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Education Students' and Lecturers' Experiences of the Effectiveness of Physical Education Teacher Training in Distance Education Mode

Abstract

Distance education is a mode of teaching that enables students who are not able to enrol full-time at a university due to a shortage of time, physical access or financial abilities, to study in their own environment and at their own pace. Only one university in South Africa offers Physical Education as a comprehensive module in the distance education mode. The aim of this study was thus to investigate education students' and lecturers' positive and negative experiences of the effectiveness of Physical Education teacher training in distance education mode at a university in South Africa. Underpinned by Moore's Theory of Transactional Distance (TTD) (1983), data were collected by means of semi-structured, individual interviews with four lecturers and open-ended questionnaires with 17 students in a Physical Education distance education module. The five themes that emanated from the data analysis, were: interaction between students and lecturers; competence, passion and enthusiasm to teach Physical Education; obstacles with regard to Physical Education in distance learning; experiences with regard to practical training in Physical Education; and the content of the Physical Education program and students' perceptions of Physical Education. From the findings of positive and negative experiences of Physical Education in distance education mode, recommendations are made for Physical Education teacher training in distance education mode, for example, additional face-to-face contact opportunities, additional technological training, the enhanced use of student-interaction functions in learning management systems and sufficient management and administration systems at universities.

Keywords: Physical Education, distance education, teacher training, Theory of Transactional Distance

Introduction

During the last few decades, distance education has included various designs. These different designs include courses via mail, video recordings and television, although they have recently progressed to online courses. The White Paper on Education and Training (Department of Education (DoE), 1995) defines distance education as an approach that combines the principles of learner-centeredness, lifelong learning, the provision of flexible learning and the removal of barriers to access to learning. Learner-centeredness and flexible learning are also among the principles underlined by Moore's Theory of Transactional Distance (TTD) (Moore, 1983; 1989; 2013), a theory that has been applied in various studies involving distance education. The TTD postulates that *structure* (the composition and content of the course), *dialogue* (the interaction between learner-learner, learner-content and learner-instructor) and *autonomy* (the independence of the student in terms of their studies) can increase or decrease the psychological, cognitive and affective distance

between the student and lecturer (Moore, 2013). The “structure” and “dialogue” components of Moore’s theory are further supported by requirements for the successful delivery of distance education, as set by the Policy for the Provision of Distance Education in South African Universities (Department of Higher Education and Training, 2014) which include that a quality learning environment must be developed with several support group discussions, practical sessions, media and private study classes.

Mphahlele and Makokotlela (2021) documented ways to abate the obstacles causing inadequate student engagement with regard to student commitment through the lens of TTD, and came to an assumption that there should be balance and flexibility between all the transactional outcomes among distance learning students, their teaching and learning programs, and the lecturers.

Mungai (2021) focused on students’ opinions of course quality and instructor success in online learning from the viewpoint of Moore’s TTD, and found that the students reported noteworthy, optimistic, and robust associations with course value and instructor success. The study further established that the main TTD dimensions (learner autonomy, course structure, and dialogue) were prognostic of course value and instructor success (Mungai, 2021).

Practical experience and learning can be further developed through a work-integrated learning (WIL) system (DoE, 1995). According to the White Paper on Education and Training (DoE, 1995), practical workplace experience and knowledge must be seen as an essential part of a qualification, whether it is presented in distance or contact mode. This aspect of practical learning experience also applies to the distance education of Physical Education - a practical component of the compulsory subject Life Orientation (LO) (Department of Basic Education (DBE), 2011). According to the Curriculum and Assessment Policy Statement (CAPS) document, the purpose of Physical Education is to develop physical competence, safety and knowledge of movements in learners (DBE, 2011). However, the training of Physical Education teachers also involves practical components such as the training in and acquisition of specific movement and sports skills and techniques, as well as practical class management and methodology strategies (DBE, 2011). The different subdivisions of Physical Education, namely: physical fitness, sports and games, and recreational movement activities including educational dance and educational gymnastics, each have their own challenges. While these aspects can be addressed in practical lectures in contact mode, they present challenges when it comes to the practical skills and strategies in which education students need to be trained over a distance. No study investigating the experiences of students in Physical Education teacher training programs in distance mode in South Africa, could be found.

This study therefore focused on the experiences of education students and lecturers regarding the effectiveness of Physical Education teacher training in distance mode, including the challenges, weaknesses and strengths of such a program. The participants’ experiences of lectures, learning movement skills, completing, submitting and assessing assignments, online communication and examinations were included.

Methodology

Research design

In this study, a qualitative research design was used, with open-ended questionnaires and semi-structured interviews as data collection methods.

Setting

The North-West University (NWU) in Potchefstroom, South Africa, offers both Physical Education and Life Orientation as majors for students enrolled in a Bachelor of Education (B.Ed.) degree, in distance mode (NWU, 2022). The NWU's Unit for Distance Learning (UDL) has a designed curriculum to be completed in the minimum period of four years and a maximum of eight years (NWU, 2022). The *eFundi* learner management system assists students in these programs, providing an electronic platform within which all the support a student requires is accessible, from communicating with the lecturer and peers, to receiving and submitting assignments (NWU, 2022). Interactive whiteboard sessions (IWB), which are live contact sessions delivered by a lecturer in Potchefstroom and broadcast to learning support centres across South Africa, are also utilised. Student support further includes contact with the lecturer via e-mails and phone calls, as well as study material and study activities posted on the *eFundi* platform (NWU, 2022).

Participants

The participants consisted of third-year distance learning students ($n = 17$) who were studying for a B.Ed. degree, with Life Orientation as a major, in the Further Education and Teaching Phase (FET phase) at the NWU. Both the first and second semester modules in the third year of this major focus exclusively on Physical Education. Secondly, the lecturers ($n = 4$) who teach Physical Education modules in distance education mode at the NWU were also part of the study population. Purposeful sampling was thus applied, in other words when relevant selected participants are used according to predetermined criteria, determined by the research question (Nieuwenhuis, 2012).

Ethical considerations

Ethical approval was obtained from the Ethics Committee of the Faculty of Education (EDU-REC) (NWU-01643-19-A2) of the North-West University, as well as from the gatekeeping committee of the Registrar of the NWU (NWU-GK-2020029) because the research included NWU students.

Data collection

Data collection included semi-structured, individual interviews with four lecturers and open-ended questionnaires with 17 students in the Physical Education distance learning module.

Credibility and trustworthiness

To increase the credibility and trustworthiness of the data collection in this study, the interview schedules and questionnaires were evaluated by experts in the

field of Physical Education before the start of the study, and adjustments were made based on the recommendations of these experts. To increase the credibility of the data related to the interviews, the researcher further provided the transcribed data to the participants for confirmation, and the transcripts and recordings to an independent researcher who validated the transcripts.

Data analysis

The researcher collected and analysed the data by means of an inductive analysis process as recommended by Creswell (2013). The data were analysed by organising the responses from the questionnaires of the students and from the interviews of the lecturers according to identified patterns, coding, and the identification of themes and subthemes to be presented in the discussions following hereafter (Creswell, 2013).

Results

The five themes that emanated from the data analysis, were: (1) Interaction between students and lecturers; (2) Competence, passion and enthusiasm to teach Physical Education; (3) Obstacles concerning Physical Education in distance learning; (4) Experiences of the practical training in Physical Education; and (5) The influence of the content of the Physical Education program on participants' perceptions of Physical Education.

Interaction between students and lecturers

According to the participants, the lecturers' availability was exceptional. The students reported that they could get hold of the lecturers easily and quickly via e-mail or the WhatsApp application and the lecturers responded punctually with helpful guidance, as two student-participants put it:

The lecturer was easily reachable via e-mail. Responded very quickly, which I appreciated. There was never a fear when I wrote an e-mail, that I would not receive a reply.

Contact was never a problem. If anything was unclear, a mail was sent and a reply was received not long thereafter.

One of the lecturers also explained the value of personal, "caring" communication with students as follows:

... I communicate personally with everyone... and the students had the greatest appreciation for it...

The students experienced the lecturers as professional, available and attentive, which contributed to the positive interaction between students and lecturers. Students' negative experiences included that there was no physical contact between the student and the lecturer, as touched on by two of the students:

... It is not always ideal or practical because no physical contact can be made with the person.

There is no real interaction.

Competence, passion and enthusiasm to teach Physical Education

From the responses of the student-participants, it appeared that the lecturers' passion for Physical Education motivated them to also teach the subject with enthusiasm. The majority of the students also indicated that their competence and confidence increased as they progressed with the module. Several student participants indicated that the positive influence of the Physical Education training on their self-confidence in presenting a thorough Physical Education lesson was accompanied by their improvement in subject knowledge. Some students stated:

... I am now highly confident, because I can now immediately apply my content knowledge and experiences from a classroom environment to this course and the later (sic) also...

I am much more confident now. I know better how to use CAPS as starting point and to then prepare lessons that fit into that curriculum.

All the lecturers reported that they were passionate about Physical Education, among other things because they felt that the holistic development of every human should include the cultivation of a lifelong desire for exercise. One lecturer stated:

... I love it, it's really just a joy and I want to motivate the students to move, not only for their own health, but also for social and all the facets of well-being.

Three of the lecturers further pointed out that their love for Physical Education and sport contributed to the outstanding quality training they strove to offer to students. Two lecturers agreed that they lived out their subject knowledge and tried to convey it to the best of their ability to the distance students, as one lecturer summarised it:

... My lifelong love of sports has provided additional confidence when I offer Physical Education classes.

Obstacles with regard to Physical Education in distance learning

The obstacles experienced by students and lecturers with regard to Physical Education in distance learning mode were, firstly, the students' background knowledge; secondly, the students' technological illiteracy and limited internet access; and thirdly, deficiencies in terms of the administration of assignments.

From both the questionnaires and interviews, it emerged that the students often did not have foundational knowledge of Physical Education and sport, as confirmed by two students:

My biggest obstacle was little knowledge about the subject but built up the knowledge over the course of the semester.

Little experience with sports...

According to the lecturers, distance-learning students are not always aware of the enormous role that technology plays in their studies. All the lecturers pointed out that students' lack of knowledge, skills and access with regard to the use of technology is an obstacle to Physical Education teacher training in distance mode, as one lecturer put it:

Unfortunately, not all students have the necessary technology and do not always understand how it works.

The lecturers also all shared the feeling that the slow service delivery by the distance education management center with regard to the administration and submission of assignments, is a "headache of its own". The majority of the lecturers

mentioned that they did not always receive the assignments on the given submission dates, and that this caused problems with regard to their timely feedback. Another problem mentioned by the majority of lecturers was that problems have arisen with regard to the forwarding of assignments to lecturers and feedback to students as a result of assignments that have not been correctly recorded at the management center. One lecturer linked the problem to the large number of assignments received:

Failure to keep a thorough record at the management center of receiving and forwarding assignments can lead to confusion. The management center to which all assignments are sent must receive thorough training to handle the large number of assignments.

Experiences with regard to practical training in Physical Education

The participants experienced the use of videos for the training of practical skills and concepts positively, although they also indicated disadvantages. Several students explained the positive contribution of videos to the development of their practical skills and understanding of movements:

I learned a lot more from the videos than I did from reading about how to coach or train others. It would be more useful if there were more videos with practical teaching for me to learn from. Especially as this is a “doing” subject rather than a “reading/studying” subject, it would be great if the delivery method used more videos to do as we watch, rather than only reading about doing.

If a video is available, one can look at it a few times if unclear.

In a normal class, certain things cannot be repeated a few times due to time constraints. I like to listen, then ponder over something and listen again... Distance also allows you to research more and therefore learn more.

A few students even reported that they doubted themselves if they did not have an adequate video depicting the practical movements:

Not having a video or clear indication of what the lecturer wanted, because it left me constantly doubting myself, not knowing if what I was doing was correct.

One negative aspect regarding the practical training reported by some students, was that they experienced the long interval between the submission of practical video assignments and feedback from lecturers, as negative. The time it takes for feedback from lecturers on students' performances of movements or practical lessons is a problem in online Physical Education, as the students only receive the feedback much later and cannot correct themselves immediately when they perform the movement. One lecturer explained the feedback problem as follows:

In a traditional classroom setting, a student's performance can be immediately assessed through questions and informal testing. With distance learning, a student has to wait for feedback until the instructor has reviewed their work and responded to it.

However, a few students explained that they were aware that practical training would be more difficult in distance mode when they enrolled for the module, as explained by one student:

... anyone will be more comfortable having a one-on-one practical lesson with the lecturer, but we all as distance students were aware of these difficulties when choosing our subjects.

The influence of the Physical Education program on participants' perception of Physical Education

The majority of the students experienced the content of the Physical Education course as positive because they found it interesting. Being conscious of the value of Physical Education for the holistic development of learners, also motivated students to perform well in the course. A student summarized her experience of the content of the training program as follows:

The module content was interesting, which made me want to learn more.

According to several students, the training course positively influenced their view of the value of Physical Education in schools. One student even indicated that her view, which had long been that Physical Education is a waste of time, had changed:

After all these years of my knowledge of PE, I now have a total different perspective of PE in Life Orientation. I also thought that it was a waste of time in schools but now I know why it is compulsory.

In another student's opinion, the principles of Physical Education are so valuable that teachers have to apply them in their own lives.

That it must be taken more seriously and integrated personally in to your life.

Recommendations and policy implications

Deriving from the findings of positive and negative experiences of Physical Education in distance learning mode, recommendations for Physical Education teacher training in distance learning mode include additional lecturer-student face-to-face contact opportunities, additional technological training for students, the improved use of videos and other media for enhanced practical training opportunities, the increase of student-interaction functions in learning management systems and sufficient management and administration systems at universities. These recommendations can contribute to the improved effectiveness of Physical Education teacher training in distance education mode, and indirectly help to address the need for the delivery of qualified and effective Physical Education teachers in South Africa.

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