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A Practical Master-Thesis Expansion of a «moving-to-music» toolkit for *KaziKidz* Grade R, validated based on the Namibian curriculum

Masterarbeit

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Abstract

Background

The *KaziBantu* project started in 2017 in Gqeberha, South Africa, with the aim of contributing to a healthy and active lifestyle for children and teachers in disadvantaged schools. South Africa is not the only low- and middle-income country affected by the double burden of communicable and non-communicable diseases. This has been one of the reasons for implementing and adapting the *KaziBantu* intervention programme in other countries such as Dakar, Senegal; Abidjan, Côte d'Ivoire; and Ifakara, Tanzania. The main task of this master thesis was to develop the *KaziKidz* toolkit in collaboration with the University of Namibia (UNAM) for preschool adapted to the Namibian curriculum to provide a basis for possible collaboration with Namibian schools in disadvantaged areas.

Methods

The extension of the toolkit for Grade R was preceded by research on Namibia and the situation of its education system, the benefits of dance in the school curriculum and the importance of pre-primary education. Various resources were used to develop the lessons, such as the Namibian Pre-Primary curriculum, multiple expert opinions from the University of UNAM, their own practical experience and literature on dance education.

Results

The outcome of this master thesis is a first version of 32 pre-designed «Moving-to-Music» lessons and assessment, for one year of Grade R. Each lesson lasts 30 minutes and contains setting-specific games and exercises that follow the Namibian Pre-Primary curriculum. The toolkit is also aligned with the existing *KazKidz* toolkit for Grade 1-7 to ensure a smooth transition into Grade 1.

Conclusion

According to research, dance seems to have a good impact on people's overall health and well-being. Based on the results of this study, it can be concluded that «Moving-to-Music» lessons have a variety of benefits for Namibian preschool children. With the help of the «Moving-to-Music» toolkit, *KaziKidz* music lessons can help school children in Namibian schools feel good and have fun with musical movement.

Zusammenfasung

Hintergund

Das Projekt KaziBantu startete 2017 in Gqeberha, Südafrika, mit dem Ziel, zu einem gesunden und aktiven Lebensstil für Kinder und Lehrer in benachteiligten Schulen beizutragen. Südafrika ist nicht das einzige Land mit niedrigem und mittlerem Einkommen, das von der Doppelbelastung durch übertragbare und nicht übertragbare Krankheiten betroffen ist. Dies war Gründe für die Implementierung und Anpassung des Interventionsprogramms in anderen Ländern wie Dakar, Senegal; Abidjan, Côte d'Ivoire; und Ifakara, Tansania. Die Hauptaufgabe dieser Masterarbeit war es, das KaziKidz-Toolkit in Zusammenarbeit mit der Universität von Namibia (UNAM) für die Vorschule angepasst an den namibischen Lehrplan zu entwickeln, um eine Grundlage für eine mögliche Zusammenarbeit mit namibischen Schulen in benachteiligten Gebieten zu schaffen.

Methoden

Der Erweiterung des Toolkits für die Klasse R ging eine Recherche über Namibia und die Situation seines Bildungssystems, den Nutzen von Tanz im Schulcurriculum und die Bedeutung der Vorschulerziehung voraus. Für die Entwicklung der Lektionen wurden verschiedene Ressourcen genutzt, wie der namibische Pre-Primary-Lehrplan, mehrere Expertenmeinungen der Universität UNAM, eigene praktische Erfahrungen und Literatur zur Tanzerziehung.

Ergebnisse

Das Ergebnis dieser Masterarbeit ist eine erste Version von 32 vorgefertigten «Moving-to-Music» Lektionen und Beurteilungen für ein Jahr der Klasse R. Jede Lektion dauert 30 Minuten und enthält einstellungsspezifische Spiele und Übungen, die dem namibischen Pre-Primary-Lehrplan folgen. Das Toolkit ist auch auf das bestehende *KaziKidz*-Toolkit für die Klassen 1-7 abgestimmt, um einen reibungslosen Übergang in die Klasse 1 zu gewährleisten.

Schlussfolgerung

Untersuchungen zufolge scheint Tanz einen guten Einfluss auf die allgemeine Gesundheit und das Wohlbefinden der Menschen zu haben. Basierend auf den Ergebnissen dieser Studie kann gefolgert werden, dass der «Moving-to-Music» Unterricht eine Vielzahl von Vorteilen für namibische Vorschulkinder hat. Mit Hilfe des «Moving-to-Music» Toolkits kann der *KaziKidz* Musikunterricht Schulkindern in namibischen Schulen helfen, sich wohl zu fühlen und Spass an musikalischer Bewegung zu haben.

Résumé

Contexte

Le projet *KaziBantu* a débuté en 2017 à Gqeberha, en Afrique du Sud, dans le but de contribuer à un mode de vie sain et actif pour les enfants et les enseignants des écoles défavorisées. L'Afrique du Sud n'est pas le seul pays à revenu faible ou intermédiaire touché par la double charge des maladies transmissibles et non transmissibles. C'est l'une des raisons pour lesquelles le programme d'intervention *KaziBantu* a été mis en œuvre et adapté dans d'autres pays tels que Dakar, au Sénégal, Abidjan, en Côte d'Ivoire, et Ifakara, en Tanzanie. La tâche principale de ce mémoire de maîtrise était de développer la boîte à outils *KaziKidz* en collaboration avec l'Université de Namibie (UNAM) pour les écoles maternelles, adaptée au programme scolaire namibien, afin de fournir une base pour une éventuelle collaboration avec les écoles namibiennes des zones défavorisées.

Méthodes

L'extension de la boîte à outils pour l'année R a été précédée de recherches sur la Namibie et la situation de son système éducatif, les avantages de la danse dans le programme scolaire et l'importance de l'éducation préscolaire. Diverses ressources ont été utilisées pour développer les leçons, telles que le programme d'enseignement pré-primaire namibien, plusieurs avis d'experts de l'Université de l'UNAM, nos propres expériences pratiques et la littérature sur l'enseignement de la danse.

Résultats

Le résultat de cette thèse de maîtrise est une première version de 32 leçons et évaluations préconçues de «Moving-to-Music» pour une année de Grade R. Chaque leçon dure 30 minutes et contient des jeux et des exercices spécifiques qui suivent le programme du Pre-Primary namibien. Le kit d'outils est également aligné sur le kit d'outils *KaziKidz* existant pour les classes 1 à 7 afin d'assurer une transition en douceur vers la classe 1.

Conclusion

Selon les recherches, la danse semble avoir un bon impact sur la santé et le bien-être général des personnes. Sur la base des résultats de cette étude, on peut conclure que les leçons de «Moving-to-Music» ont une variété d'avantages pour les enfants namibiens d'âge préscolaire. Avec l'aide de la boîte à outils «Moving-to-Music», les leçons de musique *KaziKidz* peuvent aider les écoliers des écoles namibiennes à se sentir bien et à s'amuser grâce au mouvement musical.

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1. Introduction

«Education is a human right with immense power to transform. On its foundation rest the cornerstones of freedom, democracy, and sustainable human development. » Kofi Annan, 1999

«KaziBantu – Healthy Schools for Healthy Communities» is a project with the goal to improve the health of schoolchildren and teachers using the power of education. The Project is an upscale of the DASH study («Disease, Activity and Schoolchildren's Health study»), which has its roots in Gqeberha in South Africa. Scientists and master students from the Nelson Mandela University, the University of Basel and the Swiss Tropical and Health Institute from Switzerland collaborated to develop an intervention program which promotes an active, healthy lifestyle in schoolchildren and teachers from disadvantaged settings in South Africa. The KaziBantu intervention contains three initiatives, KaziKidz an educational and instructional tool with ready-made lessons, KaziHealth a workplace health intervention program for teachers, and KaziPlay a playground and sanitation intervention program. Fighting the double burden of communicable and non-communicable diseases the KaziBantu Project also expanded and implemented its programs in other countries, Dakar, Senegal; Abidjan, Côte d'Ivoire; and Ifakara, Tanzania (KaziBantu, 2020). A team of scientist and master students are about to investigate the effect of the intervention on the overall health of schoolchildren and their teachers (Gerber, 2021).

Namibia is facing similar challenges as the above-mentioned countries, and thus could profit from the *KaziBantu* program. Although the importance of education has been recognized in all three of Namibia's national development plans and the education sector has been allocated a large budget, there are still high repetition and dropout rates and poor learning outcomes at all levels of basic education. Especially in rural schools there is a lack of qualified teachers, who contribute to a learning deficit (Republic of Namibia, 2017). The importance of pre-primary education is growing, which is seen for example in the increasing enrollment rates in the last years (UNICEF, 2017). The Ministry of Education (2015) explains that pre-primary education lays a solid foundation for Lower Pre-Primary learning, and it provides equal opportunities for all children in the development of cognitive, physical and socio-emotional areas.

A next step of the *KaziBantu* project will be to expand the *KaziKidz* toolkit for Grade R, also known as Reception Year (Embury Institute for higher Education, 2020) or Ppre-Pprimary phase (Ministry of Education, 2008). The research on Namibias current situation and its educational system, the benefits of dancing in the curriculum and the importance of pre-primary education lay a solid foundation for the expansion of the toolkit. The main focus of this master thesis will be on the expansion of the «Moving-to-Music» content pillar for Grade R, validated based on the Namibian curriculum.

2. Theoretical background

2.1 DASH - Disease, Activity and Schoolchildren's Health

In 2014 the Nelson Mandela University in Gqeberha, South Africa, the University of Basel, Switzerland, and The Swiss Tropical and Public Health Institute, Switzerland, set the DASH-Study (Disease, Activity and Schoolchildren's Health in Gqeberha, South Africa) in motion, a joint research project aimed at assessing the burden and distribution of communicable diseases and non-communicable chronic diseases among approximately 1,000 primary school-aged children in selected underprivileged schools near Gqeberha (also known as Port Elizabeth), South Africa. Furthermore, they tried to evaluate the impact on physical fitness, cognitive performance and psychosocial health.

In a three-year longitudinal cohort study, the effects of a multi-fold school-based intervention, on overall child health was studied. The intervention consisted of three parts (1) physical education program, (2) health and hygiene an education and (3) nutritional intervention (Phüse, Müller & Walter, 2020). Salvini et al. (2018) showed the significant and positive relationship between higher self-reported physical activity (PA) and health-related quality of life. They came to the conclusion that schoolchildren that report being physically active for at least 60 minutes on at least 6 days a week report higher health related quality of life than their peers who are less physically active. Gerber et al. (2018) revealed that moderate and high self-reported PA levels were related with lower BMI, lower body fat, and lower chance of being hypertensive. Although, children who reported high PA levels were more likely to be infected with soil-transmitted helminths than peers with low PA values. Thus, they concluded, that it is worthwhile to promote PA in deprived areas to prevent non-communicable diseases later in life, but only in combination with regular anthelminthic treatment to broadly improve the health and well-being of children. The DASH study was successfully completed in 2017, and the gained knowledge has been applied in the *KaziBantu* project.

2.2 KaziBantu – Healthy Schools for Healthy Communities

KaziBantu (*Kazi* – active, *Bantu* – people) means «Active People». It is a specially tailored school-based intervention, dedicated to creating a long-lasting positive change in the health of children and teachers, from disadvantaged settings in low- and middle-income countries (Nelson Mandela University, 2021). The *KaziBantu* Research Team (2019) describes the *KaziBantu* project as an expansion of the DASH project. It builds on the discoveries and experiences of the DASH study.

The *KaziBantu* intervention contains three initiatives, *KaziKidz*, *KaziHealth*, and *KaziPlay* promoting an active, healthy lifestyle in schoolchildren and teachers from disadvantaged settings in South Africa (*KaziBantu*, 2020). *KaziKidz* can be used by teachers as an educational and instructional tool, to promote healthy behaviors in primary school children (Figure 1). It

contains three different content pillars: (1) Physical-Education: (2) «Moving-to-Music»; and (3) Health, Hygiene and Nutrition Education. The first content pillar contains lessons, where learners' improve on their fundamental movement literacy and their PA level. To develop their physical, psychological and personal skills through dancing and movement experiences, the teachers can find ready-made dance lessons in the «Moving-to-Music» toolkit and sports lesson in the physical education toolkit. The third content pillar uses simple educational material and awareness techniques to teach schoolchildren about health hygiene and nutrition, which could reduce the risk of infections and increase health and well-being.



Figure 1: KaziKidz - Toolkit Grade 1 - 7 (KaziBantu Research Team, 2019)

KaziHealth is a workplace health intervention program containing 5 easy-to-follow steps and focuses on improving healthy lifestyle behaviors for teachers in low-resourced settings. The program tries to reach this goal through increasing PA, stress and sleep management and knowledge about nutrition and diet. The *KaziKidz* toolkit is aligned with South Africa's Curriculum and Assessment Policy Statement (CAPS) and includes grades one to seven. The *KaziPlay* initiative completes the *KaziBantu* program through playground and sanitation interventions that create a health promoting school environment (*KaziBantu*, 2021).

2.2.1 KaziKidz - The Toolkit

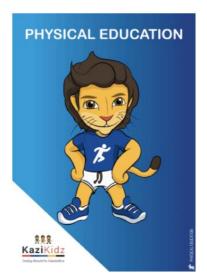






Figure 2: Titel Pages of the KaziKidz Folders (KaziBantu, 2021)

The *Kazikidz* toolkit with its three parts, Physical Education, «Moving-to-Music» and Health, Hygiene and Nutrition, is available in the form of several folders (Figure 2) or it can be downloaded from the webpage of the *KaziBantu* project. The songs for the «Moving-to-Music» lessons can also be downloaded from the website. Furthermore, special and handy cue-cards were developed for the physical education lessons. The Material is available in two languages, English and French. There is a folder for every grade, from grade one to seven, including lesson plans, assessments and posters. One Grade contains 32 lessons separated into four terms. Each grade contains two assessments which take place every two terms. A lesson fits on two pages, on which the exercises and games are explained and supported with drawings for better understanding (Figure 3).

The toolkit comes in a uniform design which was created in collaboration with the production agency «Rooftop» (Rooftop Lab, 2020). Each subject has its one color, blue for Physical-Education, red for «Moving-to-Music» and green for Health, Hygiene and Nutrition. The *Kazikidz* toolkit has its own mascots, two lions with human abilities called «*Kazi and Tandi*», a male and a female (Figure 2). One of the master students who took part in the development of the toolkit explains that the mascot was chosen because of the connection to Africa (Glover, 2018). She explains that the mascot should serve as a companion throughout the different grades, that is both powerful and proud, while yet being casual and youthful. Furthermore, the mascot has no specific ethnicity, color or age, so everyone can identify themselves with it (Glover, 2018). Additionally, to the *KaziKidz* lessons there are some cartoons, starring «*Kazi and Tandi*», on the website, that can help with the learning (*KaziBantu*, 2020).

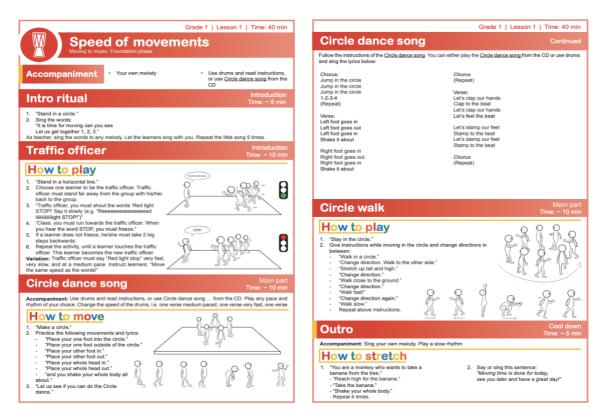


Figure 3: Moving-to-Music Lesson Example of Grade 1 (Van der Walt et. al, 2018)

2.2.2 Teachers and Schoolchildren's Feedback

«KaziKidz helped my grade 3's to have fun while they learnt. It brought out the creative side and developed their social skills. » - (Kazi Bantu, 2021, quoted after Mrs S. G., 2021)

For the *KaziKidz* toolkit to be useful it needs to be simple, effective, easy to apply for teachers and amusing for the children.

In a former pilot test learners and teachers making use of the *KaziKidz* toolkit had to fill out a survey with questions about the *KaziKidz* lessons. Results showed that for most of the children (85%) the lessons were easy and that nearly all of them (93,8) had fun while participating. Most of the children (94.3%) said that they learned something new from the *KaziKidz* lessons and that they would like to repeat the teaching material in class.

Most teachers (90.5%) had a short preparation time and many of them said it was easy to teach and to motivate the children while integrating the *KaziKidz* teaching material into the routine and daily class activities. According to the teachers, the provided material, the time allocation for the lessons and the given explanations/examples from the *KaziKidz* material were useful. Furthermore, most of the teachers recognized positive concentration changes of most of the schoolchildren's after the *KaziKidz* lessons. The overall impression of the teachers was that

they liked the *KaziKidz* lessons and that they are willing to use the *KaziKidz* teaching material in the future.

2.2.3 KaziBantu Project expanding in other countries

South Africa as representative of a low- to middle-income country (LMIC) is not the only country facing double burden of communicable and communicable diseases. In fact, many low- and middleincome countries undergo a change of traditional lifestyle diet and next socioeconomic

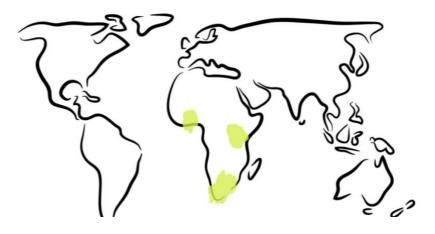


Figure 4: Countries taking part in the KaziBantu project (KaziAfya, 2021)

developments (Boutayeb,

2006, Santosa et al., 2014), while they are still struggling with infectious diseases like malaria and intestinal parasites infections (Marshall, 2004).

Battling this double burden of communicable and non-communicable disease in other African countries, the *KaziBantu* project also implemented its intervention-toolkit *KaziKidz* and *KaziHealth* at selected schools in other countries, such as Senegal, the Ivory Coast and Tanzania. In an ongoing study within the framework of the *KaziAfya* Project (*KaziAfya*: Schools for Active and Healthy Kidz) Gerber (2021) has the intention to assess the impact of a school-based intervention program on growth, health and well-being of schoolchildren in disadvantaged neighborhoods. This study takes place in three different African countries: South Africa, Tanzania and the Ivory Coast Gerber (2021) tries to find out if the school-based intervention program has an effect on communicable and non-communicable diseases and furthermore if it affects schoolchildren's health behavior and psychosocial health. If possible, the results will be published in summer 2022.

With the expansion of the *Kazikidz* toolkit for Grade R, which is the objective of this master thesis, the implementation of the toolkit may be, once completed, will also be used in selected Namibian schools.

2.3 About Namibia

First ruled by Germany and then by South Africa, Namibia gained independence on March 21, 1990, following the Namibian war independence. Namibia was the last African country to gain independence from colonial power (Fairweather, 2006). Namibia is located in the southwest corner of Africa and is one of the continent's largest countries. independence it was known as South West Africa (Tsoubaloko, 2013). Its new name Namibia derives from one of the oldest deserts in the world, the Namib desert, which is also the reason for



Figure 5: Geography of Namibia (Info Namibia 2020).

Namibia being one of the least densely populate countries in the world. Namibia is relatively arid with the Kalahari Desert in the East and the Namib desert along the West coast, but there are also some semi-arid and subtropical areas (Figure 5).

Two thirds of the population live in the northern region of Namibia (The Namibia Ministry of Health and Social Services and ICF International, 2014). The Republic of Namibia is an upper-middle-income developing country (National Planning Commission, 2017) and is ranked 130th out of 189 on the Human Development Index (HDI). In comparison, South Africa is ranked 113th (Human Development Report Office, 2019). Namibia presents rich natural resources, political and macroeconomic stability, a free press (National Planning Commission, 2017) and is ranked «high» in peacefulness, as stated by the 2020 Global Peace Index (Institute for Economics & Peace, 2020).

Despite all those positive indicators, Namibia is confronted with significant problems like a high unemployment rate, poverty and the double burden of communicable and non-communicable diseases (National Planning Commission, 2017). This leads to an income inequality, which places Namibia amongst the most unequalled nations in the world. The Gini index from the World Bank represents the income and wealth inequality and is a measure of statistical dispersion. Namibia's Gini index is 59.1. A Gini index of zero would mean total income equality (The World Bank Group, 2020). One of the reasons for this economic imbalance might be the lack of industrialization and infrastructure. The government of Namibia is striving for a rapid industrialization and therefore long-term economic success.

2.4 The Role of Education in Namibia's national development

«A prosperous and industrialized Namibia developed by her human resources enjoying peace, harmony and political stability» – Republic of Namibia (2004, S. 15)

This is the goal the Namibian Government would like to reach as stated in the Vision 2030. There are different plans to ensure the national development of Namibia: (1) Namibia's 5th National Development Plan (NDP5), (2) Harambee Prosperity Plan II (HPPII) and (3) Vision 2030. In all three development plans the role of education in contributing to sustainable development has been prioritised, the education even received the biggest budgetary allocation since 1990. Despite those factors there are still high repetition and dropout rates and poor learning outcomes at all levels of basic education (i.e. pre-primary grades to grade 12). As mentioned earlier Namibia is a geographically vast and sparsely populated country, which poses some difficulties offering quality education services to remote rural areas. This is seen for example in the majority of unqualified teachers that have been employed in rural schools, which are contributing to a learning deficit. (Republic of Namibia, 2017).

Namibia's National Development Plan is the tool to realise Vision 2030 (Republic of Namibia, 2017). This National Development Plan includes four pillars of sustainable development: (1) economic progression; (2) social transformation; (3) environmental sustainability and (4) good governance (Figure 6). Early childhood development, basic education and health and nutrition are some focus areas of the social transformation pillar.

In many cases the quality of instruction is insufficient, especially in schools serving poor communities. The high drop-out rates of schoolchildren are of a big concern. Amongst others, one of the major problems is also the low quality of PE teaching. Research shows that more than 20% of the teachers have no teaching qualifications in PE. Another problem is the poor condition of school environments that make teaching and learning more difficult. Some objectives of Namibia's 5th National Development Plan (NDP5) are to increase the access to quality integrate early childhood development, to enhance the quality of teaching at pre-primary level, develop and maintain education infrastructure and improve the provision of suitable

educational facilities, teaching-learning resources and improving child health and nutrition habits (National Planning Commission, 2017).

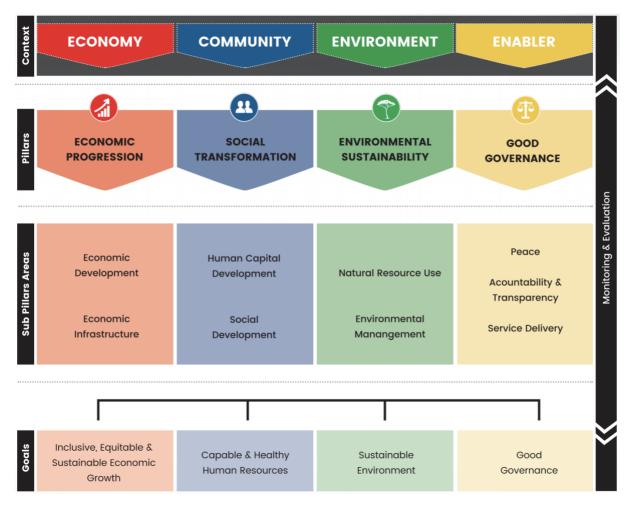


Figure 6: The four pillars of sustainable development, from Namibia's 5th National Development Plan (National Planing Commission, 2017)

The HPPII builds on the foundation of the initial Harambee Prosperity Plan I (HPPI), it's essentially a four-year plan that intends to support the war against poverty declared by Namibian President Hage Geingob, and to complement existing development plans such as the current «National Development Plan» (NDP5) or «Vision 2030». Its target is to promote positive development in defined priority areas, in which insufficient development has taken place so far (Keller, 2017). The HPPII consist of 5 pillars; (1) Effective Governance, (2) Economic Advancement, (3) Social Progression, (4) Infrastructure Development, and (5) International Relations and Cooperations.

The Republic of Namibia (2021) explains that an additional 5'169 classrooms are needed countrywide. They explain that more than 100'000 learners drop out of school every year, with two out of three learners coming from rural areas. Approximately 11% of the schools still require connection to potable water points. There are also large disparities in access between

urban and rural areas and a lot of underqualified teachers (early childhood development practitioner). Those gaps threat to weaken Namibia's efforts of reducing poverty and income inequality. The Social Progression pillar is a cornerstone of the HPPII and aims to reduce poverty. This Pillar contains five goals, and one of them is to improve access to quality education & sports. In order to reach this goal, an important task is to improve and expand educational infrastructure and integrate early childhood development.

2.5 Basic education in Namibia (Overview)

This chapter presents an overview of the basic education structure in Namibia, which is divided into four phases (Hanse-Himarwa, 2021). The basic education lasts 13 years, it starts in preprimary and ends in grade 12. Pre-primary education is not currently required to enter into grade 1 and is not yet offered to all children aged 5 to 6. But pre-primary education will be made available to everyone as soon as feasible, according to the Ministry of Education, Arts, and Culture (Ministry of Education Arts and Culture, 2016).

Primary	Pre-Primary	Grade R	Phase 1 (Junior Primary)
Education	Junior Primary	Grade 1 - 3	
	Senior Primary	Grade 4 - 7	Phase 2 (Senior Primary)
Secondary	Junior Secondary	Grade 8 - 9	Phase 3 (Junior Secondary)
Education	Senior Secondary	Grade 10 - 11	Phase 4 (Senior Secondary
	Namibia Senior		
	Secondary Certificate		
	Ordinary (NSSCO)		
	Senior Secondary	Grade 12	
	Namibia Senior		
	Secondary Advanced		
	Subsidiary (NSSCAS)		

Table 1: Table 1: Overview of the Basic Education in Namibia (National Institution for Educational Development, 2020; Hanse-Himarwa, 2021)

2.6 Pre-Primary education in Namibia

2.6.1 National Development of Pre-Primary Education

Despite the fact that Namibia is still in the initial phase of promoting pre-primary education, and facilities are often still inadequate, the enrollment growth rate of nearly 25% between 2011 and 2015 displays that there is enough demand. It is important to avoid that such a growth has negative impact on the quality of education, because pre-primary lays the foundation for the important primary phase, where quality is already critically deficient. From this point of view,

it is important that investing in pre-primary education keeps off with the needs, and also that every attempt is made to enroll children in remote rural areas. It is in those remote communities where school access, progression and eventually future grade 1 attenders lag far behind. In the end it is crucial that both access and quality of pre-primary education should be equitable from the start in order to avoid inequalities in later phases of education (Republic of Namibia. 2017). The following table shows the enrolments in pre-primary education by region for the years 2008 - 2015.

Regions	2008	2009	2010	2011	2012	2013	2014	2015	Growth 2011-15
//Kharas	322	457	620	872	931	1 169	1 190	1 442	65%
Erongo	135	477	527	758	932	1 247	1 458	1 693	123%
Hardap	139	360	552	841	1 050	1 312	1 401	1 392	66%
Kavango	235	623	910	1 466	1 931	2 710	3 438	3 845	162%
Kavango East							1 806	1 920	-
Kavango West							1 632	1 925	-
Khomas	472	746	873	1 599	2 055	2 965	3 560	3 798	138%
Kunene	124	292	419	661	902	1 209	1 155	1 591	141%
Ohangwena	211	408	601	1 163	1 562	2 254	2 857	3 537	204%
Omaheke	213	365	524	747	927	1 089	691	735	-2%
Omusati	264	482	700	1 100	1 584	2 234	2 798	3 371	206%
Oshana	436	586	802	1 169	1 569	2 446	2 369	2 582	121%
Oshikoto	220	513	675	1 211	1 624	2 419	2 914	3 422	183%
Otjozondjupa	308	505	745	1 088	1 351	1 904	2 018	2 240	106%
Zambezi	67	302	527	784	1 154	1 787	2 164	2 284	191%
Total: Namibia	3 146	6 116	8 475	13 459	17 572	24 745	28 013	31 932	137%

Table 2: Enrolment in pre-primary education by region, 2008 to 2015 (Republic of Namibia, 2017)

2.6.2 Structure of Pre-Primary Education

Grade R is the first year of the Junior Primary phase, which forms the first part of basic education in Namibia (Ministry of Education, Arts and Culture, 2016). Children attending Grade R would be between 5-6 years old. The main objective of Grade R is to lay a solid foundation for formal learning, establishing self-confidence and self-worth through personal and social development. The Pre-Primary Syllabus covers six different developing areas (see Table 3) to prepare the children for Grade 1 (Ministry of Education 2015).

Language Development	Preparatory Mathematics	Environmental Learning	Arts	Religious and Moral Education	Physical Development
Listening and	Number Concept	Myself	Visual Art	Religious Identity	Gross Motor Development
Responding		- Self awareness	- Drawing		- Gross motor movement
	Problem Solving		- Painting	Beliefs, norms and	- Balance
Speaking and		My Body	- Modelling	values	- Co-ordination
Communication	Classification	- Body Awareness	- Construction		- Eye-hand co-ordination
		- Body Concept	- Collage	Morals	- Eye-foot coordination
Preparatory-Reading	Seriation (order)		l		- Rhythm
In ald and all Decadles	0	My Family	Music	Social and emotional	Fig. M. and B. Barrella and A.
Incidental Reading	Spatial Relations	M. b	- Singing	development	Fine Muscle Development
Duna a mata ma NA/mitim m	Measurement	My home	- Instruments		- Fine muscle control - Fine muscle movement
Preparatory Writing	- Time	My School	Dance		- Rhythm
	- Length	IVIY SCHOOL	- Free movement		- Kriytiili
	- Mass	My community and	- Choreographed		Body Awareness
	- Capacity	Culture	dances		- Body concept
	- Money	Caltaro	dunioos		- Body comprehension
	money	Animals	Drama:		- Dominance
			- Dramatization		- Laterality and
		Water	- Role Play		directionality and
			- Mime		crossing of midline
		Plants			
			Appreciation		Relaxation
		The Weather			
		Health			
		Safety			
		Special Occasions			
		Special Sociologic			

Table 3: Summary of the learning content (Ministry of Education, 2015)

The main themes and topics of arts are visual art, music, and dance. The following table (see Table 4) shows the learning objectives, explaining what learners will learn and the competences, explaining what learners should learn. The end of year competences for Arts is that learners should demonstrate personal and interpersonal skills through free participation in creative activities. Further they express themselves through art forms and appreciate others' expression (Ministry of Education, 2015).

Themes and	Learning Objectives	Competencies
Topics	Learners will:	Learners should be able to:
Visual Art Drawing Painting Modelling Construction Collage	explore and be aware of the rich environment that surrounds us such as textures, colours, patterns, lines and space and how to organise these express what they may not be able to verbalise create symbols of their own invention which can be shared with others	participate in creative art activities and show expressions, e.g. picture making, pattern making; paper crafting, modelling and toy making by using different materials and techniques such as: working with different materials such as paint, crayons, pencils using utensils such as brushes, crayons, pencils, scissors moulding with modelling clay river clay, play dough sculpting with wood, stone, soap, wire folding, tearing, cutting, pasting demonstrate experimentation with colours create approximations of common 2D geometrical shapes create non-geometrical shapes such as hand prints sew big stitches onto fabric to make a border
Music Singing Playing instruments	be aware of the rich environment that surrounds us such as melodies, sounds and movement and how to organise these become aware of the possibilities of voice and percussion become aware of folk songs	participate in melodious activities by using different materials and techniques such as: free interpretation of music music appreciation through listening singing in a group, keeping rhythm and tempo doing body percussions like clapping, snapping, etc. playing various self-made percussion instruments, keeping rhythm and tempo perform songs, folk songs and song games in mother tongue,
Dance Free movement Choreographed dances	be aware of the rich environment that surrounds us such as melodies, sounds, movement patterns, and space and how to organise these become aware of movement and gesture	singing in unison participate in dancing activities, by using different techniques: free and choreographed movement to music large and small muscle movements position in space and directionality perceptual-motor movements and muscle coordination balance and rhythm perform traditional dances keep a steady speed when moving (time) show an awareness of audience and rehearsal techniques such as entrances and exists

Table 4: Learning content for Arts Grade R (Ministry of Eductaion, 2015)

2.6.3 One Year Plan of Grade R

Table 5 shows the planning for one year in Grade R. One year is separated in three terms where every term covers three themes and one integrated theme. One theme covers plus-minus one month. Theme 1-9 follow a logical sequence. Those themes help the schoolchildren to get to know their environment, starting small with «myself» while the circle gets bigger with each theme, until they get to the themes like animals, water and plants. The Ministry of Education (2014) calls such a learning process «environmental learning». Besides those environmental learning themes, 4 additional themes are integrated into each term.

Term 1	Term 2	Term 3
Theme 1: Myself	Theme 4: My Home	Theme 7: Animals
Theme 2: My Body	Theme 5: My School	Theme 8: Water
Theme 3: My Family	Theme 6: My Community	Theme 9: Plants
Integrated Themes	Integrated Themes	Integrated Themes
Theme 10: The Weather	Theme 10: The Weather	Theme 10: The Weather
Theme 11: Health	Theme 11: Health	Theme 11: Health
Theme 12: Safety	Theme 12: Safety	Theme 12: Safety
Theme 13: Special Occasions	Theme 13: Special Occasions	Theme 13: Special Occasions

Table 5: Grade R Year Plan (Ministry of Education, 2014)

2.7 Importance of Pre-Primary Education

Why expand the *KaziKidz* toolkit for Grade R? The general objective of pre-primary education programs is to enhance children's development potential before them getting into the primary school because it seems to have a positive impact on further learning during the primary level and beyond (Haque et al., 2013, Ejieh 2006, Taiwo & Tyolo 2002). Berlinski et al. (2009) discovered that one year of pre-primary school attendance augmented third grade performance by 8% of the mean or by 23% of the standard deviation of the test scores' distribution. Sylva et al. (2008) explain that Pre-school experience, compared to none, increases children's cognitive and social/behavioural development. There is evidence that pre-primary education helps children to become more independent and confident (Ramachandran et al., 2003), that it has strong influence on participation of children once they enter primary school (Haque et al., 2013, Currie, 2001) and that it positively affects classroom attention, effort, and discipline (Currie, 2001). Berlinski et al. (2009) add that those behavioral skills are as important as cognitive skills for future success in life.

Further research reveals that the benefit of pre-primary education is influenced by the dose and the quality of pre-primary education. The more pre-school experiences a child can profit from, the more progress it will make in the following three to five years. A better quality of education, for example a good proportion of trained teachers, reflects in more progress and better social/behavioural gains when compared to children attending schools of low quality (Sylva et al., 2008). The Organization for Economic Cooperation and Development, (2011) describes that students from socio-economically advantaged backgrounds and those from disadvantaged backgrounds benefit equally from pre-primary education.

To answer the question «Why expand the *KaziKidz* toolkit for Grade R?», we could say that the expansion of the *KaziKidz* toolkit for Grade R entails the goal to enhance children's cognitive and behavioural development potential, before reaching primary school age.

3. Current state of research

the following chapters try to answer the question why «Moving-to-Music» should be part of a school's curriculum and why pre-primary children should have «Moving-to-Music» lessons at school. In order two answer these questions, the following chapters will explain the benefits of «Moving-to-Music». The «Moving-to-Music» lessons contain a lot of different tasks and exercises, which range from creative dance exercises to learning choreographed dances, and from individual exercises to group activities. The attempt to find the most diverse results on the advantages and impacts of dancing, keeping in mind the diversity of the «Moving-to-Music» topics.

Dance was traditionally linked with the performing arts and was not thought to have any health benefits. Through generations the therapeutic function of dance and music has been recognized for its mind—body restorative power to make one «whole» again, but it was not recognized until recently (Alpert, 2011). Hanna (1995) thinks that through muscular activity and physiological processes, dance may help to improve the immune system and therefore promote health. Dance has various physical, psychological, and social advantages, according to several studies (Jain & Brown, 2001; Fong Yan et al., 2018; Burkhardt & Brennan, 2012). Bischof and Rosiny (2010) even say that through dancing, you may learn abilities that will last a lifetime.

3.1 Physical benefits of dancing

3.1.1 Physical fitness

Dance, according to Alpert (2011), may be just as healthy as jogging around a track, biking, swimming, or treadmill running. He adds that unlike exercising only the lower body on a stationary bike or walking on a treadmill, many dance styles give a complete body workout that tones the body and delivers aerobic benefits. Candela, Conte, Pastena, D'anna and Paloma (2013), explain that dancing involves all muscles, even those muscles which are at risk to

remain atrophic because their usually not used during daily activities. In a study with teenage females participating in contemporary dance classes, Connolly, Quin and Redding (2011), found an increase in aerobic fitness and upper body-strength.

Fong Yan et al. (2018) compared a number of dance interventions and structured fitness interventions. Dance treatments substantially improved body composition, blood biomarkers, and musculoskeletal function, according to the meta-analyses. In terms of improving a range of health outcomes, dancing, of different styles, can be as effective or even more effective than other types of exercise interventions (Fong Yan et al., 2018). Burkhardt and Brennan (2012) identified 14 controlled studies of dance programs and their impact on the health and well-being of children and young teenagers in a systematic review. The results showed that the participants benefited from increase in cardiovascular fitness and a decrease in obesity. Mavridis, Filippou, Rokka, Bousiou and Mavridis (2004) tested an aerobic dance intervention on primary school children. They measured the change of health-related fitness before and after the program. Results showed an improvement of the children's health related abilities, like cardiorespiratory fitness, strength, endurance, and flexibility.

Alpert (2011) summarizes the fitness benefits of dance as follows: higher flexibility, increase in muscle strength and tone, better endurance, balance and spatial awareness and an increase in well-being. Furthermore dancing is a sustainable type of physical activity because it is «fun».

3.1.2 Motor skills

According to Candela et al. (2013) dance training enhances different motor skills like the quickness and accuracy of the movement, the visual-spatial, laterality and segmental coordination. It is important to improve both static and dynamic motor patterns in order to achieve effective movement organization (Candela et al. 2013). Dancers have higher balancing abilities than non-dancers, according to several studies. The better sensorimotor control function of dancers, support both static and dynamic balance, it is also said that dancers can hold given postures for longer durations (Bläsing et al. 2012).

Ricotti and Ravaschio (2013) highlight the importance of balance abilities in young athletes for their future performance. In a study with young soccer players Ricotti and Ravaschion (2013) could show that short episodes of breakdance training had a positive impact on their balance skills. They also emphasize the value of balance training in reducing the risk of musculoskeletal problems. Stawicki, Warenczak and Lisinski, (2021) concluded that, despite being a dynamic exercise, dancing improves static balance. They explained that dancing improves balance in young people and is therefore a good form of PA to avoid bad balance abilities in all age groups.

Due to its specificity, dance is a unique form of training that contains balance training, endurance training, strength training, and flexibility training in varying amounts (Stawicki et

al. 2021). Several studies have demonstrated that dancing helps develop coordination skills that affect improved balance (Federic, Bellagamba and Rocchi, 2005; Zachapoulou, Tsapakidou and Derri, 2004; Hutt and Redding, 2014; Bremer, 2007)

3.1.3 Rhythm

Rhythm is an important part of our lives and it also plays an important role in dancing and sports. Bundesamt für Sport (2013) explains that rhythmic structures are found in all forms of movement. Basic movements such as walking, running, hopping and jumping follow rhythmic patterns. One of the most important goals of movement learning is to capture and apply rhythmic structures (Bundesamt für Sport, 2013).

Dancing enhances the development of the rhythmic sense. While dancing, the student learns to recognize different types of rhythms in which a movement can be expressed, he also learns to adapt his movement to the rhythms required in different situations (Candela et al. 2013). Rhythmic ability is also regarded as an important component in learning motor skills (Thomas and Moon, 1976).

Chatzihidirolou, Chatzopoulos, Lykesa & Doganis (2018) studied the effect of an 8-week dance program on preschool children. They took a closer look on the impacts on sensorimotor synchronization, balance, and movement reaction time. Repp and Su, (2013) describe sensorimotor synchronization as the coordination of rhythmic movement with an external rhythm, which can range from metronome finger tapping to musical ensemble performance. The Results of the previous study revealed improvements on sensorimotor synchronization and balance. These findings imply that dance should be incorporated in early childhood curriculum, given the relevance of sensorimotor synchronization and balance for later child development and performance of everyday and athletic activities (Chatzihidirolou, 2018).

3.1.4 Impact on bones and posture

Khan et al. (2000) try to answer the question if childhood physical activity could strengthen the skeleton, to prevent osteoporosis later in life. Both observational studies on children who exercise regularly and cross-sectional studies on young athletes show that movement is linked to an increased bone mineral density. In a paper on the health benefits of dancing Schobersberger and Wolf (2019) write that dancers had a higher level of bone mineralization than non-dancers of the same age. Alpert (2011) specifies that the side-to-side movements, which are often seen in dance steps, help reinforce the weightbearing bones, like the femur, tiba and fibula.

Alpert (2011) refers to another common issue, the lower back problems due to bad postures. Also, Seelig (2017) addresses the issue of back pain as a result of too little physical activity, such as long periods of sitting and stress, which contribute to postural deformities. Haas (2018)

reports that regular dance training strengthens the back muscles and can thus improve the children's posture. This is because a lot of the dance movements originate from the torso. They strengthen the torso and stretch the spine. Alpert (2011) explains that repetitive motions, such as hip drips, figure eights, circles, and shimmies, which are common in some dance styles, can put the lower back and hip joints and ligaments through complete range of motion, improving muscular tone and posture.

3.1.5 Cognitive abilities

It is well known that when learning new movements of any kind, new synapses are formed and linked in the brain. This is also the case when it comes to dancing. Regular dance training has been proven to increase cognitive performance. While we dance the brain works simultaneously on the kinaesthetic, rational, musical and emotional level (Seelig, 2017). The more complex the activity, the more neural pathways are formed (Engemann, 2007). Children and teenagers also improve their orientation ability by being exposed to a constant change of movement and direction in space (Wanke, 2011). Candela et al. (2013) explain that dancing promotes spatial-temporal organization by helping a child in the acquisition of spatial and orientation concepts (forward and back, right and left, near and far) as well as time and rhythmic structure (slow and quick, before and after). Studer-Lüthi and Züger (2012) believe that the procedures of searching and discovering new movements might enhance brain capacity and complex thinking.

3.2 Psychological Effects of dancing

3.2.1 Social Competence

« Social competence is defined as the ability to handle social interactions effectively. In other words, social competence refers to getting along well with others, being able to form and maintain close relationships, and responding in adaptive ways in social settings. » (Orpinas, 2010, S. 1623)

Lobo and Winsler (2008), studied the effect of a creative dance and movement intervention on the social competence of low-income preschool children. The outcome showed positive gains in children's social competence over time. They say that creative dance programs can be an excellent mechanism for enhancing social competences and improving behavior in at-risk preschoolers. Furthermore, social competence is well linked with children's behavior problems.

Several papers show that preschool children with effective social skills can better negotiate interpersonal conflicts and are less likely to act out than others, during pre-school and later in elementary schools (Olson & Hoza 1993; Pettit & Harrist, 1993; Vaughn, Hogan, Lancelotta, Shapiro & Walker, 1992). Sanson, Hemphill and Smart (2004) add that that social competent children show less symptoms such as depression, withdrawal and anxiety.

3.2.2 Well-being

Physical activity has been linked to a number of health benefits, including a certain «feeling good» effect (Haskel et al., 2007; Penedo & Dahn, 2005; Warburton et al. 2006). Dancing, which is a form of physical activity, can give you even more positive effects, since it is physical activity that can be combined with cognitive, social, psychological, spiritual and creative processes (Burkhardt & Rhodes, 2012; Siddall, 2010).

Kim & Kim (2007) investigated the potential psychological benefits of different physical activities like aerobic exercise, body conditioning, hip-hop dancing and ice-skating. They measured mood changes before and after the exercises. According to the data the aerobics and hip-hop dancing groups scored better on positive well-being than the physical conditioning and ice-skating groups. Psychological distress and fatigue were reported lower immediately after physical activity in the aerobics and hip-hop dancing groups. Also, Gurley, Neuringer and Massee (1984) compared the psychological effects of dancing with other physical activities, they discovered that dance classes had much higher overall change in well-being scores than conventional sports lessons, and that dance classes resulted in a more favorable overall change than other activities. Furthermore, quantitative research has discovered that recreational dance interventions have positive benefits on children's and adolescents' physical and mental health and well-being (Burkhardt & Brennan, 2012).

Koch et al. (2014) summarizes the psychological effects of dance movement therapy as an increase in quality of life, well-being, cheerfulness and body image, and a decrease in depression and anxiety.

3.2.3 Stress

Hanna (2006) explains that dancing can help with stress in two ways: Either it helps an individual cope with stress, or it helps prevent stress. She explains that there are three possibilities to handle stress. You can confront the stressors to reduce stress, you can distract from stress, or you can relax the muscle-tensions that can be stress-induced.

Alpert (2011) describes dancing as a magic-bullet that can put stress and tension on pause, and that it helps to be in the moment. The stress hormone cortisol can be reduced when dancing to music (Murcia, 2010). Bräuninger (2012) examined the influence of dance movement therapy on stress. He found out that, patients improved their stress management and that their stress level was reduced. The feeling of stress can be reduced trough dancing (Wiedenhofer, Hofinger, Wagner & Koch, 2017)

3.2.4 Body concept & self esteem

Studer-Lüthi and Züger (2012) investigate the effects of a time-limited intervention on normally developed schoolchildren. The children in the experimental group, which had two dance lessons per week, exhibited considerable improvements on an individual and cognitive level. They improved in their body self-concept, particularly their self-acceptance, as well as their sense of space. In another study with schoolgirls, Burgess, Grogan and Burwitz (2006) showed that 6 weeks of aerobic dance reduced body image dissatisfaction, like attractiveness, feeling fat, salience, and strength and fitness, while also improving on physical self-perceptions, like body attractiveness and physical self-worth. Marx and Delport (2017) inform that student experienced different effects form dance education like: increased self-confidence and self-affirmation, and decreased feelings of insecurity and incompetence. Dance therapy also improved self-evaluation significantly, according to Dosmantes-Alperson and Merril (1980). Connolly, Quin and Redding (2011) could show that contemporary dance classes can have a significant impact on self-esteem of young girls. This is also what Burkhard & Rhodes (2012) said that regular after-school dancing programs have positive impact on self-esteem and anxiety levels.

3.2.5 Emotional effects

Hanna (1995) discusses the role of body, emotion and mind in dancing. She explains that dancing can have a remarkable effect on mood and causes the release of endorphins, which promote happiness and confidence. Chodorow (2013) says that one of many ways to give form to the unconscious is through expressive body movement, which can include dancing or other kinds of artistic media.

«When speaking of the body, we are not only describing the functional aspects of movement, but how our psyche and emotions are affected by our thinking and how movement itself effects change within them» (Farah, 2016, P. 544)

According to Farah (2016), the mind is a component of the body, and the body influences the mind. Even by adopting a different posture or a certain facial expression, emotional states can be changed so that the experienced mood can shift towards the physically expressed mood (Hanna, 1995). Jeong et al. (2009) studied the psychological health and alterations of neurohormones in teenagers with mild depression. They found that dance movement therapy improved negative psychological symptoms, and they detected changes in serotonine and dopamine levels. Those changes in neurohormones might be the cause of the reported decrease in depression and improvement in psychological symptoms. Furthermore, they added that other studies showed similar effects of dance movement therapy like reduction of emotional disturbance, tension relief and improvement in self-esteem.

3.2 The importance of dancing in pre-primary school

«A good education consists in knowing how to sing and dance well» – Plato (Copeland & Cohen, 1983)

The preschool years are especially crucial for the development of social skills. At this age, children begin to extend their social relationships beyond their parents and face the developmental challenge of building relationships and acceptance with their classmates (Lobo & Winseler, 2006). As already stated in chapter 3.2.1 creative dance programs can be an excellent mechanism for enhancing social competences. Candela et al. (2013) states that dance has the potential to totally form a person by operating on the physical, psychological, and intellectual levels at the same time. He explains that through dancing, a child learns how his body, mind, and imagination interact together. It discovers what its body is capable of, as well as its strength and energy levels.

Siddall (2010) lists several reasons why pre-primary students should have dance in school. For example it allows young individuals who prefer kinaesthetic learning to succeed, it builds confidence and self-esteem among children, it promotes collaboration between different subject areas, it boosts health and well-being and particularly among guys it contributes to the improvement of behavior, the reduction of bullying, and the reduction of absenteeism.

Improvement in rhythmic abilities is another benefit of dancing, Candela et al. (2013) explains that the child's rhythmic sense will aid him in his learning processes on his school path (in language, reading and writing). Elliott (1998) describes dance as a potent cocktail, because dance is the only art form that integrates thinking, emotion, sensing, and doing in such a unique way. It has a powerful physiological and psychological impact, mixing the benefits of physical activity with increased sensory awareness, cognitive function, creativity, interpersonal engagement, and emotional expression.

According to UNICEF (2018) one of the most important methods for young children to gain essential knowledge and abilities is via play. Candela et al. (2013) says that dancing stands in a playful and socializing context, in which the children have the possibility to achieve goals in psychomotor, cognitive and affective areas. Dancing can also be described as physical activity, that is sustainable because it is fun (Alpert, 2011). According to Zachopoulou et al. (2004), the ideal time to develop rhythmic ability is between the ages of 4 and 7, because the basic functions of the central nervous system, which are dependent on coordination abilities, are better developed at this time. Another advantage of dancing is that, compared to other sports, dancing gives the opportunity to stay active and have fun without the aspect of competition (Allender, Cowburn & Foster, 2006). To support optimal early cognitive development, it is important to promote cultural activities such as dances. Dancing is an important part of the Namibian culture, and many messages are conveyed through dance (Haraseb, 2011).

So, to answer the question: «why dancing in pre-primary school? », Fauman (1983) gives a simple answer. She explains that young children have a natural desire to share what they learn through their senses, with other people. She explains that the way the young children communicate is through body movements. So, using dance as a vehicle to communicate helps the children to learn and grow.

4. Methods – Expansion of the «KaziKidz» toolkit for Grade R

One of the objectives of the *KaziBantu* project is to expand the *KaziKidz* toolkit for Grade R, also referred as Reception Year (Embury Institute for higher Education, 2020) or pre-primary phase (Ministry of Education, 2008). The expansion of the toolkit should take place in all three content pillars mentioned in chapter 2.2.1. Currently there are two Students working on this task. Catrin Griesshaber will take on the expansion of the Physical Education content pillar, for more details of the development of the «Pysical-Education» lessons for Grade R you can consult the master thesis of Catrin Griesshaber: *Development of a* «Physical education» toolkit *for KaziKidz Grade R, validated based on the Namibian curriculum.* I will work on the expansion of the «Moving-to-Music» Lessons. Together we will complete the toolkit with the expansion of the «Health, Hygiene & Nutrition» Lessons for Grade R.

4.1 The toolkit for Grade R

The *KaziKidz* toolkit for Grade R consists of the tree content pillars: (1) Physical-Education; (2) «Moving-to-Music»; and (3) Health, Hygiene and Nutrition Education. In the following chapters I will write in more detail about the «Moving-to-Music» and «Health, Hygiene and Nutrition» Education toolkits, as those are my parts of this master thesis.

4.1.1 Structure & Characteristics of the toolkit

TIME	ACTIVITY	DURATION
<<< - 08H00	Arrival and Welcome - Free play indoors - own choice	
08h00-08h30	News ring, weather chart - Religious and Moral Education	30 min
08h30-09h00	Environmental Learning	30 min
09h00-09h30	Preparatory Mathematics	30 min
09h30-10h00	Toilet and wash routine - Mid-morning snack	30 min
10h00-10h30	Free play (Outdoors) - Physical Development	30 min
10h30-11h00	Language Development	30 min
11h00-11h30	Arts	30 min
11h30- 12h00	Story time	30 min
12:00 - >>>	Rest and Relax	
	Total Time	4 hours

Table 6: One example for a daily schedule of Pre-Primary School (Ministry of Education, 2014)

The «Moving-to-Musik» toolkit for Grade R covers one year and contains 32 lessons. A Year has three terms and every term has 11 «Moving-to-Music» lessons except for the last term

which has only 10. The duration of a lesson is 30 minutes but can easily be prolonged if necessary. The duration of the lessons is recommended in the teacher's manual in chapter 1.3 *Daily Schedule* (table 6), they add that the time schedule is not a prescription but can be adapted to the circumstances (Ministry of Education, 2014).

Every lesson starts with an intro ritual, that serves as warm-up, and is then followed by the main part, which consist of one or two exercises or games. At the end of each lesson, you can find a cool-down.

Rituals are essential for a successful class. They children help the orientate themselves, enhance their attention and they create trust and security. Rituals always have the same sequence of actions, and since they are always used at the same time (in our case at the beginning of the lesson),

Component	Term	Lesson Number	Theme	Lesson Content
Moving-	Term 1	Lesson 1	Myself	Sing & Dance
to-Music		Lesson 2	Myself	Sing & Dance
		Lesson 3	Myself	Body parts & Freezes
		Lesson 4	My Body	Body parts & Freezes
		Lesson 5	My Body	Body parts & Freezes
		Lesson 6	My Body	Mobilisations & Isolations
		Lesson 7	My Body	Mobilisations & Isolations
		Lesson 8	My Family	Contrasting Movements
		Lesson 9	My Family	Diversity of Movements
		Lesson 10	My Family	Diversity of Movements
		Lesson 11	My Family	Contrasting Movements

Table 7: Extract of the Moving-to-Music less on tracker for Grade 1

recognition value is guaranteed. Their symbolic meaning is quickly understood by the children (Steinmann, Seiler & Niederberger, 2017). In the «Moving-to-Music» toolkit we use three different rituals, each term has its own ritual,, which always takes place at the beginning of the lesson. The Rituals are named Inye, Mbini and Nthathu, which is Xhosa (a Nguni Bantu language) for one, two and three. The main part covers the different environmental learning themes mentioned in chapter 2.6.3 (table 5) in combination with different dancing themes and movement qualities (table 7). Stretching and calming down are the goals of the cool down. According to the Bundesamt für Sport (2014), the cool down helps children lower the hectic pace and emotions of the lesson, by relaxing in a playful way.

The «Moving-to-Music» lessons do not directly build on one another, there is no need to know the content of the previous lessons. There is even the possibility to use the toolkit as an exercises and games collection, off which the teachers can simply choose some games and exercises. This feature gives the user of the toolkit some flexibility. Another important characteristic of the toolkit is the fact that all the exercises and games do not require any further material or facilities, the only thing needed is some space to move. As the dancer and choreograph Hérve Koubi once said: «You can dance anywhere and that's the beauty of it» (Léha, 2020, quoted after Koubi, p. 35). All the exercises and games are accompanied by or carried out to music

(for example with a CD-Player), drums or the own voice. But as mentioned before they work also without that equipment.

A further crucial aspect of the toolkit is the simplicity of the lessons, they should be effective and easy to apply for the teacher. Even a person with no dancing skills or music know-how is able to teach the lessons. Most of the exercises and games can be led through verbal instruction, this allows the instructor to maintain a guiding and non-presentational position.

4.1.2 Health, hygiene and nutrition education

Each term in Grade R contains two «Health, Hygiene & Nutrition» lessons. The lesson tracker gives an overview of the whole year (table 8). The focus of this master thesis was on producing the three

Term	Lesson Number	Health, Hygiene & Nutrition	Lesson Content
1	Lesson 1	Hygiene	Germs vs. Super V
1	Lesson 2	Nutrition	What is nutrition
_	Lesson 3	Hygiene	Let's wash our hands
2	Lesson 4	Nutrition	Healthy and unhealthy food
	Lesson 5	Hygiene	Healthy Lifestsyle
3	Lesson 6	Nutrition	Where does your food come from?

Table 8: Lesson tracker for «Health Hygiene & Nutrition» Grade 1

«Hygiene» lessons, whereas Catrin developed three «Nutrition» lessons. Like the rest of the toolkit for Grade R, each lesson lasts 30 minutes, and can easily be extended. The lessons accommodate different games & exercises. In a playful way the children get introduced into the basics of a healthy lifestyle. Posters, cue cards and worksheets have been developed to accompany the lessons. Like the rest of the toolkit for Grade R, the «Health, Hygiene & Nutrition» part is based on the Pre-Primary Syllabus (Ministry of Education, 2015). The lessons also include some adopted and adjusted games and exercises from the continuing toolkit for grades 1-7, which enables a smooth transition into the next grades. The following table shows the required learning objectives and the competencies for the integrated theme «Health».

Themes and	Learning Objectives	Competencies
Topics	Learners will:	Learners should be able to:
11. Health	understand that good eating habits, exercise and rest are necessary for their growth and health	explain why a clean environment, personal hygiene, body exercise and rest are important
(This theme will be integrated in themes 1-9 throughout the year)		differentiate between healthy and unhealthy food
	understand the value of personal hygiene	describe a daily routine of how to keep their body clean, tending to hair, skin, nails, brushing teeth, washing hands before they eat and after using the toilet
	understand how to care for others while protecting oneself	discuss ways that can or cannot infect them with HIV and AIDS e.g. hugging, playing together, touching an open wound/blood
	develop an understanding that a healthy environment is important for our basic needs, and develop a sense of care for the environment	explain the importance why humans should keep the environment clean participate in keeping a daily duty chart for the class

Table 9: Learning objectives and competencies for integrated theme «Health» (Ministry of Education, 2015)

4.1.2 Content & Learning Areas

The content of the «Moving-to-Music» lessons is based on the Namibian curriculum for basic education. In order for a successful application into the daily schedules of pre-primary schools, it is important that the toolkit covers and addresses the different learning areas and themes of its curriculum. As the «Moving-to-Music» toolkit for Grade R is an expansion of the already existing toolkit for grades 1-7, it is also influenced by the existing structure of the toolkit and by the themes included in the lessons for grades 1-7. This means that a part of the games and excercises are new and some are adopted from the existing toolkit and have then been simplified and adapted to fit the needs of pre-primary schoolchildren and the Namibian curriculum for basic education.

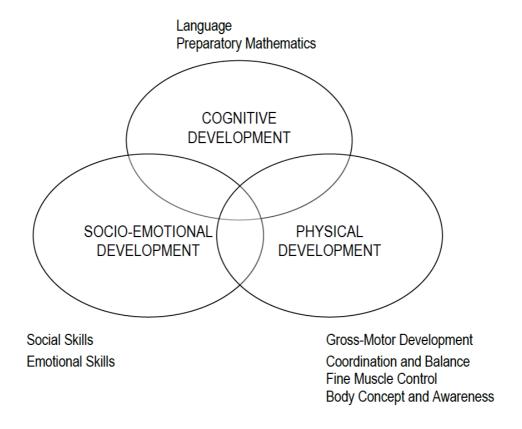


Figure 7: Holistic child development, domains and areas (Ministry of Education, 2015)

The Pre-Primary Syllabus, which serves as curriculum for Grade R in Namibia, targets a «Holistic Child Development» (figure 7) (Ministry of Education, 2015). To develop into a fully formed individual, children have physical, social, emotional, and cognitive requirements that must be fulfilled. Thus, lessons that meet the needs of children as a whole are more effective than lessons that focus on a particular aspect of development. That explains why the integrated link between the developmental domains is one of the basic concepts of child development (Ministry of Education, 2015). The «Moving-to-Music» toolkit for Grade R integrates and connects different aspects of those development areas, such as: balance, coordination, rhythm, laterality- and spatial awareness, visual perception, auditory perception, intellectual abilities,

self-concept, relationships, cooperation (for a more detailed description of these development areas look up The *Pre-Primary Teachers' Manual*, from The Ministry of Education, 2015).

Different teaching methods and approaches are recommended in the Pre-Primary Syllabus. One of those methods is «learning through play» (Ministry of Education 2015), which is also a method that is implemented in the «Moving-to-Music» toolkit for Gade R, by making use of different dancing games. Children explore their environment through playing, that is the reason why play forms should be an important part of the child's pre-school activities (Ministry of Education, 2015). The atom game is an example for a dance game (Figure 8). «The importance of storytelling» (Ministry of Education 2015) is also a method that is applicated in the «Movingto-Music» lessons (e.g Figure 9).

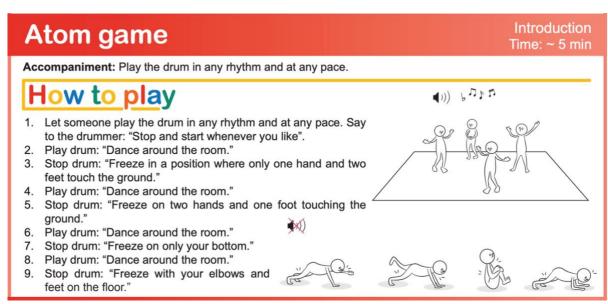


Figure 8: Dance game example of lesson 3 Grade 4 (Brügger et. al, 2018)

Main part Creative group activity: The good morning dance

How to play

- Stand in a circle.
- 2. Instruct learners to show you the following movements: "What do you do when you wake up in the morning? Show me how you wake up."
 - a. "How do you wash your face?"
 - b. "How do you clean your teeth?"c. "How will you get dressed? How
 - "How will you get dressed? How do you put on your pants?"
 - "How do you put on your socks and shoes?"
 - e. "Will you fix your hair?"
- 3. Divide the class into groups of 4.
- 4. Instruct learners to design a' wake-up in the morning' dance.
- 5. Learners must choose 4 movements showing how they wake up in the morning and combine them together to create a dance.
- 6. Give learners 15 minutes to practice their dance.

Figure 9: Example for storytelling in lesson 15 Grade 1 (Van der Walt et. al, 2018)

The lessons include a big variety of different forms of exercises and games, such as creative tasks, improvisation exercises, mobilisation & isolation exercises, group activities and many other forms. By using verbal instructions, the teacher guides the children through the improvisation exercises, which leads to the search of new movement forms of dance and the expression of emotions (Laban, 1975). Rowe (2008) explains that through improvisation tasks the creative self-exploration and self-discovery gets activated and that the children get the opportunity to explore the dynamics of movement and enhance their kinaesthetic competence. In creative dance exercises children are given time to invent their own dance movements, create own choreographies and incorporate their physical self. Kaufmann and Elis (2007) explain that creative dance can provide an escape from a mainly uniform educational atmosphere, by encouraging children's originality and individuality.

Two important organisation forms for games and dance exercises are group activities and circles. Group activities, in which different dance tasks are solved together, bring forth different benefits for pre-schoolers. Children acquire leadership and cooperation skills in mixed ability groups. Through interaction with their classmates, and observing them handling problems, they can learn different things. «Group Activities» promote healthy relationships, regulate emotions, help the children by developing empathy and they are crucial for the support of the child's socioemotional development (Choi, 2019). A lot of the «Moving-to-Music» exercises and games take place in a circle. Edward (2010) explains that it is a symbol of community, and Levy (1995) adds that the formation of a circle can give a feeling of group unity.

An important aspect of the «Moving-to-Music» toolkit is repetition. Repetition can occur in movement sequences, exercises, games and rhythms. It is provided through the whole Grade R. The Eton Institute (2015) explains that people learn by doing things over and over again; this creates pathways in our brain. The more you go down a pathway in your brain the quicker you can access it next time. The teacher also benefits from repetition, because he does not always have to prepare new exercises and games for the following lessons. Teachers can build on already known lessons buy using different variation of games and exercises.

4.2 Process Work

The following table (Table 10) presents an overview of the different phases during the project work. The different phases will be described in greater detail, in the next chapters. The phases III – V could not be executed as planed due to the Covid-19 pandemic. This will be explained in the chapter 4.2.3: *Influence of the Covid-19 Pandemic*.

Phase I	Preparation hase	Writing the disposition
		Introduction into KaziBantu Project
		Research
Phase II	Development phase	Further research
		Lesson development
		Testing some lessons
Phase III	Field stay	Inspection of pre-primary school settings
		Testing the lessons
Phase IV	Revision phase	Revision of the lessons
Phase V	Finalization phase	Cooperation with rooftop
		Working on the final design of the toolkit

Table 10: Overview of the process work

4.2.1 Preparation phase

Once all the involved parties have signed the learning contract for the master thesis in September 2020, the preparatory work could start. First and foremost, I needed to finish the disposition, which also served as the foundation for this master thesis. In different meetings Catrin and I were introduced into the *KaziBantu* Project, we learnt about their past and ongoing research projects and we were given a closer look at the next steps that have yet to be implemented.

As the expansion of the *KaziKidz* toolkit for Grade R has to be validated on the Namibian curriculum, a significant portion of the research had to be dedicated to this topic. It involved the consultation of the Namibian Pre-Primary curriculum but also research about the Namibian educational system. The basic education of Namibia underwent a lot of different reforms in the past years, which made it difficult to find the accurate documents. Another important aspect was to get to know the currently used *KaziKidz* toolkit for Grades 1-7. For a successful expansion of the toolkit the existing structure of the *KaziKidz* toolkit had to be studied, in order to apply and adapt it for the Grade R lessons. The public health situation in Namibia was also topic on which some research had to be done, keeping in mind that one of the main goals of the toolkit is to enhance the overall health of schoolchildren. Concerning a possible field stay in Namibia, I wanted to learn more about their culture and their way of living.

Taking into account that the toolkit targets mostly disadvantaged school settings, I also had to get familiar with that special situation. Ronelle Malan-Swart Lecturer at the University of

Namibia and our contact person for all the question regarding the education system, could give us a lot of valuable information about the specific pre-primary settings in Namibia. After finishing the research on the above-mentioned themes and aspects, the disposition was completed and handed in at the end of October. Now the development phase could start which will be describe in the next chapter 4.2.2.

4.2.2 Development phase

The development phase took approximately 3 months and started in January. Before we started planning the lessons, we made an overview in form of a lesson tracker (Figure 14), which contains information about the environmental themes and the lesson specific content. Ronelle Malan-Swart our supervisor from Namibia reviewed the lesson tracker. After adding some corrections, we got the approval to continue with the planning of the lessons.

For the lesson planning Catrin and I rented a place in a co-working space in Basel. This was important because during the development phase a close and continuous communication was required in order for the toolkits different parts to match together. To develop the lessons, different inputs and ideas from different sources were used, such as the websites mobilesport.ch (Bundesamt für Sport, 2013 & 2014) and dance360-school.ch (Kramer, 2021), or the books «Kreatives Tanzen mit Schulkindern: Ein Leitfaden für Lehrer und Tanzpädagogen» (Gadelha, 2012) and «Der moderne Ausdruckstanz in der Erziehung: Eine Einführung in die kreative tänzerische Bewegung als Mittel zur Entfaltung der Persönlichkeit» (Laban, 2003). A lot of the ideas for the lesson content also came through my own experience as a dance teacher for children and from other colleagues being active in this field of work. Some of the exercises and games were adapted from the existing grade 1 lessons and changed to fit the level of pre-primary schoolchildren. The overall goal of the development phase was, that a first version of most of the lesson would be ready for a possible pilot testing in Namibia.

4.2.3 Influence of the Covid-19 Pandemic

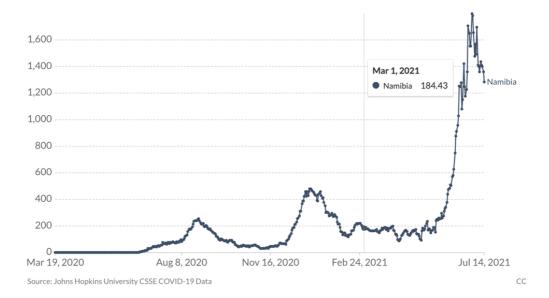


Figure 10: Daily new confirmed COVID-19 cases in Namibia (Ritchie et. al, 2020)

The Corona-19 Pandemic had a large influence on this master thesis project. The field stay Namibia could not take place as planned so this affected the pilot testing and the revision phase, which in turn had an impact on the finalization phase. Initially the field stay was planned for approximately two months, March to April. Figure 10 shows the daily new confirmed covid-19 cases in Namibia. On the 1st of March Namibia counted at least 184 new confirmed Covid-19 cases. Figure 11 shows the cumulative confirmed Covid-19 cases per million people on the 1st of March, Namibia counted at least 15'361 cases per million people on this day (Ritchie et al., 2020). Those high numbers show the reason why we decided not to go on the field trip. Our team did not want to risk being the cause of further Covid-19 infections. As the pilot testing

could not take place in the Namibian pre-primary setting, I tested some of the «Moving-to-Music» lesson in my own dance classes. I am very aware that this is a different setting and that the results be cannot transferred directly, but one can still draw certain conclusions. At that time, this was the only feasible solution. Further, some of the lessons where reviewed Namibia (Ritchie et. al, 2020)

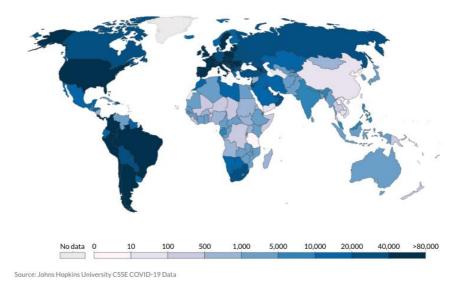


Figure 11: Cumulative confirmed COVID-19 cases per milion people on 1st Mars in Namibia (Ritchie et. al. 2020)

by a dance teacher, Jessica Ras, who is specialized on teaching children aged 5-6 years old. She could give some helpful feedback, which was then implemented in the lessons. After finishing the first version of the «Moving-to-Music» lessons, they were sent down to Namibia for a revision by Ronelle Malan-Swart, lecturer at the University of Namibia (UNAM).

Unfortunately, we had a covid-19 case in our team from Namibia, which directly influenced the revision phase. This was another critical set back, that led to a delay of approximately three months. It is mid-July 2021 and the revision phase is still on hold. As soon as the revision phase is completed, the finalization of the toolkit can begin. This last phase will happen in close cooperation with the production agency «Rooftop» (Rooftop Lab, 2020). Their task is to convert our sketches into the final version, and to transform the layout from our lessons into the original design of the *KaziKidz* toolkit. Further they will also design posters where needed. From previous projects we know that, this finalization process probably will include a lot of exchanges between us, Catrin and I, and Rooftop. Once the finalization process is finished, the *KaziKidz* toolkit for Grade R based on the Namibian curriculum will be ready to be printed. Figure 12 shows the first two pages of the first draft of a lesson and figure X presents a lesson with the final look designed by Rooftop.

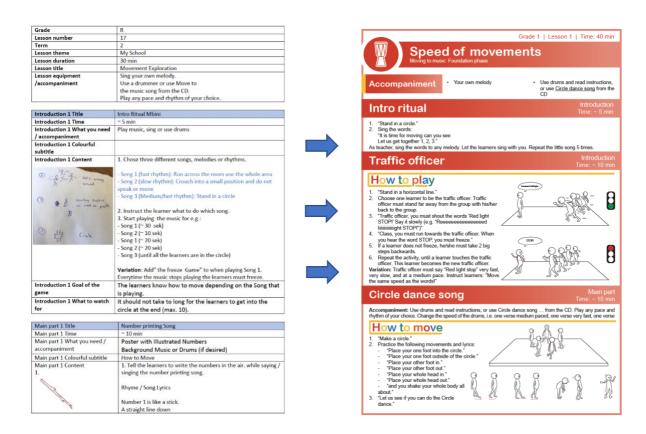


Figure 12: First draft of a «Moving-to-Music» lesson vs. final version of «Moving-to-Music» lesson in Grade 1 (Van der Walt et al., 2018)

6. Results

The main result of the KaziKidz expansion for Grade R would be a first version of the finished professional and locally adapted auxiliary toolkit with ready-made lessons, including its three parts: «Physical Education», «Moving-to-Music» «Health, Hygiene and Nutrition». Each of them containing 32 lessons & 1 assessment, except for the «Health, Hygiene and Nutrition» toolkit, which consists of 6 lessons. The product of this master thesis is the «Moving-to-Music» toolkit for Grade R, based on the Namibian pre-primary curriculum. Due to the Covid-19 pandemic, the timeline of this master's project was prolonged. The revision of the lessons and the finalization of the toolkit is still in process. The following figures present a beta version of, the title page, the lesson tracker, two lessons and an assessment.



Figure 13: The titel page KaziKidz Grade R toolkit (Beta Version)





Component	Term	Lesson Number	Theme	Lesson Content	Date
Moving	Term 1	Lesson 1	Myself	Sing & Dance	
to		Lesson 2	Myself	Sing & Dance	
Лusic		Lesson 3	Myself	Storytelling	
		Lesson 4	My Body	Bodyparts & Freezes	
		Lesson 5	My Body	Bodyparts & Freezes	
		Lesson 6	My Body	Mobilisations & Isolations	
		Lesson 7	My Body	Mobilisation & Isolation	
		Lesson 8	My Family	Contrasting Movements	
		Lesson 9	My Family	Diversity of Movements	
		Lesson 10	My Family	Diversity of movements	
		Lesson 11	My Family	Contrasting movements	
		Assessment: Moving to Music			
	Term 2	Lesson 12	My Home	Storytelling	
		Lesson 13	My Home	Storytelling	
		Lesson 14	My Home	Diversity of movements	
		Lesson 15	My School	Storytelling	
		Lesson 16	My School	Storrytelling	
		Lesson 17	My School	Movement exploration	
		Lesson 18	My school	Movement Exploration	
		Lesson 19	My Community	Body Percussion & Rhythm	
		Lesson 20	My Community	Contrasting Movements	
		Lesson 21	My Community	Body Percussion	
				& Rhythm	
		Lesson 22	My Community	Movement exploration & Isolations	
		Assessment: Moving to Music			
	Term 3	Lesson 23	Animals	Animals & your Name	
		Lesson 24	Animals	Animals and their movements	
		Lesson 25	Animals	Animals & your Name	
		Lesson 26	Animals	Animals and their movements	
		Lesson 27	Water	Animals an their movements	
		Lesson 28	Water	Partner work & Games	
		Lesson 29	Water	Partner work & Games	
		Lesson 30	Plants	Storytelling & Games	
		Lesson 31	Plants	Storytelling & Bodypercussion	
		Lesson 32	Plants	Storytelling & Games	

Figure 14: «Moving-to-Music» lesson tracker for Grade R (Beta Version)

Grade R | Lesson 17 | Time: 30 min



Movement Exploration

Accompaniment

- Sing your own melody.
- Play any pace and rhythm of your choice.
- Number Poster

 Use a drum or use Move to the music song from the CD.

Intro ritual Mbini

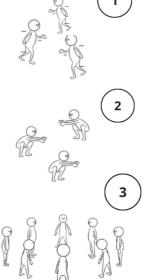
Introduction

Accompaniment: Play music, sing or use drums

How to move

- 1. Chose three different songs, melodies or rhythms.
- Song 1 (fast rhythm): Run across the room use the whole area
- Song 2 (slow rhythm): Crouch into a small position and do not speak or move
- Song 3 (Medium/fast rhythm): Stand in a circle
- 2. Instruct the learner what to do which song.
- 3. Start playing the music for e.g.:
- Song 1 (~ 30 sek)
- Song 2 (~ 10 sek)
- Song 1 (~ 20 sek)
- Song 2 (~ 20 sek)
- Song 3 (until all the learners are in the circle)

Variation: Add" the freezeGame" to when playing Song 1. Everytime the music stops playing the learners must freeze.



Number Printing Song

Main part Time ~ 10 min

Accompaniment: Poster with Illustrated Numbers and Background Music or Drums (if desired)

How to move

1. Tell the learners to write the numbers in the air. while saying / singing the number printing song.

Variation:

Write the numbers...

- as big as possible
- as small as possible
- slow
- fast



Figure 15: Example «Moving-to-Music» lesson 17, Grade R, page 1(Beta Version)

Rhyme / Song Lyrics:

Number 1 is like a stick. A straight line down That's very quick!

For number 2 Go right around. Then make a line across the ground

Go right around - What will it be? Go round again to make a 3!

Grade R | Lesson 17 | Time: 30 min

Go down and around, then you stop. Finish the 5 with aline on top.

Make a curve, then a loop. There are no tricks to making a 6.

Across the sky and down from heaven. That's the way to make a 7!

Make an "S" and then don't wait. Go up again to make an 8!

Move to the music song

Main part Time: ~ 10 min

How to move

- 1. Practice the following movements: "Can you clap your hands?",

 - "Can you stamp your feet?",
 - "Can you laugh from your stomach until your whole body moves?"
 - "Can you jump high up in the sky?"
 - "Let us run on the spot. Lift your knees!... and stop!"
 - "Can you swing your arms from side to side?"
 - "Can you hop on one leg?"



Down and over and down some more

Go down and around, then you stop.

That's the way to make a 4!

Finish the 5 with aline on top.

Make a curve, then a loop. There are no tricks to making a 6.













Follow the instructions of the Move to music song. You can either play the Move to music song from the CD or use drums and sing the lyrics below:

Chorus: Move to the music Let's have fun Move to the music Move as one! (Repeat)

Verse 1: Clap your hands Stamp your feet Laugh from your tummy Jump to the beat

Chorus (Repeat) Chorus (Repeat)

Verse 2: Run in place Move and jive Repeat Whole Song

Let's swing our arms now Hop on one leg

Imaginary things

Cool down Time: ~ 5 min

How to conduct

- 1. "Imagine you are a candle.
- Show me your fire.
- How does the fire move?
- The fire moves fast.
- The fire also moves slowly.
- The fire sometimes makes sparks.
- Make 4 sparks. Sharp fast movements.
- If the candle burns for a long time, it begins to melt.
- You are melting.
- Melt all the way to the floor.
- Close your eyes as the fire goes out."
- 2. If you want to, you can hum a soft, relaxing song to the learners.
- 3. Say or sing the closing sentence:
- "Moving lesson done for today,
- See you later and have a great day!"

Figure 16: Example «Moving-to-Music» lesson 17, Grade R, page 2 (Beta Version)

Grade R | Lesson 24 | Time: 30 min



Animals and their Movements

Accompaniment

- Play/sing any song of your choice.
- Play any pace and rhythm of you choice.

Intro ritual Nthathu

Introduction Time: ~ 5 min

- 1. "Stand in a Circle"
- 2. Teacher stands in the middle of the circle.
- 3. Ask the learners "Are you ready to move?"
- 4. Learners should answer "Yes!"
- 5. Teacher says: "louder"

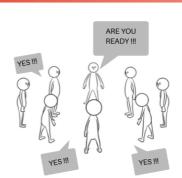
(Repeat this 3x)

- 6. Teacher says: "Moving to...", Learner answer: "Music" (Repeat this 3x)
- 7. Instruct the learners: "Show me a freeze"
- 8. Ask them to show you another one (Repeat this 3x)
- 9. Ask the learners: "Show me your happy dance.
- 10. Instruct them to do a "Highfive" Circle. Say: Let's do a "Highfive" Circle

Highfive Circle: One Learner begins to give "Highfives" in the circle. the others follow the first learner until everyone could go around in the circle.



It should resemble a call and response team huddle.





Move like an animal and freeze

Main part Time: ~ 5 min

How to play

- 1. Play music/drums and instruct learners to move freely to the music (Encourage learners to use the entire area you have to move).
- 2. When you stop the music/drums, all the learners must freeze. Instruct the learners: "Freeze like a statue! Don't move!").
- 3. Play music/drums. Instruct the learners: "Flap your arms like a bird's wings and fly around." Stop music/drums. Learners must: "Freeze!" (Repeat birds and freeze 5 times).
- 4. Play music/drums: "Walk on hands and knees and pretend to be kittens saying 'meow'." Stop music/drums: "Freeze!" (Repeat kittens and freeze 5 times).
- 5. Play music/drums: "Walk with your legs far apart and swing your arms like a monkey." Stop music/drums: "Freeze!" (Repeat monkey and freeze 5 times).
- 6. Play music/drums: "Hop on all fours like a frog." Stop music/drums: "Freeze!" (Repeat frogs and freeze 5 times).

Figure 17: Example «Moving-to-Music» lesson 24, Grade R, page 1 (Beta Version)

Grade R | Lesson 24 | Time: 30 min

Guess the Animal

Main part Time: ~ 15 min

How to play

- 1. Make groups of 10.
- 2. Instruct learners: "Stand in a circle."
- 3. Choose a learner to stand in the circle.
- 4. Instruct the learner in the middle of the circle:
- "Move and act like a dangerous animal. You can choose the animal! Do not say its name. Just move like your animal."
- 5. Instruct the rest of the class: "Let us see if you can guess the animal."
- 6. As soon as the learners identified the correct animal, instruct all the learners to act like this animal. Give them 30 seconds to move and act like the animal.
- 7. Choose the next person to be in the middle of the circle, and instruct the middle person:
- "Choose a little animal; do not say its name; only move like it."
- 8. Instruct the rest of the learners: "Guess the animal." Once they identified the correct animal,
- "Everybody must move like the animal."
- 9. Repeat this activity with different learners in the middle. You can use the following instructions to make it interesting.
- a) "Choose an animal with fur. Do not say its name! Act like your chosen animal."
- b) "Show your favourite animal to the other learners! Do not say its name!"
- c) "Choose a heavy, big animal! Do not say its name! Only move!"
- d) "Choose a fast animal! Do not say its name! Just move like it!"
- e) "Choose a slow animal! Do not say its name! Show us!"
- f) "Choose a flying animal! Do not say its name! Use only movements!"

Outro Cool down

How to conduct

- 1. Imagine you are a mouse crawling back into her hole after a long day.
- "stand up tall an take some deep breathes of fresh air"
- "now crouch down to be very small"
- "crawl into your little hole and close the entrance with some sand"
- "lay down into a cozy position"
- "now close your eyes think of something that made you laugh today"
- "take three deep breaths"
- 2. Say or sing the closing sentence:
- "Moving lesson done for today, see you later and have a great day!"

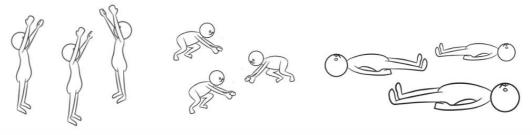
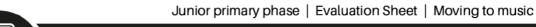


Figure 18: Example «Moving-to-Music» lesson 24, Grade R, page 2 (Beta Version)



	Assessment: Moving to music

First and last name:		
Date:	_	
Class:	_	
Class:	-	

Rating: 3 points: Well done

2 points: Good 1 point: OK

0 points: Needs to work on it

	Term 1	Term 2	Term 3
1) Participation			
2) Creativity			
3) Coordination			
4) Balance			
5) Musicality / Rhythmic skills			
6) Spatial awareness			
Total points:			
Mark:			

Rating Code	Description of Competence	Percentage
8	Excellent	88 - 100
7	Outstanding	75 - 87
6	meritorious	62 - 74
5	substantial	49 - 61
4	adequate	36 - 48
3	moderate	23 - 35
2	elementary	10 - 22
1	Not achieved	0 - 10

Figure 19: «Moving-to-Music» assessment Grade R (Beta Version)

7. Discussion

This master thesis has led to the research of different themes. At first, the situation of Namibia's basic education system was explained in more detail, then the possible health benefits of dancing for children were highlighted. Following the research, a first version of a professional and locally adapted auxiliary expansion of the *KaziKidz* toolkit for Grade R was developed, with the hope that with its future implementation it will contribute to a sustainable development of Grade R children's health.

Research has shown that the basic education system plays an important role in all three national development plans (Republic of Namibia, 2004, 2017 and 2021; National Planing Commission, 2017). Although the educational sector received the largest budget since 1990, there are still high repetition and dropout rates and poor learning outcomes at all levels of basic education (i.e. pre-primary grades to Grade 12). It is especially difficult to offer quality education to the remote rural areas, which is seen in the majority of unqualified teachers that have been employed in rural schools (Republic of Namibia, 2017). Maybe the *KaziBantu* toolkit for Grade R with its ready to use lessons could provide some assistance in those rural areas.

This leads us to one of the strengths of the *KaziBantu* toolkit for Grade R, which is its simplicity. The exercises and games are described and illustrated in a way that the teachers can vocally guide the schoolchildren through a lesson, even if they have no sports or dance experience. Another important aspect of our toolkit is its setting specific adaption to the Namibian preprimary schools in more disadvantaged areas. The lessons require little to know equipment, which means that most games or exercises, for example in the «Moving-to-Music», don't necessarily need a CD-Player or any other material. The teacher can simply use his voice or clap a rhythm, or if available play the drums. The only thing that is essential is some space to move. Another strength is that the toolkit is fitted for the Namibian curriculum. It takes into account all feasible learning objectives predefined by the Pre-Primary Syllabus and the pre-primary teachers' manual. The strong reliance on the Namibian curriculum is one of the main reasons for teachers to even incorporate the lessons in the daily school program.

Dancing offers different health benefits for children; it includes physical and psychological benefits. Several studies highlight the physical health effects of dancing, such as higher flexibility, increase in muscle strength, better endurance, balance and spatial awareness (Alpert, 2011; Stawicki et al. 2021) and increase in bone mineral density (Khan et al., 2000). Further dancing enhances the development of the rhythmic sense (Candel et al., 2013), and improves the cognitive performance (Seelig, 2017). Other studies investigated the psychological impact on health, such as an increase in social competence of children (Lobo & Winlser, 2008), which in turn has a positive impact on symptoms like depression and anxiety (Sanson et al., 2004). Further, dancing benefits the mental health and well-being of children (Burkhardt & Brennan, 2012), and it can improve stress management, which can lower the stress level (Bräuninger, 2012). Hanna (1995) highlights the role of body, emotion and mind, and says that dancing can

promote happiness and confidence. Based on the findings of this study, it can be stated that a «Moving-to-Music» toolkit provides a variety of beneficial advantages for pre-primary schoolchildren.

Due to the Covid-19 Pandemic different stages of this projects progress work were delayed or cancelled. First, our team had to call of the field stay, which made it impossible for us to test the lessons in the specific pre-primary setting of Namibia's disadvantaged schools. This fact makes the accurate prediction of the toolkit's feasibility rather difficult, which is also a limitation of this toolkit's full potential. Secondly, the revision phase had to be put on pause due to a Covid-19 case in our team, which in turn resulted in a delay of the finalization of the *KaziKidz* toolkit for Grade R. Unfortunately, at this moment it is not possible to draw a conclusion on the final product.

8. Conclusion and outlook

At this point there is barely any outcome to be discussed, since the *KaziKidz* toolkit for Grade R has still to be revised and finalized. After the finalization of the toolkit, next steps would be, the implementation in some selected disadvantaged Namibian pre-primary schools, with the goal to evaluate and study the impact of the *KaziKidz* lessons on the overall health of pre-primary children. It would be important not only to measure physical health outcomes but also psychological health outcomes, as we could see in the research of this master thesis, that dancing has also a significant impact on psychological parameters.

The *Kazikidz* toolkit for grades 1-7 has been implemented in South Africa, Senegal, the Ivory Coast and Tanzania, but the results of its effect on the schoolchildren's health are still pending. Nevertheless, the results of the intervention in the DASH study showed that 60 minutes of physical activity on at least six days of the week have a positive impact on schoolchildren's health-related quality of life (Salvini et. al, 2018). Higueras-Fresnillo et al. (2016) suggest that dancing even positively affects academic performance. The good thing about dancing as a form of physical activity is that it has various physical, psychological, and social advantages (Jain & Brown, 2001; Fong Yan et al., 2018; Burkhardt & Brennan, 2012).

The idea of the expansion of the *Kazikidz* toolkit for Grade R would be to help teachers in disadvantaged pre-primary schools, educate schoolchildren to live a healthier and more active lifestyle. As we know pre-primary education has a positive impact on further learning during primary level and beyond (Haque et al., 2013, Ejieh 2006, Taiwo & Tyolo 2002) and that the preschool years are crucial for schoolchildren's social skills development (Lobo & Winseler, 2006). Hopefully by implementing the expansion in other countries, the *KaziBantu* toolkit could reach more children, and contribute to their health trough education. As Kofi Annan said in the foreword of the State of the world's children (Bellamy, 1999, quoted after Annan, 1999, S. 4): «Education is a human right with immense power to transform. On its foundation rest the cornerstones of freedom, democracy, and sustainable human development.

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Expansion of a «Moving-to-Music» toolkit for *KaziKidz* Grade R, validated based on the Namibian curriculum

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Background

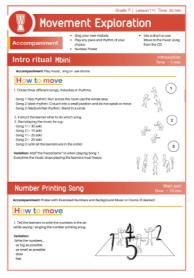
The KaziBantu project started in 2017 in Gqeberha, South Africa, with the aim of contributing to a healthy and active lifestyle for children and teachers in disadvantaged schools. South Africa is not the only low- and middle-income country affected by the double burden of communicable and non-communicable diseases ¹². This has been one of the reasons for implementing and adapting the KaziBantu intervention programme in other countries such as Dakar, Senegal; Abidjan, Côte d'Ivoire; and Ifakara, Tanzania. The main task of this master thesis was to develop the KaziKidz toolkit in collaboration with the University of Namibia (UNAM) for preschool adapted to the Namibian curriculum to provide a basis for possible collaboration with Namibian schools in disadvantaged areas.

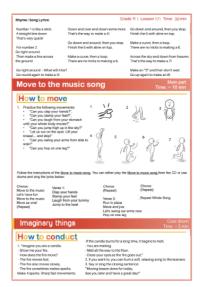
Methods

The extension of the toolkit for Grade R was preceded by research on Namibia and the situation of its education system, the benefits of dance in the school curriculum and the importance of pre-primary education. Various resources were used to develop the lessons, such as the Namibian Pre-Primary curriculum 3, multiple expert opinions from the University of UNAM, their own practical experience and literature on dance education.

Results

The outcome of this master thesis is a first version of 32 pre-designed «Moving-to-Music» lessons and assessment, for one year of Grade R. Each lesson lasts 30 minutes and contains setting-specific games and exercises that follow the Namibian Pre-Primary curriculum. The toolkit is also aligned with the existing KazKidz toolkit for Grade 1-7 to ensure a smooth transition into Grade 1.





First version of the «Moving-to-Music» lesson 17 for Grade R of the KaziBantu teaching material.

Conclusion

According to research, dance seems to have a good impact on people's overall health and well-being ^{4,5}. Based on the results of this study, it can be concluded that «Moving-to-Music» lessons have a variety of benefits for Namibian preschool children. With the help of the «Moving-to-Music» toolkit, *KaziKidz* music lessons can help school children in Namibian schools feel good and have fun with musical movement.

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