While not specifically indicated by respondents, it can be assumed that the reason for non-participation by the rest of the employers may be related to lack of capacity to do so. Figure 4 below captures employer responses on current participation levels.

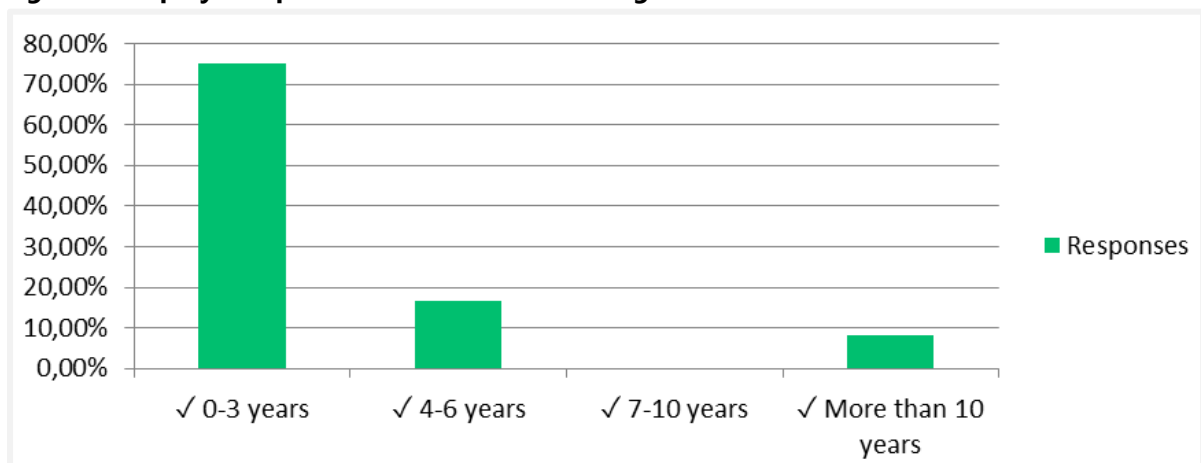
Figure 4: Employer Participation in Blended Learning



Source: W&RSETA 2021

Figure 5 below captures employer experience levels in delivering blended learning interventions.

Figure 5: Employer Experience on Blended Learning



Source W&RSETA 2021

4.3.4 Learners

Of the respondent learners, 45% were based in Gauteng Province. An analysis of learner responses on what they understand to be blended learning reveals that while the majority has a good idea of what it is, there are others who are totally not aware of the learning approach. When asked the question “**Please explain what you understand to be blended learning**” some learners responded in the following way:

- “I understand that is when you weren’t given time to ask anything and your contract is terminated before time”
- “It is customer service”
- “Getting a feedback from learners”

- "I don't even know what that means"

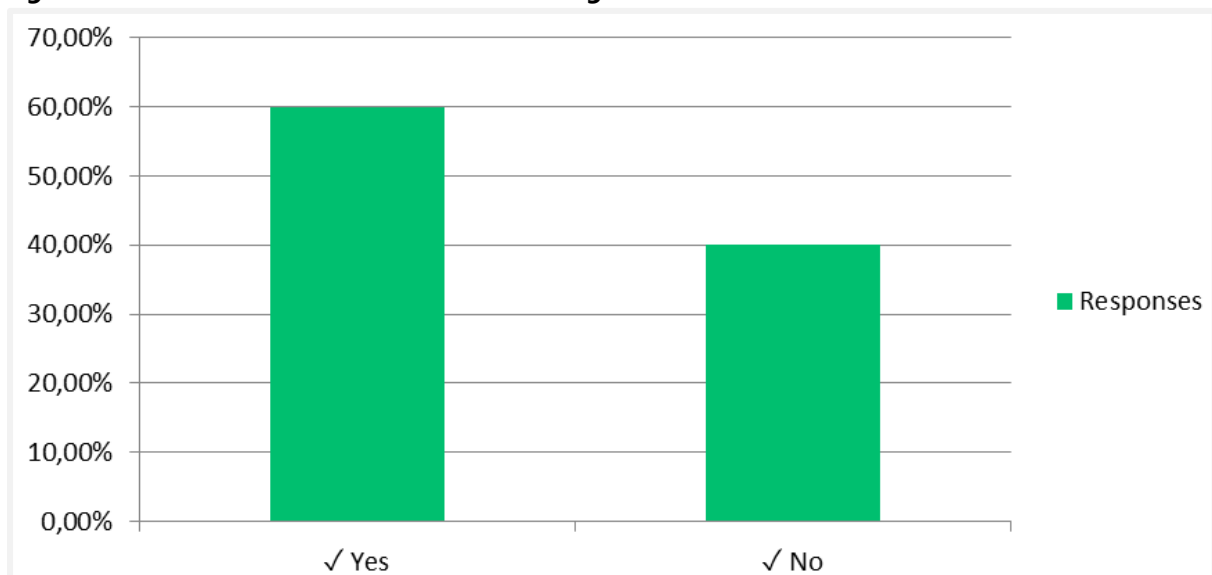
It is however interesting to note that 65% of respondents indicated that they have received training through a combination of distance learning, e-learning and face-to face lectures. This may indicate that training providers and employers have made progress in embracing blended learning approaches.

4.4 Readiness for Blended Learning

4.4.1 W&RSETA Vision and Policy

Implementation of new skills delivery approaches for the sector requires that there be a clearly articulated vision and policy to guide and influence practices at stakeholder level. As indicated in Figure 6 below, approximately 60% of W&RSETA Management respondents believe the sector has a clear vision for blended learning. Interestingly, a similar response was obtained from management respondents on the existence of a clear policy on blended learning. However, based on responses from SDPs and Employers, it appears the vision has not yet been effectively operationalised throughout the sector. 40% of W&RSETA Management respondents are however of the view that there is no clear vision and policy on blended learning, a fact which should be of concern to management. This view might be reflecting an underlying problem with communicating the blended learning vision and policy, rather than its non-existence.

Figure 6: W&RSETA Vision on Blended Learning

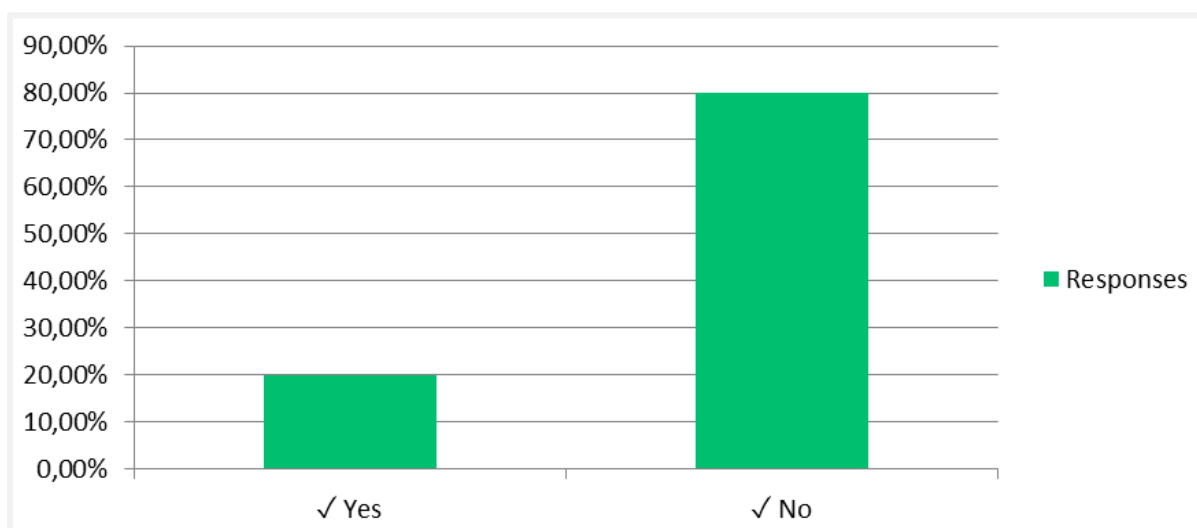


Source: W&RSETA 2021

4.4.2 Training Provider Capacity to Implement Blended Learning

A necessary requirement for effective, sector-wide implementation of blended learning is a clearly articulated policy from the centre, in order to provide clear guidance to all stakeholders. From survey results, it is noted that 60% of management respondents are of the view that W&RSETA does not have a clearly articulated policy on blended learning. Should this be true, such lack of policy would definitely undermine efforts at implementing sector-wide transformation on an issue such as blended learning. Equally concerning is the observation that 80% of respondent managers believe SDPs do not have capacity to implement blended learning (as indicated in Figure 7 below).

Figure 7: Training Provider Capacity to Implement Blended Learning



Source: W&RSETA 2021

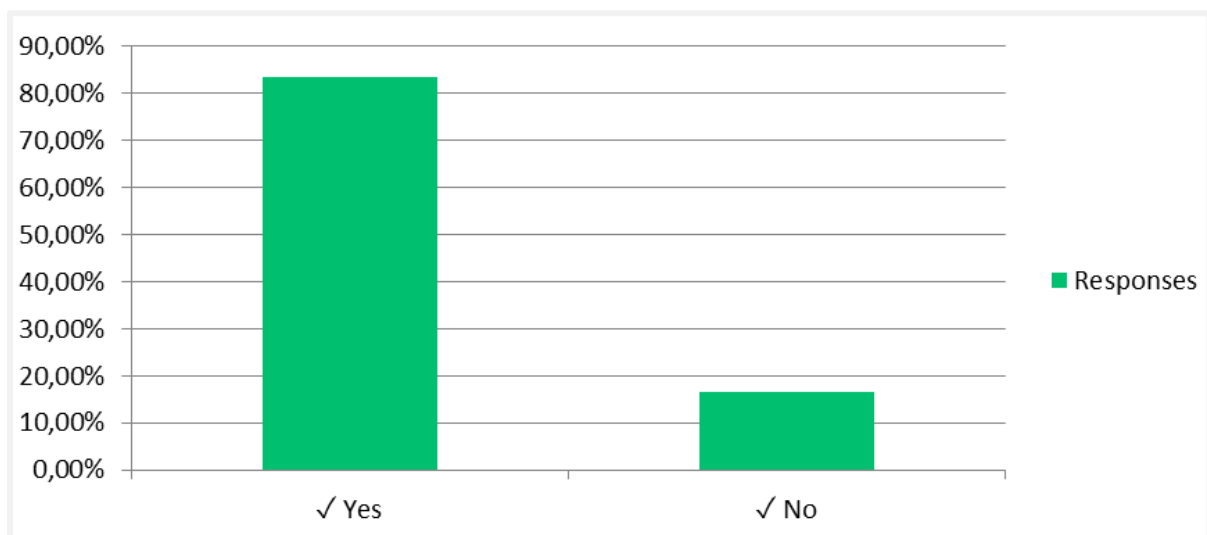
In addition, 60% of respondent managers are of the view that employers are not ready to implement blended learning.

Responses from SDPs indicated that more than 80% (Figure 8 below) are currently using or have used blended learning approaches. This indicates a high level of readiness by training providers, although more than 75% of respondents have only recently started using this approach (0-3 years' experience). Also demonstrating readiness is that more than 80% of respondents indicated that they currently have a Learner Management System (LMS) in place. While it may not be easy to determine the quality of systems in place and their compatibility to blended learning best practice requirements, it is a good starting point that such a high percentage of providers already have some system. Interestingly, only 50% of providers indicated that they are using e-learning platforms. It may therefore be assumed that the currently blended learning may be one skewed in favour of face-to-face learning. Should this be the case, there will be a need for training providers to accelerate e-learning and distance learning delivery

as these may offer greater opportunities for inclusion to learners in different and diverse locations. It is however also noted that 68% of respondents indicated that they are located in an urban environment, where issues of access to equipment, data and connectivity may be relatively better than in rural areas.

The majority of respondents (68%) indicated that they have received training on blended learning. However, and perhaps worryingly, 32% indicated that they have not received any training on blended learning. Effectively, this means a third of providers are not capacitated to deliver blended learning. This is a significant proportion of providers and sectoral progress on blended learning will require that this be addressed. Also of concern is the fact that 70% of respondent training providers do not offer distance learning. As indicated above, this omission is significant as it implies exclusion of some learners. Critically, the definition of blended learning from DHET includes face-to-face, e-learning and distance learning.

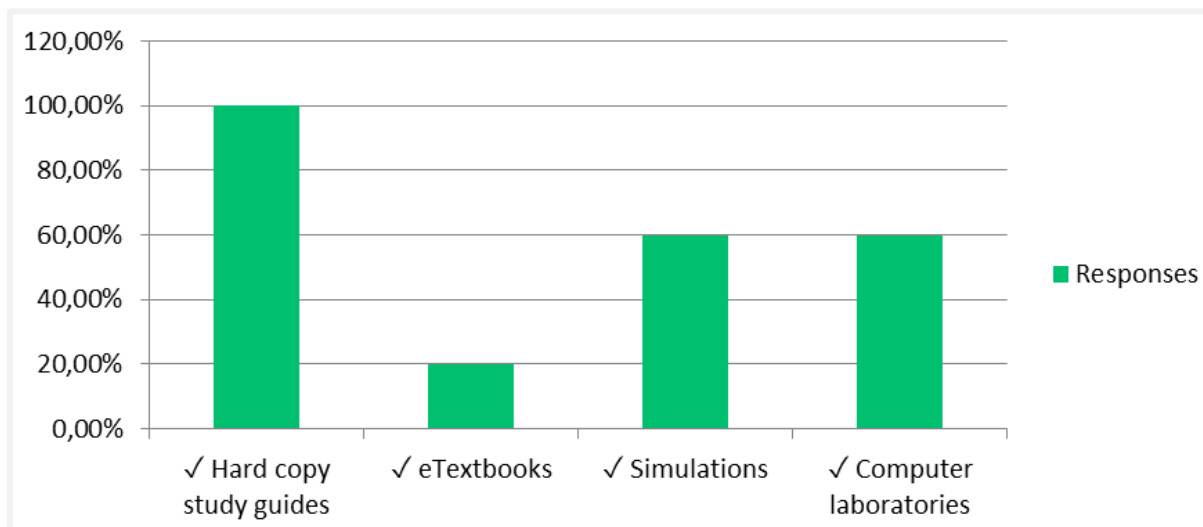
Figure 8: Providers Offering Blended Training



Source: W&RSETA 2021

As indicated in Figure 9 below, responses from training providers also indicate that skills delivery methods are still skewed in favour of hard copies. For effective blended learning delivery, there is a need to shift more towards e-learning resources and materials so as to improve access and hence inclusivity.

Figure 9: Training Resources

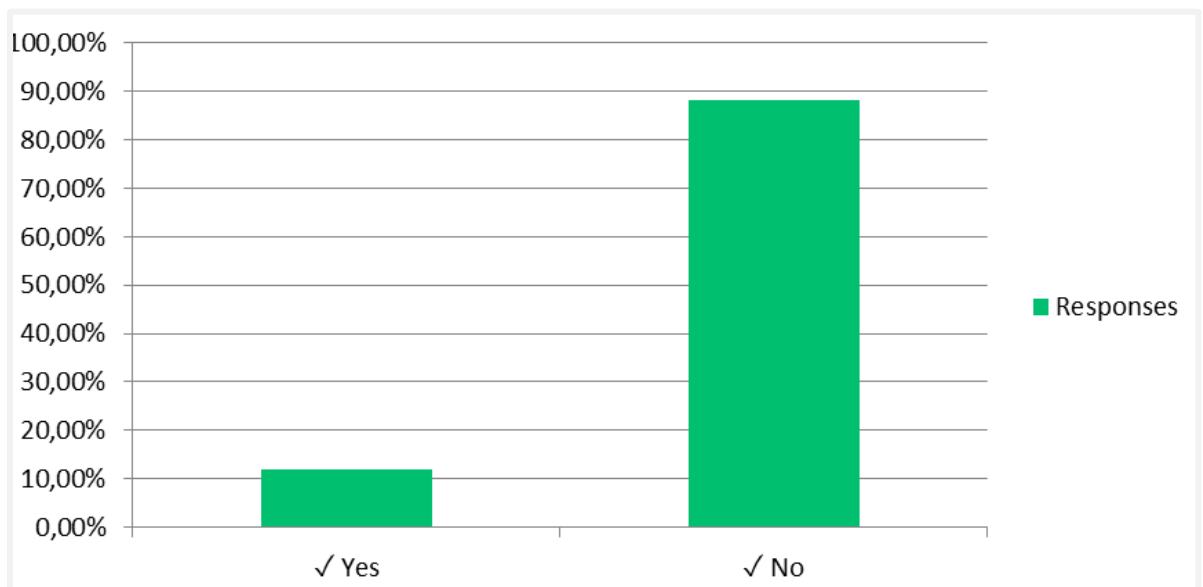


Source: W&RSETA 2021

4.4.3 Employer Readiness to Offer Blended Learning

Figure 10 below indicates that Employers are not yet ready to offer blended learning as more than 85% have not received training on how on it. With such a high percentage not having received training, it is unlikely that Employers would have the knowledge and skills to implement blended learning. In addition, lack of formalised training may promote inconsistent approaches and thus result in ineffective blended learning interventions.

Figure 10: Employers that have received training on how to implement blended training



Source: W&RSETA 2021

4.5 Challenges with Blended Learning

4.5.1 Training Providers

Responses from SDPs indicated that there are challenges experienced with blended learning. Responding to the question **“What challenges (if any) have you experienced with learners on blended learning”**, SDPs responded thus:

- “Learners do not always have access to Wi-Fi or data”
- “There is lack of commitment by learners especially when at workplaces”
- “Working with learners with disabilities”
- “Feedback takes a bit more time. Assessments are longer”

The above responses indicate an alignment of responses with those from learners, particularly on issues of connectivity. In addition, SDPs responses highlight the importance of developing blended learning interventions that do not overlook differently-abled learners. Failure to accommodate their special needs may mean their exclusion. This may require specialised laptops and software that addresses the needs of learners with different forms of impairments.

4.5.2 Employers

In response to the question **“What major challenges currently impede the success of practical sessions for students on blended learning programmes?”** employers indicated:

- “Supervisors and mentors do not have access to course material and don’t receive feedback from trainers on the performance of students”
- “Data and network connections”
- “We don’t know enough about it”
- “Shortage of computers as only 20 were donated instead of 100”
- “Mindset of older/senior employees”

An analysis of employer responses reveals that lack of equipment such as computers, data and connectivity are hindering effective delivery of blended learning. In addition, there is lack of knowledge on what blended learning is all about.

4.5.3 Learners

On their part, respondent learners indicated the following as challenges experienced with blended learning:

- “Illiterate Assessors”
- “Loneliness”
- “Load-shedding causing poor connectivity”

While there is no clarity provided on what is meant by illiterate Assessors, it would be a cause for concern if training providers do not display skill and expertise in skills delivery. For learners that are used to classroom face to face interaction, there is no doubt that blended learning can create a sense of loneliness for some learners.

4.6 Stakeholder Recommendations on Blended Learning

4.6.1 W&RSETA Management

To improve blended learning delivery, respondent managers indicated the following recommendations:

- Provide support and tools
- The SETA should create a platform (Learner Management System) that can be used by employers, providers and learners for blended learning
- Clear communication and capacitation of providers
- Clear policy and procedure on blended learning

Based on management recommendations, it can be surmised that lack of support and tools at both Training Provider and Employer levels are critical issues requiring attention if blended learning is to be successfully implemented in the sector. Equally important for management are issues of stakeholder capacitation and providing clear policy guidelines to all stakeholders involved in delivering blended learning interventions.

4.6.2 Training Providers

To improve blended learning delivery, training providers made the following recommendations:

- "Faster approval of providers to be accredited to use e-learning"
- "More online resources"
- "Cordial, strong partnership between the college and host employers"
- "Industry experts paying visits to Colleges"

4.6.3 Employers

Respondent employers made the following recommendations on improving blended learning delivery:

- "Buy-in from Managers"
- "Each learner to have his or her own computer"
- "Involving all stakeholders and having monitoring tools in place"

The above employer responses are consistent with those from training providers and W&RSETA Management in that they also highlight the need for more resources and capacity building at all levels.

In addition, a consistent policy message to all stakeholders from W&RSETA will be critical for successful implementation of blended learning interventions.

4.6.4 Learners

Learners who have already participated in blended learning provided interesting recommendations on how to improve delivery through the approach. Some of their recommendations included:

- "To have more computers at the office"
- "Offer students data bundles"
- "We need to have enough material, enough information and instructions"
- "To use networks that are more reliable"
- "More communication with students directly"

The above learner recommendations are addressing important issues including access to equipment (i.e., laptops/desktops), data and connectivity. In addition, they are highlighting the importance of effective communication with each learner through individualised follow-up and engagement. From literature reviewed, all these issues were identified as critical for successful implementation of blended learning. It is therefore pertinent to note that these issues will need to be addressed if blended learning is to be successfully implemented in the sector. In any case, all other respondents indicated issues of resources as being pivotal in making blended learning interventions work more optimally.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section of the report documents conclusions and recommendations emanating from both literature review and primary research.

5.2 Summary of Findings

5.2.1 Findings from Literature

Blended learning offers great opportunity to increase access to higher and continuing education in South Africa, more especially in the context of the Covid pandemic. However, for blended learning to succeed the following issues need to be considered:

- Institutional vision and policy on blended learning need to be clearly articulated and communicated to all stakeholders including training providers and workplaces
- W&RSETA has developed an e-learning policy that outlines processes and methodology for the evaluation of e-learning programs. While the existing e-learning policy may be sufficient in outlining processes and methodology for the evaluation of learning programs, it does not provide SDPs, Employers and Learners with clear policy guidance on how to deliver online skills development in an integrated fashion that speaks to technology, SDPs and learners within the context of blended learning.
- The DHET approach to blended includes a combination of classroom face-to-face and distance learning and/or online learning
- Pedagogical issues must be clarified to ensure all learning providers are familiar with best practice on delivering blended learning programmes. In particular, there is need for a shift to more flexible collaborative training delivery modes where learners specific needs are considered
- Blended learning requires that a new curriculum approach be adopted, one that de-emphasizes simply transmitting information and puts emphasis on developing competencies for identifying problems and enquiring after solutions.
- Blended learning delivery must actively seek to promote the needs of Net Generation students who are accustomed to multitasking on devices and social media
- The needs of learners must be considered as they require capacity building on how to engage with blended learning platforms and in accessing necessary tools such as laptops, data bundles, USB devices etc
- Support must be provided to learning providers and workplaces to enable them to acquire necessary resources and skills to effectively implement blended learning.

- Training should address issues of culture among training providers and work places to create a more conducive atmosphere for blended learning. Without a culture shift, providers and work places may resist change and thus frustrate the thrust towards blended learning.
- Issues of ICT infrastructure need to be addressed at all levels to ensure integration on delivery of blended learning programmes.

5.2.2 Findings from Primary Research

The following were the findings from primary data research:

- W&RSETA has not effectively communicated its vision and policy on blended learning to Management, SDPs and Employers
- W&RSETA has developed an e-learning policy to guide SDPs and all stakeholders
- The Wholesale and Retail Sector currently lacks a clearly articulated, integrated policy on blended learning incorporating face-to-face, online and distance education
- At least 80% of SDPs are currently using some form of blended learning
- At least 80% of SDPs have a Learner Management System in place
- 80% of SDPs do not include distance learning in their blended learning offerings
- Up to 80% of Training providers still rely on using hard-copy training material, while only 20% use e-textbooks
- At least 80% of learners have a fairly good idea of what blended learning is about, while an estimated 20% are ignorant of its meaning
- Learner participation in blended learning is constrained by access to computers (laptops/desktops) and connectivity (data/Wi- fi)
- 89% of Workplaces have not been capacitated to understand and implement blended learning
- Lack of adequate resources is constraining access to blended learning for people living with a disability
- SDPs view blended learning as more demanding from an assessment point of view.

5.3 Conclusions

Blended learning offers an innovative and relevant skills delivery approach, particularly in the context of challenges experienced during the Covid 19 pandemic and in meeting the learning needs of Net Generation learners. Research results indicate that there has been some progress made by different stakeholders in implementing blended learning. At sector level, an e-learning policy has been developed by the SETA while some training providers and employers have been using blended learning approaches

to deliver learning. However, for meaningful results to be achieved through blended learning, there is need for more strategic interventions by all sectoral stakeholders involved in skills development.

5.4 Recommendations

The following recommendations are made on blended learning:

- The W&RSETA needs to more clearly define sectoral policy on blended learning within the context of the guidelines provided by DHET. Such guidelines must address the roles of different stakeholders and issues of inclusivity to ensure none of the learners are left behind;
- W&RSETA should champion development of a new curriculum approach, one that de-emphasizes simply transmitting information and puts emphasis on developing competencies for identifying problems and enquiring after solutions. In particular, such curriculum must consider the learning needs of the Net Generation learner who is comfortable multitasking on mobile devices and social media
- W&RSETA must provide Training Providers with policy guidelines on blended learning for the sector, in order to encourage a more structured approach at skills delivery level;
- W&RSETA must provide Employers with guidelines on the blended approach to skills development, to ensure a more consistent approach at their level;
- W&RSETA, together with other stakeholders, must develop clear guidelines on learner support specifically to address issues such as access to computers and connectivity;
- W&RSETA must convene a Blended Learning Skills Development Indaba with stakeholders to explain policy guidelines, provide an opportunity for sharing of industry best practice and on-boarding;
- W&RSETA must develop a monitoring mechanism to ensure common understanding and application of blended learning approaches across the sector
- W&RSETA must champion establishment of Communities of Practice (CoP) on blended learning across the sector to encourage sharing of best practice.

REFERENCES

- Bates, A.W. (2000). *Managing Technological Change: Strategies for College and University Leaders*, San Francisco.
- Boitshwarelo, B. (2009). *Explaining Blended Learning for Science Teacher Professional Development in an African Context*, University of Botswana.
- Bystrova, T.Y, Larionova, V.A and Platonove, A.M (2015). Introduction to open e-Learning System as a factor of Regional Development. R-Economy, 2015, Volume 1, No4
- Dziuban, C.D. et al. (2007). *Blended Learning*, Educause Centre for Applied Research.
- Garrison, R. D. & Vaughan, N. D. (2008). *Blended Learning in Higher Education: A Framework, Principles and Guidelines*, San Francisco.
- Graham, C. (2005). *Blended Learning Systems, Definitions, Current Trends and Future Directions*, Pfeiffer.
- Kuh, G. D. (2005). *Student Success in College: Creating Conditions that Matter*, San Francisco.
- Marsh, J. (2001). *How to design effective blended learning*, Brandon-Hall.
- Marshall, C and Rossman, G.B. (2006). *Designing Qualitative Research, Thousand Oaks, Sage*
- Mirriahi, N, Alonzo, D. and Fox, B. (2015). *A Blended Learning Framework for Curriculum Design and Professional Development. University of New South Wales, Sidney.*
- Poon, J. (2013). *Blended Learning: An Institutional Approach to Enhancing Student Learning Experiences. Journal of Teaching and Learning, Volume 9, No2*
- Queros, D.R and de Villiers, M.R. (2016). *Online learning in a South African Higher Education Institution: Determining the right connections for the student. The International Review of Research in Open and Distributed Learning Volume 17, No 5.*
- Spiliotopoulos, V. & Beers, M. (2007). *Teaching, Learning, and Working with e-portfolios*, Vancouver.
- Vici, E & Young, K. (2001). *Blended Learning Working in a Leadership Programme, Industrial and Commercial Training.*

ATTACHMENTS

Data Gathering Instruments