

Physical Education Teachers' Experiences in Promoting Life Skills using Differentiated Instruction Experiencias de profesores de educación física en la promoción de habilidades para la vida mediante la instrucción diferenciada

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Abstract. Physical education (PE) is a strategic medium for teaching students life skills. Therefore, teachers' understanding of the comprehensive concept of life skills is important to help them organize, integrate, promote, and even develop the life skills of their students. This study explores teachers' experiences promoting life skills in PE with differentiated instruction (DI) used a qualitative approach. The participants were two elementary school teachers who had graduated from the teacher mover program and had implemented the Independent Curriculum. Participants' experiences were explored using nine open-ended questions, from conception, usefulness, and problems to constraints and solutions. Interview data were analyzed using thematic procedures. The research findings imply that teachers already have concepts and well-integrated PE life skills, such as analytical and critical thinking, communication, and simple product development. Teachers promote students' life skills through DI that accommodates students' learning needs with diagnostic assessment through content, processes, products, and learning climate. The constraints that teachers experience include teaching collaboration and time management with various cultural backgrounds from students. The novelty of this research is that it is the first research investigating teachers' experiences of integrating life skills in PE using DI so that with different learning needs, teachers can also accommodate various life skills needs of students, such as critical thinking, creative thinking, collaboration, and communication. The teaching of life skills from the concept of the Independent Curriculum has been well implemented. However, to ensure a more comprehensive and sustainable integration of life skills dimensions will need further discussion on the development of learning tools and models as well as life skills integration training for PE teachers.

Keyword: Differentiated instruction, life skills curriculum, life skills problems, physical education-based life skills, teaching life skills

Resumen. La educación física (EF) es un medio estratégico para enseñar a los estudiantes habilidades para la vida. Por lo tanto, la comprensión por parte de los docentes del concepto integral de habilidades para la vida es importante para ayudarlos a organizar, integrar, promover e incluso desarrollar las habilidades para la vida de sus estudiantes. Este estudio explora las experiencias de los docentes promoviendo habilidades para la vida en educación física con instrucción diferenciada (ID) utilizando un enfoque cualitativo. Los participantes fueron dos maestros de escuela primaria que se habían graduado del programa Teacher Move y habían implementado el Currículo Independiente. Las experiencias de los participantes se exploraron mediante nueve preguntas abiertas, desde la concepción, la utilidad y los problemas hasta las limitaciones y las soluciones. Los datos de las entrevistas se analizaron mediante procedimientos temáticos. Los resultados de la investigación implican que los profesores ya tienen conceptos y habilidades para la vida en educación física bien integradas, como el pensamiento analítico y crítico, la comunicación y el desarrollo de productos simples. Los maestros promueven las habilidades para la vida de los estudiantes a través de DI que se adapta a las necesidades de aprendizaje de los estudiantes con evaluación de diagnóstico a través de contenidos, procesos, productos y clima de aprendizaje. Las limitaciones que experimentan los profesores incluyen la colaboración docente y la gestión del tiempo con diversos orígenes culturales de los estudiantes. La novedad de esta investigación es que es la primera investigación que investiga las experiencias de los docentes al integrar habilidades para la vida en educación física utilizando DI para que, con diferentes necesidades de aprendizaje, los maestros también puedan adaptarse a diversas necesidades de habilidades para la vida de los estudiantes, como el pensamiento crítico, el pensamiento creativo, colaboración y comunicación. Se ha implementado bien la enseñanza de habilidades para la vida desde el concepto del Currículo Independiente. Sin embargo, para garantizar una integración más amplia y sostenible de las dimensiones de habilidades para la vida será necesario seguir debatiendo el desarrollo de herramientas y modelos de aprendizaje, así como la formación en integración de habilidades para la vida para profesores de educación física.

Palabras clave: Instrucción diferenciada, plan de estudios de habilidades para la vida, problemas de habilidades para la vida, habilidades para la vida basadas en la educación física, enseñanza de habilidades para la vida

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Introduction

The complexity of today's modern society demands that students' future educational principles are applied to the subject matter and to ensure that the knowledge, attitudes, and skills that students learn are diffused into the behavior of their daily lives (Latino, 2022). Students' experience of learning material must be transformed into life skills education, considering that, currently, life skills are very important in the 21st-century (Gupta, 2021, p. 50). Life skills are taught as general skills for living that help

individuals to grow and develop, be able to communicate and build relationships individually and in groups (Sonjaya et al., 2024, p. 599), including in the context of holistic health and social issues, such as learning about social influences on behavior and learning rights and responsibilities, as well as learning about health issues (World Health Organization, 1996, p. 4). Teaching life skills is an effort to improve student's mental well-being and competence so that they are ready to face real life (Esmaeilinasab et al., 2011; Rachman, 2009). The teacher's role is to prepare and optimize students' social and personal

abilities to carry out their full participation functions (Giang et al., 2022, p. 105) to develop their daily life both at school, at home, and in their environment (Jones & Lavalley, 2009; Suardika et al., 2021; Wardani et al., 2021). Thus, by integrating life skills into physical education (PE), teachers use physical activity to promote learning experiences that prepare students to accelerate and be competitive with various complexities and dynamic changes in life's demands.

Physical education can be a strategic medium for promoting students' life skills (Aliberti & Manzo, 2023; Cronin et al., 2020; Goudas, 2010; Kumar, 2017; Lenzen et al., 2023; Opstoel et al., 2020; Winn et al., 2022). There are at least three basic reasons. First, through demonstration and practice, life and physical skills are learned similarly. Second, many skills learned in and in sports are transferable to other areas of life (including the ability to perform under pressure, problem-solving, meeting deadlines and challenges, goal setting, communicating, handling success and failure, working in teams, and receiving feedback). Third, sport is an activity that is pervasive throughout our society, and most students are familiar with it (Goudas et al., 2006; Papacharisis et al., 2005). Previous efforts confirmed that teaching students in PE classes is not limited to mastering physical skills, but through physical activity, teachers prepare their students to fulfill educational goals (Blegur et al., 2023, p. 724). Teachers develop, expand, and increase the potential of students' physical, social, emotional, and reasoning skills to prepare them to become strong citizens and be able to face life's challenges positively and effectively (Latino, 2022; Marheni et al., 2022). At least the guarantee of life skills-based learning can eliminate public concerns about education and its processes, where teacher performance is the most critical factor (Paez & Hurtado Almonacid, 2019, p. 61).

This research is important to carry out because numerous evidences support the success of participant life skills by integrating life skills-based programs (Anira et al., 2021; Goudas & Giannoudis, 2008; Suardika et al., 2021; Young et al., 2006). However, to ensure the effectiveness and efficiency of integrating life skills into learning, teachers must have a comprehensive concept of life skills to successfully integrate life skills into PE through analytical, evaluation, and creative processes. Teachers play a strategic and critical role in organizing learning (Esmaeilinasab et al., 2011; Kurtdede-Fidan & Aydoğdu, 2018), so teacher readiness is very important in the success of life skills education (Gupta, 2021, p. 50). Teachers not only influence one area of their student's lives but also have to instill life skills that cover every area of their lives (Kumar, 2017, p. 191)—starting from deliberately planning student development strategies in learning activities to ensure that each student has sufficient opportunities to participate in developing their life skills (Nugraha et al., 2022, p. 936), placing the context of life skills in measurable student learning goals, and trying to overcome various

implementation constraints (Goudas & Giannoudis, 2008, p. 535). Thus, the success of teaching life skills also depends on the teacher's competence because life skills must be taught through real learning experiences, not just "captured" by students (Mandigo et al., 2018).

In addition to a series of successful integration of life skills in PE (Cronin et al., 2018; Goudas et al., 2006; Goudas & Giannoudis, 2008; Kumar, 2017; Suardika et al., 2021; Wardani et al., 2021), research others also reported that teachers had problems teaching life skills. These obstacles are due to internal teacher problems (Kurtdede-Fidan & Aydoğdu, 2018). For example, the teacher's lack of knowledge about life skills and inadequate teaching and learning materials (Mohale & Mafumbate, 2019; Wangchuk et al., 2019) does not assess life skills in learning (Gover, 2018), greater attention given to subjects such as mathematics and language (Chirwa & Naidoo, 2014), as well as difficulties in technical content, information, and communication technology skills in teaching (Jawarneh, 2013). Furthermore, some teachers stated that there was insufficient time to apply life skills, many life skills had not been included in the curriculum (Cassidy et al., 2018), and teachers felt they were less relevant and inappropriate for working with transfers to non-sports (Knudsen et al., 2020). The results of this diagnosis underline that the teachers' understanding of comprehensive life skills is so important to help them organize, integrate, and develop the value and meaning of comprehensive PE for their students.

Cronin et al. (2023, p. 1) recently reported the results of their qualitative investigation of the experiences of 11 teachers in northwest England developing life skills in PE. The findings succeeded in establishing five main themes, namely: (1) main life skills developed through PE, including teamwork, communication, leadership, and resilience, (2) students need life skills for various areas of their lives such as education, work, personal relationships, or life in general, (3) consider individual student needs when teaching life skills, (4) strategies for developing life skills including, explicit and implicit learning, teachable moments, and role models, and (5) transfer life skills from schoolwork to home life). However, there is a gap in the study by Cronin et al. (2023), where they have not reviewed the meaning of life skills from the teacher's perspective (because the meaning that the teacher guides determines the action of promoting life skills), evaluates the relevance of teacher competence to teaching life skills (how teachers reflect on themselves as individuals who are competent in promoting life skills using differentiated learning), as well as constraints and solutions that teachers experience in teaching life skills (ensuring solutive efforts that teachers initiate to promote and transfer life skills).

Since 2022, Indonesia has implemented the Independent Curriculum. According to Khoirurrijal et al. (2022), the Independent Curriculum offers diverse learning that focuses on essential content, giving students sufficient time to deepen concepts and strengthen competence. Teachers can choose various teaching tools so that learning

can be adapted to students' learning needs and interests. So do these curriculum changes help restore and accelerate teacher teaching based on life skills or vice versa teachers are still monotonous towards their conventional learning (disciplinary mastery). Finally, this study focuses on voids that have not been explored by Cronin et al. (2023) (see previous paragraph) by borrowing investigative questions from Kurtdede-Fidan & Aydoğdu (2018) to be more comprehensive in answering research problems based on investigating teachers' experiences in promoting life skills in PE after implementing the Independent Curriculum.

Methods

Research Approach and Procedure

This study used a qualitative approach. Qualitative research is more holistic in nature and often involves collecting rich data from multiple sources to gain a deeper understanding of each participant, including their opinions, perspectives, and attitudes (Nassaji, 2015), such as phenomena and is especially appropriate for answering questions. why something was (not) observed, assessing complex multi-component interventions, and focusing on improving interventions (Busetto et al., 2020). Qualitative research goes through an iterative process in which increased understanding of the scientific community is achieved by making significant new differences as a result of getting closer to the phenomenon under study (Aspers & Corte, 2021). These nine questions were asked to the participants in stages to ensure that the credibility of the data or information obtained could be confirmed. These questions also develop according to the needs of the participants' answers. Participants' answers were analyzed thematically using Lester et al. (2020). Simultaneously with the analysis process, the researcher formulates other questions following the needs of data exploration and confirmation so that the process of collecting and analyzing data is carried out simultaneously. Researchers always tried to develop questions based on the answers from participants so that the data that researchers receive is more detailed about the need for coding, categorization, and research themes. For example, when the participants answered questions about the meaning of life skills, "*Life skills are a basic concept where we teach and prepare students to be tough in dealing with everything.*" The researchers continues the question, "*How do you construct the meaning of these life skills? Do you construct based on experiences and reflections as a teacher so far or from the results of interventions when attending training organized by the government, especially in the teacher mover program?*" In addition, researchers meet participants according to mutual agreement in determining the place and time of the interview (for example, meeting at school). All participant answers (results of interviews) were audio-recorded and recorded by researchers with due regard to the qualitative research code of ethics from Kang & Hwang (2021), including confidentiality and privacy, convenience, and integrity.

Participants

The participants were two elementary school PE teachers who graduated in the 2022 teacher mover from the Ministry of Education, Culture, Research and Technology Program, Republic of Indonesia. They, respectively, Participant 1 (male, 34 years) and Participant 2 (male, 43 years). The teacher mover is a leadership education program for teachers to transform to create quality, meaningful, and impactful student learning. The consideration for determining the participants is because they are government agents responsible for promoting the Independent Curriculum, so it is crucial to identify the participants' attitudes toward teaching life skills in PE with the implementation of the Independent Curriculum. Given the practice of PE using physical media to achieve educational goals, teachers often do not maximize other "values," such as promoting students' life skills to help them survive in life now and in the future. In addition, does the government's updating of the curriculum also impact the concept, application, and development of teaching life skills to students or, vice versa, stagnate while continuing to teach conventional PE (disciplinary mastery)?

Data Collection

Observing the characteristics of the problem and research objectives, the researchers used in-depth interviews as the main instrument in data collection. The goal is for researchers to get a comprehensive and in-depth perspective on the concept of life skills that the participants guide, as well as their responses to the curriculum and various student learning activities that teach life skills and how the attitudes of the participants overcome problems in teaching life skills to their students. The research instrument includes nine open questions adopted from Kurtdede-Fidan & Aydoğdu (2018) and contextualized in PE. Question details are as follows: (1) what do life skills mean? (2) which life skills should be acquired by students? (3) why is it important to teach students life skills? (4) how effective is curriculum in helping students acquire life skills? (5) what kind of activities and sources are used to teach students life skills? (6) which roles are implemented in teaching life skills? (7) how competent are they with teaching life skills? (8) what are the problems in teaching life skills? and (9) what are the solutions and expectations in teaching life skills?

Data Analysis

Interview data were analyzed thematically using the protocol developed by Lester et al. (2020). First, preparing and organizing the data for analysis, the researcher collected all participant interview files from audio recordings to sketch a corpus of thematic analysis data. The researcher included a structured naming protocol for each file and creates a catalog of master data such as data sources, data types, storage locations, creators, data collection locations, collection dates, and informants. Second, transcribing the data, namely, the researchers transcribed the data in

preparation for further analysis using the verbatim transcript method to capture every conversation between the researcher and the informant. Researchers carried out Verbatim transcripts using the Transcripator application support (<https://app.transcripator.com/uploader>) to ensure speed, accuracy, and an in-depth understanding of the data set while helping to speed up the accessibility of analysis in the future.

Third, becoming familiar with the data, the researcher conducted a light or preliminary analysis of the transcription results to record the ideas or experiences the participants explain in the interview. This initial understanding has helped the researchers to inspire and create opportunities for further data collection if the researchers were aware of the limitations or gaps in the data that has been collected. Fourth, memoing the data, where the researcher reflects on the data collected with the help of critical questions to interpret the data that appears. The memo was made to anticipate potential biases that could affect the interpretation of the data. Fifth, coding the data, in which the researchers created a short and descriptive word or phrase that gives meaning to the research data. The researcher used three phases of data coding, namely. (1) the researcher gave a general code to the entire data set (the results of the memo). This coding layer identifies simple inferences to statements, experiences, and reflections that reduce the amount of data corpus. (2) the researcher provided an additional code to the results of the data code in the first stage. The codes in the second stage began to move to a higher level of inference, especially when the researcher begins to relate statements, experiences, and reflections offered by informants to concepts and ideas more directly related to the research focus. (3) the researchers made explicit connections with conceptual and theoretical research ideas. In this phase, coding usually reaches its highest level of inference as the researcher relates participants' statements, experiences, and reflections/information to specific conceptual or theoretical ideas.

Sixth, moving from codes to categories and categories to themes, the researchers began to aggregate the code to find the meaning of the conceptual categories of similarities (relationships) and differences in the data from each other. This aggregation is an essential intermediate step in theme production. After the researchers developed the category, the researchers began to build a theme. Creating a theme involves two steps. (1) the researchers brought together related categories. It involves recognizing similarities, differences, and relationships between categories. (2) researchers provided meaningful statements for specific categories by recognizing similarities, differences, and relationships. The researchers determined the theme by accommodating all the underlying categories, descriptive content, relationships between categories, and responsiveness to observed similarities or differences. Themes were aligned with the conceptual or analytic objectives of the research or in response to the main research question or focus.

Results

Life Skills Mean

Teachers have integrated life skills into their students' learning experiences when organizing PE lessons. Integrating life skills must be distinct from the concepts and meanings that the teacher guides about the life skills themselves. These concepts and meanings greatly assist teachers in diagnosing the dimensions of life skills, managing learning models that support life skills, and exploring assessment and evaluation techniques that support the credibility of the success of teaching life skills to students.

The results of the interview on the meaning of life skills according to P1 (FI/M/I1) are as follows:

"Life skills are a basic concept where we teach and prepare students to be tough in dealing with everything."

Furthermore, the meaning of other more complex life skills was conveyed by P2 (KM/M/I1), namely:

"Life skills, in my opinion, are a kind of skill that everyone has to be able to solve every life problem they experience so that they feel not pressured in life, then their life must be dignified by being able to find solutions or every problem in life so that they can live their lives with dignity different."

The meaning of life skills for the two teachers above emphasizes that life skills are an educational process that prepares students to always be solutive and resilient in overcoming various problems or problems in life (including life's difficulties), both that students experience during learning and when they are in the midst of society. Life is not only faced with all choices to the preferences and desires of students. Some activities often cause problems that are not following the aspirations of previous students (counterproductive). At such times, students must be prepared (tough) to control themselves and respond with a productive solution. Even though the teacher only uses the words "solve" and "tough" to simplify the meaning of the concept of life skills, these two words contain the meaning that the teacher wants students to be able to optimize and mobilize all their psychological and non-psychological attributes so they can respond to everything including successes and failures so that the life they lead is more dignified by successfully overcoming various life obstacles (academic and non-academic).

Life Skills Should be Acquired by Students

Continuing the results of the teachers' interpretation of the concept of life skills above, the teachers then classify the dimensions of the life skills they taught their students while carrying out PE. This dimension also aligns with the Independent Curriculum mandate, including, critical thinking, creative thinking, communication skills, and collaboration (4C).

During an interview with P1 (FI/M/I2), he expressed his opinion that:

"We have entered the 21st-century, of course, in this Independent Curriculum. We need to prepare students with: (1)

must have a critical thinking attitude, (2) must be able to communicate well, (3) be able to make an analysis, (4) be able to create products, etc. Besides that, the 21st-century skills that we always teach students are teaching them to collaborate well."

Anderson et al. (2001) taxonomy of learning outcomes has regulated these five operational dimensions. Thus, teachers can also accelerate the taxonomy of student learning outcomes into life skills learning not to confuse teachers when organizing student learning experiences based on life skill concepts.

Furthermore, P2 (KM/M/12) also teaches additional dimensions of life skills in PE. Demanding life skills that students namely must possess:

"For students, at least, some life skills need to be instilled by the teacher. For example, communicating, critical thinking, cooperation, being able to focus, having self-control, then being able to direct themselves. It needs to be instilled in students from an early age so that when they grow up, they are ready to live their lives and overcome the challenges of their lives."

Teachers define focus, self-control, and self-direction as essential dimensions of life skills for their students. Rationalization considers that students will have many choices in living their lives, such as having "A" or "B" or deciding what they want or need. Therefore, integrating these three additional dimensions helps students to be more selective in making choices about their needs in learning and expressing themselves in something beneficial to them both in the short, medium, and long term because education is part of an investment in the future.

Important to Teach Students Life Skills

Education is part of investing in the future, so teachers must ensure that what they practice and teach their students must be valuable and meaningful and impact the students themselves, their parents or families, and the nation and state. The teachers must ensure that the materials they provides and the learning experiences that students go through can reflect future competencies, not just answering an administration ceremony. It is the responsibility of the teachers to carry out their professional duties. Life skills have been viewed as a skill that students need in the 21st-century, but rationalizing the significance of life skills may differ among teachers.

For example, the views of P1 (FI/M/13) regarding the importance of life skills are as follows:

"Yes, it is crucial because, for the current era of the Independent Curriculum, teachers' learning must impact students. Why do I say this for students when we have instilled students' skills, one of which is critical thinking earlier if it is not instilled in students by itself, the learning will look passive, not dynamic."

In the context of learning, according to the teacher, learning must have an impact on students. Life skills can have an impact by stimulating students to develop various higher-order thinking (including analytical, critical, and creative thinking). At the same time, life skills can support

the implementation of active, participatory, and expressive classroom learning.

A more global idea about the importance of life skills for students emerged from P2 (KM/M/13), according to him:

"As a teacher, it is vital to teach students life skills because students are the future of the nation, the successors of the nation. They must be instilled with life skills to become the basis and strength to answer the challenges of an increasingly global world."

The teachers realize that there are periodic changes in global challenges, so the learning activities that the teachers develop must not be stagnant but dynamic and futuristic. Teachers need to make innovations when integrating adaptive skills with global challenges. Life skills play a strategic role in transitioning processes to the demands of the times. For example, through analytical thinking, students are trained to develop and distinguish between an important and unimportant structure of the material presented, organize/formulate material to form a new knowledge structure, and be able to attribute material/information to ensure productive actions. In addition, students also have creative thinking to be able to develop opportunities or knowledge products so that they have the opportunity to create novelty. Life skills teach students to set a focus so they can learn and develop themselves according to their learning needs for optimal and sustainable self-development.

Effective Curriculum in Helping Students Acquire Life Skills

The Independent Curriculum that teachers implement significant impacts on the success of students' life skills. The reason is that the teacher no longer focuses on the mastery of student learning (disciplinary mastery). However, first diagnoses the learning needs of students then follows with the formulation of learning so that students can learn and develop according to their needs.

The results of the interview with P1 (FI/M/14) regarding the effectiveness of the Independent Curriculum in supporting student life skills are as follows:

"I see that the impact of the current Independent Curriculum, especially for PE, is very effective because in the Independent Curriculum, what we need to do is good practice stuff, namely diagnostic assessments. How can we apply student-centered learning, then how do we provide a diagnostic assessment? One of the methods I use in my own school is to do a diagnostic first. I look at the needs of students or the potential that students have followed by designing DI. The DI are beneficial because they contain content, process, and product evaluations."

Furthermore, P2 (KM/M/14) shared his experience that:

"Related to the Independent Curriculum about life skills, it is very effective because the Independent Curriculum wants every student to have stable physical health and good skills so that they are able to face every challenge and continue to work and work actively on every activity they face and live."

One of the recommendations for the Independent

Curriculum is DI which emphasizes content assessment, process assessment, and product assessment. These three aspects become teachers' references for integrating life skills into student learning experiences. For example, students will first observe or listen to videos about learning material. Then the teacher asks them to analyze the material displayed (content assessment). Next, the teacher provides opportunities for students to demonstrate movements from the material they have previously observed in groups (process assessment). It is followed by developing movements in short videos (product assessment). This stage leads students to a process of life skills. After all, there are analytical, critical, and creative thinking activities, the formation of communication in observation and discussion, and the creation of collaboration because students study in groups to achieve common goals. The most significant difference from other curriculum improvements is that students learn according to the teachers rather than their preferences. Thus, the teacher's responsibility is to facilitate various learning needs of students that are freer and more enjoyable, including when students move, think, and behave. This dynamic atmosphere and initiatives help teachers integrate the life skills dimensions of their students.

Activities and Sources are used to Teach Students Life Skills

Teachers have incorporated the realization of students' life skills in PE into various student learning experiences. Specifically, the teachers are more varied in one learning model but try to internalize many student experiences according to contextual conditions to ensure students learn in a safe, comfortable, positive, and meaningful atmosphere.

In total, the following is the opinion of P1 (FI/M/I5) regarding activities and resources when teaching life skills:

"The first is that we are based on contextual. The learning resources I use are good practices that lead to positive activities. For example, when students do their learning, they must be responsible for what they do, tidy up their pencil cases, the dining area, and the schoolyard. Then the learning resources that I mean here are using various methods. The method is scientific, and I enrich students to create a safe, comfortable, and enjoyable learning atmosphere. I try in such a way to design fun learning through simple games. For example, when I teach students about scissor style high jump. I modify it with a traditional game approach such as the jump rope approach."

It is similar to the previous teachers' experience, and other teachers also use positive activities in developing students' life skills.

According to P2 (KM/M/I5):

"Positive habits or culture that are instilled. Then there are many sources of learning; the teacher is one of them, but not the only one. There are sources from the environment, colleagues, or the media or gadgets, where in this millennial era of technology, students can obtain a lot of information and knowledge through the media. For example, in assignments in

the form of projects, I usually instill in students to train how to plant and care for grass plants at home, and they report to me regularly to the teacher using video. That is one example of what I do."

There is a shift in roles in developing student learning activities in the Independent Curriculum. The teachers do not act as an information center but instead stimulates students with various experiences that encourage students to seek information or data and use other information media for learning. The teachers have applied project-based activities that are not limited while at school, but life skills-based assignments have also been expanded into student learning activities at home. Student learning activities at school need to be synergized with real experiences or actions outside of school (including home) so that there is continuity between the impact of learning life skills at school, which is helpful for students when they are at home or in the midst of society.

Roles are Played in Teaching Life Skills

The teacher mover program from the Independent Curriculum is designed so teachers can become constructive leaders in organizing their learning classes. This concept makes the teacher mover not monotonous in implementing self-centered learning. In mobilizing teachers (teacher mover), they can play many roles in diagnosing student learning needs, designing learning models that suit student learning needs, and ensuring a positive impact that students feel after going through a fun and expressive learning experience.

According to P1 (FI/M/I6), the roles carried out in teaching life skills are as follows:

"A teacher is not just a teacher, but a leader; he can be a coach or a mentor. We look at the situation when students are less active or even very passive; we can use coaching methods to determine how much student progress is in learning. The Independent Curriculum does not target students to achieve or not, but how teachers strive to make fun learning and particularly impact students."

Furthermore, the more operational role of the teacher in teaching life skills according to P2 (KM/M/I6) experience such as:

"First, it provides questions that encourage students to think critically. The second stimulates students with questions that train students to solve problems. The third implements cooperative learning."

Teachers synchronize the formulation of learning objectives and students' learning experiences by optimizing roles that empower, guide, stimulate, strengthen, and support their students. For example, in the case above, the teacher integrates life skills using a life skills-oriented learning model and stimulates critical thinking and problem-solving through questions, observational cases, and learning cases. In addition, other clinical roles that teachers perform are as coaches and mentors who are always active in diagnosing student learning experiences, strategizing solutions to encourage student learning

progress, and ensuring that students actively learn (finding out) and have joy and happiness in learning study groups. Teachers as mediators who support the development of students' life skills, so they must be selective in choosing and exploring forms of student life skills experience as previously stated (analytical, critical, creative, communicative, collaboration, self-regulation, and others). The teacher also uses students' communicative experiences in reflection. According to the teacher, reflection questions learning material and asks students to reflect on their feelings about many learning experiences they have passed in front of their friends.

Teachers Competent Teaching Life Skills

Integration of life skills will not be successful if teachers have problems with their teaching competence. Therefore, reflection (self-evaluation) of teachers regarding their teaching competence is important so that they must know what indicators of teaching skills contribute directly and significantly to their success in promoting students' life skills in PE.

According to P1 (FI/M/I7):

"I see that from the whole series of program activities provided by the government, this is very impactful, and of course, this increases my potential as a teacher. I am not just a PE teacher who comes and blows the whistle, and the students just play, but I see the students' potential and then concoct them with various methods. I also not only understand the concept of the learning process but also teach using various methods. I am also a teacher who can integrate technology-based learning. One of them was during a pandemic, and I made video-based learning so that students could follow along well, even though we were not face to face."

Teacher competence in teaching life skills is also formed in various government training activities while participating in the teacher mover program. It means there is a match between the concept and methodology regarding teaching life skills with the DI developed in the teacher mover program. Teachers are no longer in an information center that drives learning through teacher design and instruction unilaterally and centrally. However, teachers develop competencies based on student learning needs so that students can learn in a learning style so that exploration of student potential is more optimally developed.

Furthermore, P2 (KM/M/I7) believes that:

"As a teacher, of course, you must be competent or have the initiative to intensively continue to remind and bring positive things in students' lives, and this must be done on an ongoing basis."

Teachers' teaching competence will be proven if they can ensure student learning experiences impact students and classroom learning. Thus, the teachers' concern for improving the quality of students must be marked by their enthusiasm to diagnose students potential and concoct and integrate various learning models on an ongoing basis to bridge students' life skills experiences. Teacher satisfaction is not limited to mastering a particular skill. However,

teachers must always update their competencies (including pedagogic, professional, social, and personality) on an ongoing basis to be adaptive to student development (cognitive, psycho-social, and psychomotor). For example, the teacher must prepare himself as a friendly and supportive person so that students always consult him when experiencing various problems. Alternatively, the teacher continues to support students even though students experience a series of obstacles and even failure. This example is the process of reconstructing the teacher's thinking about his formulated learning objectives. The learning objectives are not limited to achieving curriculum completeness, but far more important is how the teacher contributes to designing the learning curriculum so that students feel the meaning and impact of learning experiences that support the achievement of their life skills.

Problems in Teaching Life Skills

Teachers have tried to ensure their students experience empirical experience about life skills. However, as in classical class problems, teachers always experience various obstacles both from within and outside of school.

Constraints in teaching life skills can come from the background of the students, as stated by P1 (FI/M/I8) that:

"The obstacles I face when teaching life skills to students are, firstly, related to time management or time management, then secondly, it is about collaboration. Collaboration is much needed, but in reality, when I want to implement collaboration in my class, I face various challenges. For example, students who come from the market have an indifferent habit that often occurs at school, so that when there are tasks that require collaboration, students often neglect it because it is a habit from home."

Time management and collaboration are obstacles that teachers often encounter. It is motivated because parents pay less attention to various learning and other work behaviors when students are at home. For example, students are not used to working with a timeline or collaborating at home. The average parent focuses more on meeting the family's economic needs because the average parent's main job is selling or trading in the market. Even though the successful integration of life skills should be simultaneous with various student behaviors that can transform when they are in the midst of family and society.

Student background constraints were also experienced by P2 (KM/M/I8), according to him:

"The obstacles that I found were communication, collaboration, and responsibility, we often remind them of life skills, but they have not fully developed them because of other external factors."

Students who grow up with the euphoria of playing games have been facilitated by the teacher in the learning class so that the exploration, integration, and development of their life skills can go well. Familiarizing students to study in groups with dominant physical activity followed by various integrations of critical, analytical, and creative thinking increases the space for dialogue between fellow

students, students, and teachers. However, these efforts are still constrained because the teacher has not maximized the synergy with the various experiences of students' life skills while in the family. Therefore, family synergy will greatly help maximize students' experiences in developing their life skills. There are still students who are receptive to various instructions. For example, remind them about saying hello, taking out the trash, helping each other to achieve goals, and others. It means that efforts to integrate life skills have not yet been entrenched in student behavior; student dependence on the teacher or peer stimulus is still often encountered by teachers.

Solutions and Expectations in Teaching Life Skills

The constraints teachers encounter need to find solutions to solve them so that the teacher's goal in empowering students' life skills experiences becomes more factual and actual and impacts students. Teachers initiate these solutions to ensure that there are changes in students' learning experiences that can help them shape a way of life wherever they are.

For example, P1 (FI/M/19) conveyed the following solutions to the obstacles in teaching life skills:

"The solution to the problems we face is first to form an association between parents and school to facilitate communication, conduct home visits, carry out simple activities at school including coming to school early in the morning starting with a smile, greeting, greeting. Second, creating sensitivity to students, when they see scattered rubbish, they take the initiative to clean it up and dispose of trash. The third is creating supporting programs, such as literacy, hatching, caring for, and planting. Also, if students do not listen in the literacy program, we use the visual method."

Another effort that teachers make to overcome obstacles to teaching life skills is to pay attention to learning needs according to student learning modalities. For example, some students do not like to read, so the teacher uses the game method to facilitate student learning modalities and provide opportunities for students to disseminate information or experiences they have learned to their colleagues.

For some students who experience problems in learning, the teacher does not deal with remedial processes with reading and writing activities. However, the teacher assigns students to work together to create simple products and publish them in class groups. The space for exploration and development that is so large in the Independent Curriculum makes the high alignment of students and students more impactful in learning. Teachers are more supported, and students get more opportunities to learn.

Experience overcoming different obstacles was also carried out by P2 (KM/M/19), according to him:

"The first solution is that I have to do a diagnostic assessment to determine the level of knowledge of the students I teach at school. After identifying how many students need help, I give more time to these students to pay more attention to them. Second, communicating with parents so that teachers and

parents have a shared commitment to pay attention to students, their knowledge, skills, and character so that students grow as students with character and become provisions for their lives."

Diagnostic assessment is still the main option in overcoming student obstacles so that teachers pay more intense attention to each student's development as stipulated in the DI. In addition, the involvement of parents in overcoming obstacles is also a strategic solution in teaching life skills so that the efforts made by the teacher are in line with the efforts of parents in monitoring student learning progress periodically.

Discussion

This study explores teachers' perspectives and experiences (from concepts to solutions) when teaching and promoting life skills in PE. First, this study confirms that the Independent Curriculum has accommodated teacher instrumentation in teaching life skills in PE. The teacher succeeded in constructing and accelerating his understanding of life skills so that it helps and makes it easier for him to integrate the life skills teaching of his students. Although the definition of life skills that the teacher develops is editorially different from the general definition offered by previous researchers Cronin et al. (2018), Giang et al. (2022), Jones & Lavalley (2009), Kendellen et al. (2017), Suardika et al. (2021), and Wardani et al. (2021), in substance the meaning of the life skills that the teacher guides can translate a process that prepares students to become individuals who are ready to be resilient in addressing and solving life's problems, both in the school, family and community environment. This meaning underlines that teachers have a futuristic view and believe that PE is also responsible for facilitating students with various skills to succeed and survive in their lives (Aliberti & Manzo, 2023; Cronin et al., 2020; Kumar, 2017; Winn et al., 2022) and meaningful engagement at school, at work, at home and in society (Camiré, 2022). The consideration is that PE uses demonstrations and practices during learning as well as physical activities and sports that are familiar to all levels of society while teaching skills that can be transferred to other dimensions of life (Goudas et al., 2006; Papacharisis et al., 2005).

Previous literature has divided the dimensions of life skills, both reviewed by Kendellen et al. (2017), including focus, perversion, goal setting, emotional regulation, honesty, teamwork, and respect, as well as from Cronin & Allen (2017), including teamwork, goal setting, time management, emotional skills, interpersonal communication, social skills, leadership, and problem-solving and decision making. In this study, teachers have not accommodated all the dimensions of life skills mentioned earlier. Instead, they only focus on dimensions of life skills such as critical thinking, good communication, making an analysis, being able to create products, collaborating, focusing, and self-control. This dimension limitation is reduced from the instructions of the Independent

Curriculum, where PE learning needs to integrate 4C skills (critical thinking, creative thinking, collaboration, and communication), and innovating teachers develop several additional (although still limited) dimensions of life skills. The teacher argues that students need life skills learning. However, as elementary school students, they do not yet have much independent learning experience with high dependence. Hence, the teacher only limits the main dimensions of life skills to facilitate the teacher in planning, implementing, and evaluating the successful integration of life skills.

The teacher develops students' life skills using DI by prioritizing four aspects, including content – information and skills that students need to learn; processes or students' meaningful activities in learning the content being taught; product – the way students demonstrate what they have learned that can measure the achievement of learning objectives; and the learning environment or influences—the school setting in which learning takes place and facilitates effective working relationships between teachers and students (Magableh & Abdullah, 2020; Melesse & Belay, 2022; Purba et al., 2021; Tomlinson, 2001). Differentiated instruction is different from various strategies used by previous researchers to promote life skills. For example, Kendellen et al. (2017) used four operational steps, such as (1) focus on one life skill per lesson, (2) introduce life skills at the beginning of the lesson, (3) implement strategies to teach life skills throughout the lesson, and (4) ask life skills at the end of the lesson. Knudsen et al. (2020) use four stages of participatory action in which teachers are involved in designing, planning, implementing, and evaluating life skills courses for students. There are also Ciampolini et al. (2020) which offer five protocols for integrating student life skills, (1) selecting and discussing life skills at each meeting; (2) practicing the chosen life skills, (3) integrating life skills during practice, (4) discussing and reflecting on the application of life skills and transfer to other contexts, and (5) creating opportunities to facilitate the transfer of life skills.

Differentiated instruction is proposed as a pedagogical approach that supports social, emotional and academic success for all students in heterogeneous classroom contexts (Gaitas et al., 2022) by facilitating student diversity and background knowledge (Pham, 2012) which focuses on achieving national education goals with each student's learning method and performance level (supporting students to survive to their potential) (Blegur & Hardiansyah, 2024). According to the teacher, what is interesting about DI is that they start learning with a diagnostic assessment so that the teacher has a more role in ensuring what method their students use in learning the content of the material. It is a creative action that can encourage students to plan for achieving their goals, self-regulate, be critical for questioning content, and be creative in developing problem-solving methods and making products from the content learned. Students may use

different preferences to develop their life skills because teachers do not co-opt student learning experiences through certain instructions and methods but instead provide opportunities for students to develop their methods to achieve goals. In addition, according to the teacher, the products that students produce are more accumulative and authentic for measuring, assessing, and evaluating the progress of students' life skills rather than those given conventional classical tests. Thus, in contrast to the previous protocols offered by Ciampolini et al. (2020), Kendellen et al. (2017), as well as Knudsen et al. (2020) regarding the teacher's method for integrating the life skills of his students. On the other hand, with DI, teachers facilitate and moderate students to develop methods to develop their life skills through different content, processes, and products with a learning climate that supports the students' DI rights.

Teachers play an important role in the process of various areas of student life, so they must ensure that their students receive life skills education Kumar (2017) and Kurtde-Fidan & Aydoğdu (2018) by inspiring creative experiences in their students through DI. For example, in group division, students are divided based on relay games rather than dividing student study groups conventionally (counting). Not only that, but the teacher also said that his job was to ensure that students used their methods to achieve learning goals. So if students do not want to run, the teacher prepares games for them to move places. It means that the goal for students to be able to practice basic movement skills (locomotor, non-locomotor, and manipulative) is achieved even though each student uses a different method from the other students. The teacher experiences proved that the promotion of life skills in DI is in line with the idea (Cuong et al., 2023; Langelan et al., 2024) that teachers successfully adapt their teaching to the various needs and students' characteristics. Positive experiences also form the foundation for teachers in teaching life skills through opportunities for students to communicate with teachers and creating a caring culture at school that makes students feel valued (Yuen et al., 2021). Students set goals in lessons, and students lead warm-ups, facilitate group work, or use other positive events (Cronin et al., 2023). The teacher agrees that the dimensions of life skills and integration strategies that he teaches reflect and manifest the teacher participating in various training packages in the program package as a driving teacher. The Independent Curriculum program contributes to various teacher experiences when integrating life skills in PE.

One of the obstacles to implementing DI is insufficient time for planning and implementation (Gibbs, 2023). For this reason, teachers need to pay attention to the qualitative findings from (Baumoel & Schmidlein, 2023). The findings of Baumuel & Schmidlein (2023) underlined the primary concept of successful DI implementation that is teachers need to understand students, assess quickly, and adapt quickly. Student understanding is rooted in curriculum pre-planning and direct assessment related to products and

processes. Adaptation quickly affected all three components of DI. Differentiated strategies, including what, where, when, and how to help all students succeed, will give PE teachers a practical application to add to their toolkit. Finally, Fullerton (2023) concluded that differentiated assessments are keys to measuring students' readiness and learning outcomes, so teachers' knowledge and skills in preparing diagnostic instruments are crucial. Even though teachers have integrated life skills into PE by using DI strategies (content, processes, products, and learning climate), in their recent qualitative study Cronin et al. (2023), still suggest that teachers need to evaluate students' life developments using various credible evaluation tools, bearing in mind that the development of students' life skills may occur by chance. Teachers can use evaluation tools such as the Life Skills Scale for Physical Education (Cronin et al., 2020) and the Life Skills Scale for Adolescents and Adults (Kase & Endo, 2023). Periodic evaluation of life skills development will help teachers localize other significant dimensions of life skills that have not been integrated into PE, as well as formulate and perfect various strategies for integrating life skills comprehensively into their student learning activities.

Another important note is that teachers must ensure that students' life skills transfer to non-educational contexts must also work well. The main meaning of life skills itself is a skill that prepares students to succeed and adapt to various work demands, both in school, family and society. Students are initiated not only to succeed in PE (school) but to help them transfer life skills to other settings (Gould & Carson, 2008). Teachers can facilitate by discussing and practicing the transfer of life skills (Cronin et al., 2023) as an ongoing process in which students continue to interact and interpret their environment to transfer positive life skills (Pierce et al., 2017). Thus, the obstacles that have been found by Mohale & Mafumbate (2019) and Wangchuk et al. (2019) regarding the teacher's lack of knowledge about life skills and Grover (2018) about teachers not assessing life skills in learning were not found in this study. Finally, teachers need to consider the needs of each student and implement practical strategies for students to develop their life skills (Cronin et al., 2023). It means that the continuation of the promotion of student life skills lies in the professionalism of the teacher (Kirchhoff & Keller, 2021) in their skills in formulating planning, implementing teaching, and evaluating life skills (Jawarneh, 2013) so that the need for training and developing teacher competence in the teacher mover program is to promote DI is needed because it is aligned with life skills education. Another interesting note is that the contextual factors that influence the development of life skills do not include experiences in the school curriculum but also opportunities for talent development and family and peer relationships (Shek et al., 2021; Yuen et al., 2010).

Teachers must actively promote explicit teaching transfer strategies for developing students' life skills. These strategies include discussing, reflecting, and practicing life

skills. Some teachers find new and recent activities modified with a new focus. In general, teachers agree that new practices can enhance the development of life skills (Knudsen et al., 2020). High-achieving students tend to set goals for future achievement (Yuen et al., 2021), so using group learning by empowering peers will complement active interaction among students in promoting life skills experiences (including goals-setting). This effort also frees students to find and develop learning methods according to their preferences for solving problems and achieving goals. On the other hand, the synergy of parents to promote life skills activities at home is necessary because poor consideration of life skills education by parents is a major challenge for the successful implementation of life skills in schools (Grover, 2018; Newman & Anderson-Butcher, 2021; Shek et al., 2021).

Conclusion

The Independent Curriculum and the teacher mover program convinced teachers of the importance of teaching students life skills in PE. The teacher has reconstructed the meaning of his life skills into a skill that helps students be tough and prepared to face and adapt to various life challenges in school, family and society. The dimensions of life skills that teachers integrate still include critical thinking, communicating, analytical thinking, creating products, collaborating, and self-control, so exploring other meaningful dimensions in students' life skills in further research, including goal setting, integrity, and others. Carrying DI, the teacher integrates the teaching of life skills through four aspects, namely content – information and skills that students need to learn; processes—methods or students' meaningful activities when learning content; product – the way students demonstrate what they have learned that can measure the achievement of learning objectives; and the learning environment or influences—the school setting in which learning takes place and facilitates effective working relationships between teachers and students.

We have attempted to fill in the gaps in the study by Cronin et al. (2023) to investigate teachers' experiences from various countries (now in Indonesia). However, this research only focused in a limited way on two elementary school PE teachers in who had implemented the Independent Curriculum in the teacher mover program. Their number is very limited because PE teachers in elementary schools have graduated from the teacher mover program are still limited to date. The research results also report that teachers promote these life skills in line with the Independent Curriculum agenda. Therefore, it is important to investigate whether teachers not involved in the teacher mover program also have the same vision in promoting life skills or vice versa. In addition, investigations based on gender will also provide other meaningful information about the orientation of the development of life skills in PE. There is still a lot of teacher dependence on the curriculum,

so the government needs to design a curriculum based on life skills and strengthen teacher training programs. The transfer of life skills to non-educational contexts is an obstacle that needs serious attention because the family background and parental orientation toward children's education differ in determining parental commitment to supporting the development of children's life skills at school and in the family.

There are three novelties identified in this research. First, this study is the only one investigating teachers' experiences in integrating life skills in PE using DI. Other research, such as Cronin et al. (2023) reported integration strategies and the development of life skills including, explicit and implicit learning, teachable moments, and role models). Second, the life skills aspects that teachers integrate are critical thinking, creative thinking, collaboration, and communication. In contrast to Cronin et al. (2023) which reported teamwork, communication, leadership, and resilience. Thus, three life skills are different from previous research. However, this difference occurs because of teachers' dependence on the mandate of the Independent Curriculum in Indonesia. Lastly, the study completely reported how the teacher's perspective teaches life skills from the aspects of meaning, rationalization of life skills, integration processes, obstacles, and solutions.

Limitations

The results of our current investigation, the two dominant participants use DI to develop students' life skills. However, the protocol for implementing life skills in PE is not too clinical, from planning (learning objectives), implementation and learning organization (learning model), and life evaluation. Students' skills during and after learning so that it does not facilitate the transferability process to other researchers. Given that life skills programs in developing countries lack systematic implementation, evaluation, and monitoring (Nasheeda et al., 2019), the latest study on the development of DI models/protocols in a more clinical "frame" of life skills-based learning is needed to help teachers are more clinical, practical, and integrative, and comprehensive, and credible when planning, organizing, evaluating, and developing students' life skills in PE on an ongoing basis. In addition, our study only pays attention to the exploration of teacher experience in developing life skills in schools, so the transfer of life skills to non-educational contexts has not been seriously investigated (although several questions have been explored).

Recommendations

Future studies also need to conduct more clinical studies on how parental strategies develop life skills in non-educational contexts because parents, teachers and students think that teaching life skills is insufficient in the school

curriculum (Shek et al., 2021). It requires collaboration with social agents, including parents, teachers, and coaches (Newman & Anderson-Butcher, 2021). The investigation includes how parents interpret life skills, what dimensions of life skills parents consider important to teach their children, and how parents' strategies develop their children's life skills. At the same time, there is the potential for parents to have educational preferences and career development for their children, so they have set standard dimensions of life skills that their children need to develop.

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Conflict of Interest

There is no conflict of interest.

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