

Teach physical and sports education at the intermediate level from a goal-based approach to a competency-based approach.

Keddar zineddine ^{1*}, Mekchouche Moufida ², Hamid Dali ³, Larbi Mohammed ⁴.

^{1,2,3} Université Hassiba Ben bouali chlef Algeria

⁴ University alger3, Algeria

* keddarzinedine@gmail.com

Received:13/09/2024, Accepted: 15/10/2024 Published: 25/11/2024

ABSTRACT

This study examines the teaching of physical and sports education (PSE) at the intermediate level, moving from a goal-based approach to a competency-based approach. The objective is to assess how this pedagogical transition influences students' skills and performance in PSE. The design of the study is based on a methodology for observing and assessing students' skills, comparing the two approaches. The results reveal that the competency-based approach promotes a more comprehensive development of students' physical and social capacities, thus strengthening their autonomy and engagement in PSE learning.

Keywords

Physical education, competency-based approach, pedagogical transition, student performance, skill development

Introduction

Background to the study

Physical education and sport (EPS) play a fundamental role in the educational field, with the main objective of refining the physical, mental and community well-being of students. This goes outside simple sports instruction to encompass the growth of skills and values that enrich the lives of young people. With a wide range of goals such as taming motor skills and promoting social skills, PSE contributes to overall personal growth, both physically and mentally. Recent advances in this area involve innovative teaching methods and the integration of technology into PSE instruction, highlighting the need for a thorough examination of the place of PSE in educational settings. This study aims to explore the changing landscape of physical education methodologies, highlighting the shift from goal-oriented to competency-based approaches, as well as their effects on student progression. (BERTRAND, 2018, pages 11-15) and (Deschamps, 2024).

The basis of this study lies in the lack of studies examining how physical education teachers have adapted to the significant reform employed in 1993, known as the College Instruction Reform.

Despite extensive research on the implementation and acclimatization of this reform in various disciplines, a notable gap is with regard to the field of physical education. It remains unclear how educators in this field have changed their education methods to align with the competency-based standard introduced in 1993. Thus, the main objective of this education is to evaluate the instruction plans employed by physical education teachers at the college level. Focusing on the Physical Activities and Performance course, this survey aims to observe and describe their teaching techniques while identifying the learning theories currently put into practice (as mentioned in (BERTRAND, 2018, pages 11-15)). In addition, it is essential to examine how these strategies align with students' perceptions of equity within physical education classes, as highlighted in previous research (according to (Lentillon-Kaestner, 2014, pages 1-5), (Lentillon-Kaestner, 2014, pages 11-15) and (Lentillon-Kaestner, 2014, pages 16-20)). Finally, understanding how different teaching methodologies influence student motivation and engagement is crucial to fostering their overall growth and success (citing (Motivation and Engagement - Réseau réussite Montréal, 2024)).

Research objective

The main objective of this study is to explore the teaching techniques used in college physical education, with a particular focus on the shift from goal-based to competency-based methodologies. As highlighted in (BERTRAND, 2018, pages 11-15), physical education instructors are considered dynamic professionals, knowledgeable about sports activities and teaching methods. The shift to a competency-based approach, supported by (BERTRAND, 2018, pages 16-20), highlights the importance of fostering competencies and standards to improve student educational outcomes. This transition presents challenges, including adapting teaching methods and assessment strategies, which will be examined in this study.

In addition, (BERTRAND, 2018, pages 21-25) emphasizes the importance of incorporating physical activity into the daily routine of students through progressive learning sequences, closely aligned with the objectives of this research. In addition, (BERTRAND, 2018, pages 51-55) draws attention to the limited research regarding teaching practices in college physical education, thus highlighting the importance and relevance of this survey.

By analyzing students' teaching strategies and skills development within a competency-based framework, this study aims to offer valuable insights into effective pedagogical approaches to enhance students' physical growth. The findings from this research will help shape teaching practices in intermediate-level physical education and provide suggestions for future studies.

Research Questions

Research Inquiries:

1. How do college-level physical education teachers implement their teaching practices?
2. What learning theories are used by physical education teachers?
3. What epistemological positions do physical education teachers take to cultivate competence in academic settings?

Literature review

Goal-based approach in physical education and sport

The paradigm of goal-based methodology in physical education and sports has long been a predominant strategy in academic environments, highlighting the importance of establishing clear learning goals and aligning educational efforts with these targets. By doing so, a seamless link is established between objectives and educational activities, providing a well-structured evaluation framework with specific criteria. However, difficulties such as the latent fragmentation of objects and the complexity of putting them into rehearsal have been recognised.

In contrast, the competency-based method concentrations on upskilling through practical scenarios, aimed at bridging the gap between theoretic knowledge and its claim in the real world. This method seats a strong emphasis on student-centered knowledge, where individuals can master particular assistances at their own pace while receiving modified assistance tailored to their unique needs. In addition, competency-based education anchors knowledge in relevant contexts, fostering skills enhancement through comprehensive learning experiences.

The shift towards competency-based strategies in education systems means a move towards outcome-based models, better suited to meet the diverse needs of students. This transformation requires continued commitment from educational institutions, teachers, and policymakers to ensure its continued success. In essence, understanding the differences between goal-based and competency-based methodologies is key to enriching pedagogical approaches in the fields of physical education and sports. (ELFARCHI & ZERRAD, 2024, pages 6-10).

Skills-based approach in physical education and sports

Big changes are happening in physical education and sports! The focus is shifting from a traditional "technical" approach—where the spotlight was on teaching specific movements and game rules—to one centered on developing real-world skills. Instead of drilling strict precision and rule-following, this new way emphasizes things like problem-solving, taking initiative, working well with others, and being adaptable. It's less about perfecting movements and more about preparing students to think on their feet, make smart

decisions, and collaborate effectively in all kinds of situations.

Recent studies back this up, showing that the competency-based approach leads to more well-rounded learning compared to the old-school methods. Why? Because it's not just about physical techniques anymore. This way of teaching helps students build skills they can use beyond the gym, like critical thinking, teamwork, and even creativity. Plus, it prepares them to stay active and engaged in physical activities for life. And hey, it also lines up with must-have 21st-

century skills, such as tech-savviness, communication, and understanding global perspectives.

What's even cooler? Research shows that this approach doesn't just boost physical skills—it also helps students grow socially and mentally. By building teamwork, confidence, and problem-solving abilities, students aren't just learning how to move ; they're learning how to thrive. (Couillard, 2017, pages 41-45) and (Deschamps, 2024).

Authors	Target	Method	Engagement Factors
Brooks & Magnusson (2006)	Explore the experiences of students who have moved from inactivity to active engagement in PSE.	31 students aged 14-15 in secondary schools who have adopted a PSE program to promote student engagement. Focus groups with clients	The new PSE curriculum has generated a more positive student identity. These health-promoting interventions promote engagement in PSE, from an adolescent perspective.
GAO 2009.	Investigate relationships between middle schoolers' beliefs, their engagement and satisfaction in PSE, and their cardiorespiratory fitness.	Questionnaires and then <i>Progressive Aerobic Cardiovascular Endurance Run</i> (pacer).	Beliefs related to expectations and interest are correlated with perceived commitment. Differences appeared by age and sex (better beliefs about boys).
Casey & Jones (2011)	Explore the influence of the use of video technology on student engagement in PSE.	High school students refractory to PSE. Use of a program involving video technology + assessment of student engagement.	Effectiveness of video technology to improve engagement. Students developed an increased understanding and felt less marginalized.
Haegele et al. (2018)	Explore barriers and facilitators of participation of students with disabilities in PSE.	168 physical educators (72% female). Questionnaire on the positive and negative factors of student participation.	741 facilitators and 652 barriers were identified, including on teacher intervention or teaching programs. Personal variables were also barriers to participation.
Otundo et al. (2019)	Investigate the independent and interactive predictive effects of situational interest and support needs on self-interest and engagement.	middle schoolers Questionnaire on situational and personal interest, support needs, and behavioral and emotional engagement.	Presence of predictive effects independent of situational interest and support needs on self-interest and engagement. Need to set up a social learning environment.
Bertills et al. (2019)	Analyze the relationships between student engagement, the environment, and the competencies of PSE teachers.	3 groups of students with disabilities (n = 23), with low grades (n = 27) and high grades (n = 44).	Students showed relatively high engagement. Increased engagement has been observed in environments involving teacher-pupil closeness.
Leo et al. (2020)	Test whether the satisfaction of needs and the quality of motivation mediated the relationship between environment and commitment.	1,120 students aged 10 to 17 (49.9% boys). 30 classes from 13 schools. Questionnaire on teaching style and perceived engagement.	There is a positive relationship between teaching perceived as supporting needs and engagement. Teaching style is decisive for achieving positive consequences on engagement.

Table 1: Brief presentation of articles on student engagement factors in PSE in a person-centred approach (source: (Petiot, 2023))

Comparison of the two approaches

A key element to consider in the field of education is the contrast between the goal-oriented approach and the competency-based approach. While the goal-based approach sets predetermined learning goals for students, it has some limitations. In contrast, the competency-based approach, increasingly favored in higher education institutions, offers a structured framework that aligns pedagogical practices with clearly defined training objectives. This shift towards competency-based teaching methods is gaining ground within Moroccan higher education institutions, especially in scientific fields.

A review of training programs for ten undergraduate and master's degrees in psychology revealed challenges faced by educational leaders when it comes to differentiating skills, abilities, and abilities while defining required qualifications. While some competencies are described according to a competency-based strategy, others continue to adhere to a goal-based approach. Overall, it seems that the predominant method used in these programs is goal-oriented.

In addition, initiatives such as STED-AMT have advocated for the integration of skills into educational practices, aiming to align skills with sector-specific development strategies in Algeria, Morocco and Tunisia. This initiative has strengthened the capacities of higher education actors through programmes that focus on skills development. Ultimately, the implementation of competency-based approaches in educational contexts represents a step towards outcome-based educational models that better meet the needs of students and society as a whole. (ELFARCHI & ZERRAD, 2024, pages 6-10) and (ELFARCHI & ZERRAD, 2024, pages 1-5).

Methodology

1. Teamwork skills development study Conception

The research methodology adopted to study pedagogical approaches in physical education combines interviews and surveys with secondary school students in France. A group of 86 students, equally distributed between 43 girls and 43 boys, participated in semi-structured interviews. In addition, a study was administered to 1467

students, with responses providing by 823 girls and 644 boys. The average age of respondents was 16.1 years, while the average age of survey respondents was 15.2 years. The interviews began with an open-ended question regarding observations of injustice in physical education, leading to discussions on various areas where students may feel unfairly treated, counting in grading and assessment processes. This combined methodology aims to explore gender disparities in perceptions of unfair treatment within physical education classes. On the other hand, research enterprise involves looking at how teachers allocate their time during physical education classes in order to gain visions into their behaviors and decision-making processes. By integrating these qualitative data collection and analysis methods into the study design, a comprehensive understanding of student experiences and physical education teacher practices can be achieved. (Petiot & Saury, 2021) and (Lentillon-Kaestner, 2014, pages 6-10).

Human Participants

The study participants were students attending secondary schools (colleges and lycées) in France. A total of 86 students, equally distributed between 43 girls and 43 boys, participated in semi-structured interviews. In addition, 1467 students (823 girls and 644 boys) completed questionnaires as part of the research. The average age of the students interviewed was 16.1 years, while those who completed the questionnaires were on average 15.2 years old. The objective of the study was to include participants with diverse gender identities in order to explore their perceptions of injustice in the context of physical education. Qualitative data collection methods were employed in the design of the research, such as conducting semi-structured interviews with open-ended questions like: "In your opinion, are there injustices in physical education? These interviews examined different areas where students may perceive inequity, with a particular focus on the scoring and assessment methods mentioned in (Lentillon-Kaestner, 2014, pages 6-10). This diverse group of participants offered valuable insights into the experiences and perspectives of high school students in physical education classes,

contributing significantly to a comprehensive understanding of the subject.

2. Methods of data collection

To ensure a thorough data collection process, this study will take a mixed methodological approach. The research plan includes quasi-experimental procedures incorporating cognitive tests focused on sports knowledge, as well as standardized assessments to assess motor skill. Observation grids will be used to assess the appropriateness of decision making. In addition, qualitative methods such as participant observation, clinical observation, teacher reflective diaries, and lesson plan analysis will be employed for descriptive purposes. Questionnaires assessing participants' level of satisfaction will complete the data collection process in order to understand learners' experiences with the methodologies used.

In addition, the use of validated questionnaires on a large sample will help assess perceived injustices related to scoring practices in physical education. These questionnaires specifically target distributive justice and aim to provide objective data by validating scales and confirming significant differences. Interviews will also be conducted to identify procedural injustices in assessment processes, including composition of scoring criteria and assessment methodologies. Despite potential limitations due to the small number of students surveyed and subjectivity in content analysis, this information will be cross-checked with questionnaire responses for robust conclusions.

In essence, the integration of quantitative data from questionnaires with qualitative perspectives obtained through interviews will provide a comprehensive overview of students' perceptions and experiences in physical education classes, addressing both the distributive and procedural aspects of injustice within grading systems. (Lentillon-Kaestner, 2014, pages 16-20), (Gréhaigne et al., 2014) and (Lentillon-Kaestner, 2014, pages 11-15).

3. Data Analysis methods

When exploring data analysis methods to compare the effectiveness of goal-based and skill-based approaches in physical education, a variety of techniques were used. The studies incorporated quasi-experimental designs with sport-related

cognitive assessments, including tactical knowledge surveys. At the same time, standardized tests assessing motor skills proficiency and observation grids were implemented to assess the importance of decision making. The main focus was on possible changes in knowledge and motor skills resulting from participation in either approach. Surveys measuring participant satisfaction were also used to understand learners' experiences with each method.

In addition, research aimed at providing a heuristic representation of realities has relied mainly on qualitative research methodologies. These include tools such as participant observation, clinical observation, interviews, reflective teacher diaries, and review of lesson plans. The results of these studies present varied conclusions regarding the effectiveness of both approaches. While some studies indicate that there is no significant variance over short periods of time, others demonstrate that students following a tactical approach display better in-game performance compared to those adopting a technical approach. In addition, the results reveal that students who follow a tactical approach score higher on tactical knowledge assessments compared to other approaches. The literature makes it clear that data analysis techniques are essential to assess the influence of different teaching methods on students' physical education outcomes. (Gréhaigne et al., 2014).

4. Transition from a goal-based to a competency-based approach

Implementation process

In the transition from a goal-oriented to a competency-based approach in physical education, several essential steps need to be followed. As indicated by the information extracted from the NCPN comparison to a competency-based perspective ((PRACTICAL GUIDE - Articulating the RNCP to a competency-based approach, 2024, pages 21-25)), it is first necessary to establish a detailed plan with the project manager and create a basic document that integrates blocks of competencies and skills from the RNCP sheet. This document will serve as the foundation for collaborative efforts to define both the desired skill set in students and the learning

outcomes. Secondly, it is crucial to develop a matrix that aligns these new defined competencies with the teaching units in order to ensure consistency between training objectives and skills improvement initiatives.

In addition, according to the information gathered during the comparative analysis between the objective-based approach and the competency-based approach ((ELFARCHI & ZERRAD, 2024, pages 11-15)), it is vital to focus on observable and measurable competency indicators during this transition process, such as articulated expression of ideas, which serve as benchmarks to assess skill acquisition. These indicators must be specified each year according to the profiles of the students at their entry, highlighting different levels of skills development at different stages of training.

Finally, drawing on data obtained from library service resources ((BERTRAND, 2018, pages 16-20)), it is imperative to move from traditional models of knowledge dissemination to active learning methodologies that encourage students to apply their acquired knowledge to complex real-world challenges. Fostering collaboration between educators to design activities that connect multiple disciplines can enrich students' understanding and motivation. By adhering to these strategies, educational institutions can successfully implement a competency-based approach to physical education, fostering holistic student development and improving teaching methodologies.

Challenges encountered during the transition

Moving from a goal-based methodology to a skills-based approach to physical education can encounter a variety of barriers. As indicated (PRACTICAL GUIDE - Articulating the RNCP to a Competency-Based Approach, 2024, pages 21-25), one of the main challenges of this change is the reluctance of some members of the educational teams. There may be concerns about the level of complexity, the time required for its implementation and the anticipated results. Moreover, as pointed out (Amade-Escot & Agbodjogbé, 2016), the transition from a content-based to a competency-based approach requires a transformation of teachers' mindset and perspective, which can be daunting, as it involves

challenging established norms and adapting to new educational principles.

In addition, disparities between professed and observed practices can pose challenges throughout the transition period. According to (BERTRAND, 2018, pages 121-125), while some instructors may incorporate elements of a cognitive strategy, their overall practices may align more with behaviorist theories. This incongruity between stated intentions and actual implementation could hinder a smooth transition to a competency-based approach in physical education.

Essentially, navigating these barriers during transition requires addressing resistance within educational teams, fostering a shift in mindset towards competency-based methodologies, and ensuring consistency between stated intentions and practical application to effectively implement a competency-based approach in physical education.

5. Observations and assessment of students' skills

Evaluation Criteria

Assessing students' progress in physical education necessitates a rigorous assessment context. As outlined in (International Baccalaureate Course Impression of the Physical and Health Education Middle Years Program, 2015), four key conditions are used to assess student work, each with eight assessment levels. Criterion A focuses on understanding health and physical activity in order to effectively solve problems. Criterion B involves performance planning through research to improve physical education and health outcomes. Criterion C emphasizes the application of skills, techniques, and strategies in different physical activities. Finally, Criterion D emphasizes personal and social development, encouraging goal setting, responsible actions, and self-reflection to improve performance. These criteria provide a robust assessment structure for assessing students' achievements in physical education ((International Baccalaureate Course Overview of the Physical and Health Education Middle Years Programme, 2015)). In addition, it is essential to consider various assessment methods to adapt to different learning styles ((Casey et al., 2002, pages 116-120). By integrating observation and written testing into the

assessment process ((Casey et al., 2002, pages 116-120), educators can ensure a comprehensive assessment of students' achievements and skills.

Comparison between goal-based and competency-based approaches.

When comparing the goal-oriented technique with the competency-based approach in physical education, it is vital to consider the several factors that influence student engagement. As highlighted in (Petiot, 2023), Bevans et al. (2010) found that education through competency-based strategies was linked to higher levels of engagement, particularly among those who perceived themselves as lacking competency. This indicates that focusing on developing specific skills in scholars can lead to increased participation and interest in physical education classes.

In addition, (Petiot, 2023) highlights the standing of teacher-student relationships and their impact on student engagement. According to Shen et al. (2012), positive relations with teachers and peers directly affected the emotional and behavioral appointment of high school girls. This highlights the position of creating an atmosphere of provision and inclusion to encourage student participation in physical activities.

In addition, (Petiot, 2023) indicates that perceptions of competence and pleasure can influence levels of engagement. Kalaja et al. (2010) found that observation of aptitude was a key predictor of student engagement, with boys generally writing higher levels of perceived competence than girls. This suggests that building a sense of capability and enjoyment in physical goings-on can contribute to augmented student engagement.

In summary, adopting a competency-based approach to physical education can have a positive impact on student engagement by prioritizing the development of specific skills, fostering positive teacher-student relationships, and promoting feelings of competence and enjoyment during physical activities. These ideas offer valuable guidance for educators wishing to improve student participation and interest in physical education classes at the intermediate level.

6. Impact of the competency-based approach on student development Physical Development

The way physical education is taught can significantly influence students' physical development. As stated in (BERTRAND, 2018, pages 101-105), honing skills such as efficiency in physical activities plays a key role in overall skill improvement. This can be achieved by designing and executing strategies to improve performance. In addition, (Cycle 4 Program, 2020, pages 66-70) emphasizes the importance of implementing a balanced and progressive training regimen tailored to students' unique characteristics and abilities.

Furthermore, as pointed out (Petiot & Saury, 2021), engaging students in sports activities that challenge their skills and decision-making ability can cultivate a deeper understanding of tactics and their execution. By creating an environment where students can practically apply their skills, educators can help them reach a higher level of expertise. This aligns with the idea that promoting understanding-based approaches to learning, as mentioned in (Gréhaigine et al., 2014), allows students to take ownership of their learning journey and actively engage in developing their skills.

In essence, adopting a competency-based approach to physical education can lead to positive outcomes for students' physical development. By focusing on improving skills through practical application and strategic thinking, teachers can foster a more conducive learning environment that supports students' overall growth and competence in physical activities.

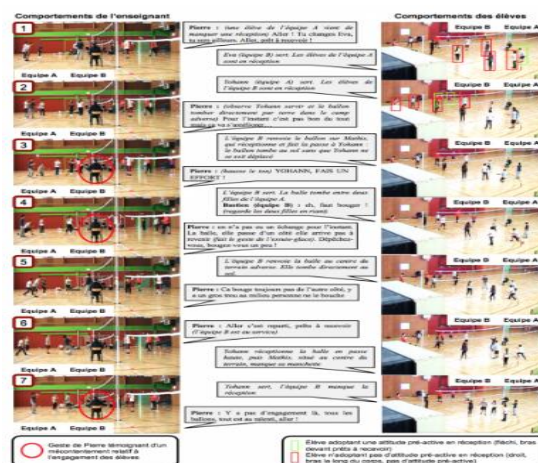


Figure 1: Chronophotography of the volleyball situation No. 1 (TEAM A / TEAM B) (source: reference (Petiot & Saury, 2021))

in a player's development?	Service Team	Number of net crossings before the exchange stops	Team that lost the point by dropping a ball directly to the ground	Point gain	in a player's development?	Service Team	Number of net crossings before the exchange stops	Team that lost the point by dropping a ball directly to the ground	Point gain
1	B	1		B	1	D	1		D
2	B	1		B	2	D	1		D
3	B	1		B	3	D	2		C
4	A	2		B	4	C	1		C
5	A	1		A	5	C	3		C
6	A	2		B	6	C	2		D
7	B	1	A	B	7	D	1		D
8	B	1		B	8	D	3		D
9	B	1	A	B	9	D	1		D
10	B	1		B	10	C	4		D
11	A	2		B	11	C	2		D
12	A	2	A	B	12	C	1		C
13	A	2	A	B	13	D	5		D
14	B	3		B	14	D	2		C
15	B	1	A	B	15	D	1		D
16	B	1		B	16	C	2		D
17	A	2		B	17	C	1		C
18	A	0		B	18	C	1		C
19	A	1	B	A	19	D	5		D
20	A	1		A	20	D	2		C
21	B	1		B	21	D	0		C
22	B	3		B	22	C	2		D
23	B	1		B	23	C	2		D
24	A	1		A	24	C	1		C
25	A	2		B	25	D	2		C
26	A	2		B	26	D	1	C	D
27	B	1		B	27	D	3		D
28	B	1		B	28	D	1		D
29	B	1	A	B	29	C	1		C
30	A	2		B	30	C	1		C
31	A	2	A	B	31	C	1		C
32	A	2		B	32	D	1	C	D
33	B	1		B	33	D	2		C
34	B	1		B	34	D	4		C
35	B	6		A	35	D	1		D
36	B	1		B	36	C	2		D
37	A	1		A	37	C	3		C
38	A	1		A	38	C	2		D
399	A	4		B					
40	B	1	A	B					

Table 2: Frame of the two volleyball situations analysed (source: (Petiot & Saury, 2021))

According to the results of recent research, teachers have many opportunities to observe and evaluate students in game-based lessons using an understanding-centered approach. Students show higher levels of engagement when participating in game management in this approach, actively

Conclusion

Summary of findings

participating in planning and evaluation activities. Notably, students with weaker technical skills feel greater enjoyment and put in more effort during play situations thanks to the understanding-centered approach. They report a better understanding of the game, know how to perform well, feel more included and display a positive attitude towards their ability to participate in team sports. It was observed that there was no decline in motor skills among students who engaged in comprehension-based games.

In addition, teachers play a serious role in developing students' motivation, engagement, and proficiency levels. The quality of the teacher-student affiliation emerges as a crucial factor influencing student appointment. Positive relations with teachers can forecast sustained student engagement, highlighting the importance of supportive teacher-student relationships. In conclusion, it is clear that the application of practices such as comprehension-based games can produce positive outcomes for educators and students. These findings highlight the importance of effective teaching methodologies and the promotion of supportive learning environments to improve student engagement and physical education skills development. (Gréhaigne et al., 2014) and (Motivation and commitment - Réseau réussite Montréal, 2024).

7.2. Implications for teaching PSE at the intermediate level

Including 21st century skills and digital chances into physical education is key to if students with a comprehensive learning knowledge. As the paper points out (Couillard, 2017, pages 41-45), the concept of capability has evolved to include not only subject-specific abilities, but also global skills such as critical thinking, problem-solving, statement, collaboration, and originality. These skills are crucial in preparing students to become competent, innovative and responsible individuals, actively engaged in various aspects of their lives. In addition, exposure to arts and culture can further enhance the development of these skills.

As mentioned in (International Baccalaureate Course Overview of the Physical and Health Education Middle Years Programme, 2015),

physical education plays a central role in promoting social interactions and developing cross-cultural understanding among students. By integrating these 21st century skills into the physical education curriculum, educators can establish a more inclusive and diverse learning environment that prepares students to succeed both personally and professionally. This focus on skills development aligns with a goal-based approach, while transitioning to a competency-based approach can significantly improve students' ability to effectively navigate real-world challenges ((Gréhaigne et al., 2014)).

7.3. Recommendations for future research

Future research in the field of physical education teaching methodologies should focus on several key areas. First, it is imperative to explore the consequences of shifting from a goal-based methodology to a competency-based approach in various educational contexts. This study could examine the barriers encountered during the transition and identify best practices for successful implementation. In addition, additional research should evaluate student observations and assessment of competencies under both approaches to determine which of these techniques is most effective in fostering student engagement and academic achievement.

In addition, future studies could explore the impact of teacher-student relationships on student motivation and engagement in physical education classes. Understanding how educators can foster positive connections with students to improve their engagement and overall performance is key to perfecting teaching methods. Finally, there is a gap in the literature regarding specific teaching methodologies and their fit with learning theories in physical education. Analyzing how different pedagogical strategies influence student learning outcomes and improving skills could offer valuable insights for teachers. These lines of research will contribute to improving the effectiveness of physical education teaching methodologies at the intermediate level. (BERTRAND, 2018, pages 31-35), (Gréhaigne et al., 2014), (Motivation et engagement - Réseau réussite Montréal, 2024) and (Amade-Escot & Agbodjogbé, 2016).

References

- [1] Antoine Thépaut, Yvon Léziart. (2013). Disciplinary performance and learning in physical education and sports. A study of didactic performance in group sports games in elementary school. <https://journals.openedition.org/ejrieps/2851>
- [2] A, Ridwan. (2022). Measuring patient satisfaction with healthcare services: Using artificial neural network (ANN) models. *Journal of the Institute of Economic Sciences*, 25 (1), 333-352.
- [3] Joan Casey, Ethel Heald, Carolyn Bartlett, Rosemary Fleming, Zonya Hiscock, Harold Stanford, Yvette Walton, Sheila Anderson, Linda Coles, Thelma Hodder, James McGettigan, Eugene Parsons, Robert Arklie, James Crewe, Stuart Fairhurst, Kevin Lane, Lloyd Walters, Mac Wells, Paul Quigley, Ron Tobin. (2002). Adolescence: healthy lifestyles. https://www.gov.nl.ca/education/files/k12_french_immersion_sante_ado.pdf
- [4] Chantal Amade-Escot, Basile Agbodjogbé. (2016). The teaching of hurdles racing according to the skills-based approach in Benin The aporias of a curricular reconfiguration. <https://journals.openedition.org/rechercheseducations/3315?lang=en>
- [5] Cycle 4 programme. (2020). <https://eduscol.education.fr/document/621/download>
- [6] Fatima Zahrae ELFARCHI, Jaouad ZERRAD. (2024). 1546-Article Text-3340-1-10-20240422. <https://www.ijafame.org/index.php/ijafame/article/download/1546/1410/>
- [7] François Deschamps. (2024). Physical and Sports Education (PSE): A Pillar of Education and Global Development - Cité Scolaire Parc Chabrières. <https://www.parc-chabrieres.fr/https-www-parc-chabrieres-fr-20-formations-568-seconde-premiere-terminale-generale-et-technologique-education-physique-et-sportive-eps/>
- [8] Gréhaigne. Jean-François, Jean-François Gréhaigne, Luc Nadeau. (2014). Tactical intelligence. <https://books.openedition.org/pufc/10608?lang=fr>
- [9] GUY BERTRAND. (2018). Teaching PRACTICES and learning THEORIES OF PHYSICAL EDUCATION TEACHERS AT CEGEP. <https://archipel.uqam.ca/12446/1/M15832.pdf>
- [10] International Baccalaureate Health and Physical Education Intermediate Education Program Course Overview. (2015). <https://www.ibo.org/globalassets/new-structure/brochures-and-infographics/pdfs/myp-brief-phe-2016-fr.pdf>
- [11] Motivation and commitment - Réseau réussite Montréal. (2024). <https://www.reseautreussitemontreal.ca/dossiers-thematiques/motivation-engagement/>
- [12] Oriane Petiot, Jacques Saury. (2021). Fostering student engagement in sport and physical education: the effects of time use measured in the first and third person. <https://journals.openedition.org/ree/3261>
- [13] Oriane Petiot. (2023). What are the factors of student engagement in PSE? A literature review of teacher and student experience. <https://journals.openedition.org/ejrieps/8372>
- [14] Ainous, R. (2018). Macroeconomic, income inequality, and poverty relationship: A review of research perspectives. *The Review of Black Political Economy*, 45(2), 123-146. <https://doi.org/10.1177/0034644618794684>
- [15] Philippe Couillard. (2017). POLICY OF EDUCATIONAL SUCCESS the PLEASURE OF learning, the CHANCE TO succeed. https://www.education.gouv.qc.ca/fileadmin/site_web/documents/PSG/politiques_orientations/politique_reus_site_educative_10juillet_F_1.pdf
- [16] PRACTICAL GUIDE - Linking RNCP to a competency-based approach. (2024). <https://www.enseignementsup-recherche.gouv.fr/sites/default/files/2024-06/articuler-le-rncp-une-approche-par-comp-tences---guide-pratique-2024-33373.pdf>
- [17] Redouan, A. (2024). Sustaining Adaptation to the New Normal: Tenacity and Originality in Higher Education Marketing After the COVID-19 Pandemic. In *Driving Transformative Technology Trends With Cloud Computing* (pp. 342-357). IGI Global.
- [18] Vanessa Lentillon-Kaestner. (2014). Physical education ratings and perceptions of injustice among students: the contributions of a mixed approach. <https://revuedeshp.ch/pdf/17/06-Lentillon.pdf>