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CROSS-CURRICULAR COMPETENCES IN THE TEACHING OF PHYSICAL AND HEALTH EDUCATION SUBJECTS IN THE CONTEXT OF EXTERNAL EVALUATION OF SCHOOLS

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Abstract: The aim of the work is application of the Reference Framework of Competences for Democratic Culture (RFCDC) in teaching in the subject of Physical and Health Education. The authors opted for reviews and reflections on democratic competences and their application in the teaching of the subject Physical and Health Education, through the method of analyzing the results of external evaluation. The data for this research were results of external evaluation process which were obtained in school 2022/23 year during visits to 191 classes in 143 schools. The external evaluation of institutions by checking 24 standards and 124 indicators found in six areas of quality. This work should be a guideline for further professional development of teachers, but also for the development of syllabus in the process of initial education of teachers who teach the subject of Physical and Health Education.

Keywords: Reference framework of competences for democratic culture (RFCDC), competences, competences for democratic culture, external evaluation, physical and health education

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Introduction

This article presents an effort of authors to emphasize connection between achievement of teachers' quality standards in Physical education and competences for democratic culture, viewed within the Reference Framework of Competences for Democratic Culture (further: RFCDC).

The Ministry of Education and the Institute for Evaluation of the Quality of Education and Training carry out an external evaluation of institutions by checking 24 standards and 124 indicators found in six areas of quality.

- The field of evaluation Programming, planning, and reporting contains 3 standards and 16 indicators;
- Teaching and learning area contains 5 standards and 28 indicators;
- The field of educational achievements contains 2 standards and 15 indicators;
- The Student Support area contains 3 standards and 16 indicators;
- The Ethos area contains 5 standards and 22 indicators;
- The area of school work organization, human and material resource management contains 6 standards and 27 indicators.

Standards can be used to check "school conditions" for the development of competences for democratic culture. Compliance with a standard is assessed through the presence of a set of indicators that describe it. Each indicator is evaluated on a scale from 1 to 4.

The school quality standards represent measures for evaluating the quality of work of schools in the Republic of Serbia (Rulebook on quality standards of the institution, 2018).

Methodology

In this research authors wanted to explain results of external evaluation of physical and health education, gather them in Teaching and Learning area of school quality standards and explain them through the model of 20 competences in RFCDC.

The data for this research were results of external evaluation process which were obtained in school 2022/23 year during visits to 191 classes in 143 schools in administrations in Leskovac, Niš, Čačak, Novi Sad and Jagodina in the first and second cycle of primary education and secondary education (Vuković, Čaprić, Lazić, 2023).

The degrees of fulfillment of the following standards were considered through the lense of standards detailed nominated in the Rulebook on quality standards of the institution, 2018, 2024):

- The teacher shall efficiently manage the learning process in the classroom.
- The teacher shall tailor the activity in the classroom to the educational needs of students.
- The students shall acquire knowledge, adopt values, and develop skills and competences in class.
- Every student shall have the opportunity to be successful.

Results with discussion

For the purpose of this article, standards for Teaching and Learning area, numerated from 2.1 to 2.5 in Rulebook on quality standards of the institution will be presented in figures and then in tables 1 to 5 in comparative view to the RFCDC. In all tables competences will be presented in the right columns and marked as areas of ROKDK:

Values = V;

Attitudes = A;

Skills = S;

Knowledge and critical understanding = KCU.

Quality standard 2.1:

Standard 2.1 has a mean score of 3.31. which indicates that there is a functional use of teaching aids and available sources of knowledge, that teachers use high-quality explanations and instructions, apply the sequence of requirements, and connect activities in the Physical and Health class education (Figure 1).



Figure 1. Effective management of the learning process in class

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In standard 2.1 all indicators are presented from the teacher perspective, besides the first 2 indicators are directed to students (Table 1). Students can understand the content only if teacher successfully manage classroom management.

Table 1. Standard 2.1 and RFCDC competences

Quality standard 2.1: The teacher shall efficiently manage the learning process in the classroom:		
Rulebook standards	Score	RFCDC competences, descriptors and sub descriptors
2.1.1. The students shall clearly understand the objectives/ learning outcomes of the school class and why they need to learn the planned content.	3.16	<p>KCU: Competence 19: Knowledge and critical understanding of the world (including politics, law, human rights, culture, religions, history, media, economies, the environment and sustainability).</p> <p>Descriptor 114: Can explain how social relationships are sometimes encoded in the linguistic forms that are used in conversations (e.g. in greetings, forms of address, use of expletives).</p> <p>Sub descriptor 1911: Can reflect critically on some effects which different styles of language use can have in social and working situations.</p>
2.1.2. The student shall understand the explanations, instructions, and key terms.	3.38	<p>KCU: Competence 19: Knowledge and critical understanding of language and communication.</p> <p>Descriptor 115: Can explain why people of other cultural affiliations may follow different verbal and non-verbal communicative conventions which are meaningful from their perspective.</p> <p>Sub descriptor 1912: Can explain why people of other cultural affiliations may follow different verbal and non-verbal communicative conventions which are meaningful from their perspective.</p>
2.1.3. The teacher shall successfully structure and connect parts of the class using different methods (forms of activity, techniques, procedures...), or implement training for a vocation/profile, in line with the specific requirements of the work process.	3.34	<p>V: Competence 2: Valuing cultural diversity.</p> <p>Descriptor 8: Promotes the view that one should always strive for mutual understanding and meaningful dialogue between people and groups who are perceived to be “different” from one another.</p> <p>Sub descriptor 202: Promotes the view that one should always strive for mutual understanding and meaningful dialogue between people and groups who are perceived to be “different” from one another.</p>
2.1.4. The teacher shall gradually ask questions/set assignments/requirements of varying levels of complexity.	3.38	<p>KCU: Competence 19: Knowledge and critical understanding of language and communication.</p> <p>Descriptor 113: Can describe the social impact and effects on others of different communication styles.</p> <p>Sub descriptor 1902: Can describe the social impact and effects on others of different communication styles.</p>
2.1.5. The teacher shall channel the interaction between students so that it serves the purpose of learning (i.e. he/she shall use questions, ideas, student comments, and encourage peer learning).	3.17	<p>S: Competence 16: Co-operation skills.</p> <p>Descriptor 98: Generates enthusiasm among group members for accomplishing shared goals.</p> <p>Sub descriptor 1629: Generates enthusiasm among group members for accomplishing shared goals.</p>
2.1.6. The teacher shall make functional use of existing resources and sources of information available to students.	3.46	<p>S: Competence 10: Autonomous learning skills.</p> <p>Descriptor 59: Seeks clarification of new information from other people when needed.</p> <p>Sub descriptor 1008: Seeks clarification of new information from other people when needed.</p>

Although students are in focus in first 2 indicators of standard 2.1. it is highly important and recognized teacher's role in the process of efficient management of the learning process in the classroom. Teacher should be equipped with knowledge which allow him/her to understand different types of communication and its critical understanding. In situations like this, teacher give himself/herself a chance to upgrade knowledge in this very specific field of professional work and development, as a part of lifelong learning (Council of Europe, 2018).

Quality standard 2.2:

The average fulfillment of this standard is 3.06 (Figure 2). The assessment of the standard that determines the adaptation of the work in the class to the educational needs of the students is noticeable but not complete because it was determined that the methods and materials were insufficiently adapted to the needs of certain students (Illustration 3), as well as the application of quality activities concerning planning individualization of work with students and work according to individual student educational plans (IEP).

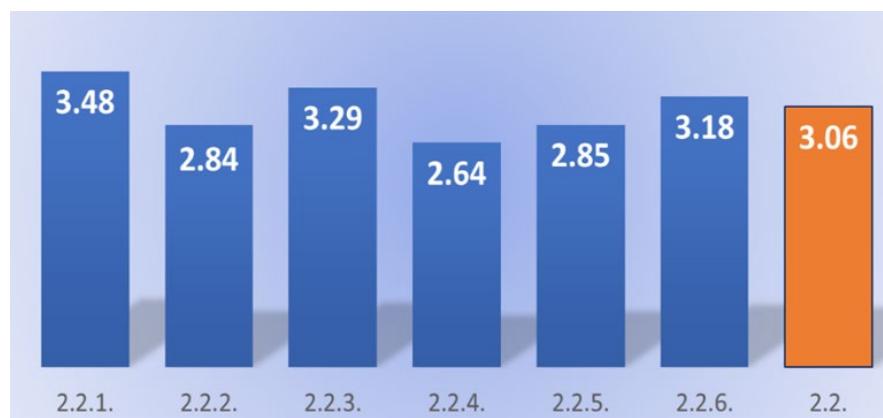


Figure 2. Adjusting the work in the Physical and Health Education class

In this standard is clear that teacher's values are significantly important (Table 2).

Table 2. Standard 2.2 and RFCDC competences

Quality standard 2.2: The teacher's adaptation of classwork to the needs of students		
Rulebook standards	Score	RFCDC competences, descriptors and sub descriptors
2.2.1. The teacher shall tailor requirements to the abilities of each student.	3.48	A: Competence 5: Respect. Descriptor 29: Treats all people with respect regardless of their cultural background. Sub descriptor 504: Treats all people with respect regardless of their cultural background.
2.2.2. The teacher shall adjust working methods and teaching materials to the individual characteristics of each student.	2.84	S: Competence 10: Autonomous learning skills. Descriptor 59: Seeks clarification of new information from other people when needed. Sub descriptor 1007: Can gather information effectively using a variety of techniques and sources.
2.2.3. The teacher shall dedicate time and attention to each student in line with his educational needs.	3.29	V: Competence 1: Valuing human dignity and human rights. Descriptor 2: Argues that specific rights of children should be respected and protected by society. Sub descriptor 102: Argues that specific rights of children should be respected and protected by society.
2.2.4. The teacher shall use specific tasks/activities/materials based on the Individual Educational Plan (IEP) and individualization plan.	2.64	V: Competence 1: Valuing human dignity and human rights. Descriptor 2: Argues that specific rights of children should be respected and protected by society. Sub descriptor 103: Argues that everyone should recognise the fundamental freedoms of each human being. KCU: Competence 19: Knowledge and critical understanding of language and Communication. Descriptor 114: Can explain how social relationships are sometimes encoded in the linguistic forms that are used in conversations (e.g. in greetings, forms of address, use of expletives). Sub descriptor 1907: Can reflect critically on how diverse audiences may perceive different meanings from the same information.
2.2.5. Students who need extra support shall participate in joint activities that encourage their progress and interaction with other students.	2.85	V: Competence 1: Valuing human dignity and human rights. Descriptor 4: Argues that all public institutions should respect, protect and implement human rights. Sub descriptor 105: Argues that all public institutions should respect, protect and implement human rights.
2.2.6. The teacher shall tailor the activity pace to the different educational needs of students.	3.18	V: Competence 2: Valuing cultural diversity. Descriptor 9: Expresses the view that the cultural diversity within a society should be positively valued and appreciated. Sub descriptor 205: Argues that one should try to learn from one another in order to deepen understanding of both one's own and other people's backgrounds.

Indicator 2.2.4 has the lowest score. It is very complex indicator and in table is visible that it asks values and knowledge and critical understanding. Because of its complexity

authors think that, for quality achievement the cross-curricular competences in teaching Physical education, it is necessary for all teachers to improve their competences in values and knowledge and critical understanding.

Quality standard 2.3:

The standard that assesses whether and how learning progresses and students' competences are developed was rated the lowest in this analysis and is 2.88 (Figure 3). Based on the obtained result, it can be concluded that there is a lack of student independence and acceptance of student initiatives and originality, and there is no space for the development of critical reasoning, values, attitudes, and skills even though this subject is ideal for the development of competences for democratic culture. Although there is teacher feedback, there is no interaction to improve health education competences and discussions.



Figure 3. Acquisition of competences in class

In this indicator students are in the center of observing and quality assessment (Table 3). The presence of skills is dominant.

Table 3. Standard 2.3 and RFCDC competences

Quality standard 2.3: Students achieve learning and competence development at the class		
Rulebook standards	Score	RFCDC competences, descriptors and sub descriptors
2.3.1. The students' activities/schoolwork shall demonstrate that they have understood the subject of study in class, that they can apply the lessons learned, and explain how they arrived to the solution.	3.32	<p>KCU: Competence 18: Knowledge and critical understanding of the self.</p> <p>Descriptor 107: Can describe the ways in which his/her thoughts and emotions influence his/her behaviour.</p> <p>Sub descriptor 1803: Can reflect critically on his/her own motives, needs and goals.</p>
2.3.2. The students shall make connections between the subject of study in class and previously learned matter in various fields, vocational practice, and daily life.	3.10	<p>S: Competence 10: Autonomous learning skills.</p> <p>Descriptor 61: Can assess the quality of his/her own work.</p> <p>Sub descriptor 1017: Can integrate learning from various subjects/areas of learning.</p>
2.3.3. The students shall collect, critically evaluate, and analyse ideas, answers, and solutions.	2.72	<p>S: Competence 11: Analytical and critical thinking skills.</p> <p>Descriptor 65: Uses evidence to support his/her opinions.</p> <p>Sub descriptor 1105: Can draw conclusions from an analysis of information.</p>
2.3.4. The students shall present their ideas and share original and creative solutions.	2.63	<p>S: Competence 15: Linguistic, communicative and plurilingual skills.</p> <p>Descriptor 91: Can adopt different ways of expressing politeness in another language.</p> <p>Descriptor 89: Asks speakers to repeat what they have said if it wasn't clear to him/her.</p> <p>Sub descriptor 1518: When ambiguous communications occur, he/she can clarify or otherwise deal with them satisfactorily.</p> <p>Sub descriptor 1507: Uses body language to help reinforce what he/she wants to say.</p>
2.3.5. The students shall use feedback to solve a task/improve learning.	3.21	<p>S: Competence 11: Analytical and critical thinking skills.</p> <p>Descriptor 65: Uses evidence to support his/her opinions.</p> <p>Sub descriptor 1115: Can reflect critically on past experiences in order to inform future progress.</p>
2.3.6. The students shall plan, implement, and evaluate a project in class independently or with the help of the teacher.	2.33	<p>S: Competence 10: Autonomous learning skills.</p> <p>Descriptor 61: Can assess the quality of his/her own work.</p> <p>Descriptor 63: Shows ability to monitor, define, prioritise and complete tasks without direct oversight.</p> <p>Sub descriptor 1019: Can monitor own progress towards reaching his/her own learning goals.</p> <p>Sub descriptor 1024: Manages own time effectively to achieve his/her own learning goals.</p> <p>S: Competence 11: Autonomous learning skills.</p> <p>Descriptor 69: Can use explicit and specifiable criteria, principles or values to make Judgments.</p> <p>Sub descriptor 1142: Can draw the results of an analysis together in an organised and coherent manner to construct logical and defensible conclusions.</p>

In this standard the lowest score goes to indicator 2.3.6 which asks of students to be independent and projected oriented during the class. For this indicator it is important to educate teachers first, and then students. Bearing in mind that students' development and achievement are in positive correlation with the quality of teachers' work it can be said that quality of teachers' professional development is precognition for cherishing the inspired child and making successful students – future professionals (Lazić, Vuković, 2024).

Besides that, this indicator's score indicates to authors some important questions of their further pedagogical work and researches.

Quality standard 2.5:

The average achievement of this standard is 3.12. The analysis indicates that there is support for student development and participation, but that there is a need to encourage the free expression of opinions and ideas by students and to allow students to influence the content, a form of work, or means (Figure 4).

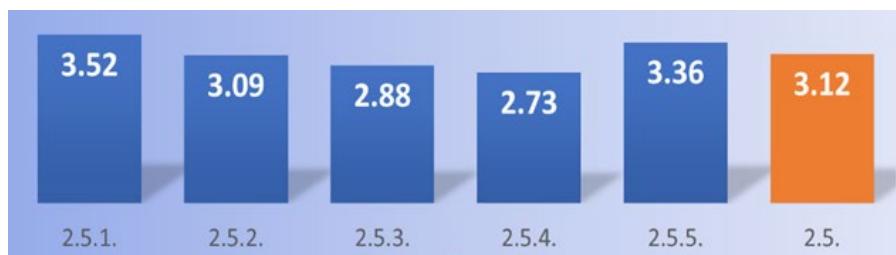


Figure 4. Display of individual student performance standards

In this standard student can be successful only if teacher has quite good attitudes, skills and knowledge (Table 4).

Table 4. Standard 2.5 and RFCDC competences

Quality standard 2.5: Students are enabled to be successful		
Rulebook standards	Score	RFCDC competences, descriptors and sub descriptors
2.5.1. The teacher / practical training instructor and students shall maintain a relationship of mutual respect, the teacher/practical training instructor shall encourage students to respect each other and constructively establish and maintain discipline following agreed rules.	3.52	A: Competence 5: Respect Descriptor 29: Treats all people with respect regardless of their cultural background. Sub descriptor 504: Treats all people with respect regardless of their cultural background. KCU: Competence 20A: Knowledge and critical understanding of politics, law and human rights. Descriptor 118: Can explain why everybody has a responsibility to respect the human rights of others. Sub descriptor 2003: Treats all people with respect regardless of their cultural background.
2.5.2. The teacher shall use a variety of procedures to motivate students, taking into account their diversity and previous achievements.	3.09	S: Competence 16: Co-operation skills Descriptor 97: When working as a member of a group, keeps others informed about any relevant or useful information. Sub descriptor 1624: Helps to motivate others when working in a group, encouraging them to participate.
2.5.3. The teacher shall encourage intellectual curiosity and free expression of opinions.	2.8.8	S: Competence 15: Linguistic, communicative and plurilingual skills. Descriptor 89: Asks speakers to repeat what they have said if it wasn't clear to him/her. Sub descriptor 1506: Asks questions as a way to be involved in conversations. A: Competence 4: Openness to cultural otherness. Descriptor 23: Expresses curiosity about other beliefs and interpretations and other cultural orientations and affiliations. Subdescriptor 404: Expresses curiosity about other beliefs and interpretations and other cultural orientations and affiliations/
2.5.4. The student shall be allowed to choose the approach to a topic, the form of activity or the material.	2.73	S: Competence 10: Autonomous learning skills. Descriptor 58: Shows ability to identify resources for learning (e.g. people, books, internet). Sub descriptor 1001: Shows ability to identify resources for learning (e.g. people, books, internet).
2.5.5. The teacher shall demonstrate trust in the abilities of the students and have positive expectations of success.	3.36	A: Competence 8: Self-efficacy. Descriptor 49: Shows confidence that he/she knows how to handle unforeseen situations due to his/her resourcefulness. Sub descriptor 824: Shows confidence that he/she can deal efficiently with unexpected events.

In this standard indicator 2.5.4 has the lowest score, since it asks of students to be independent in approaching to topic and the form of activity or the material. In other words they should be enabled to be successful. This point of view in contemporary pedagogy in Serbia is clearly visible in preschool education, especially in the new national

curricula *The Years of Ascent*³. Kindergartens in whole Serbia for last 7 years works according to this curricula and cherish curiosity, playfulness, critical thinking, project working among children. Still, it is not present enough in formal education. Teachers need skills in order to improve their work.

Overview of all standards and CDC

In Table 5 is clearer picture of presence of each competence for democratic culture in order of appearance.

Table 5. CDC presented in each standard

	Values	Attitudes	Skills	Knowledge and critical understanding
2.1	Competence no. 2		Competence no. 16 Competence no. 10	Competence no. 19
2.2	Competence no. 1 Competence no. 2	Competence no. 5	Competence no. 10	Competence no. 19
2.3			Competence no. 10 Competence no. 11 Competence no. 15	Competence no. 18
2.5		Competence no. 5 Competence no. 4 Competence no. 8	Competence no. 16 Competence no. 15 Competence no. 10	Competence no. 20a
Total	5	4	12	6

Authors find very important to emphasize that teachers' skills are at the first place for quality teaching and lecturing. This is recognized in Didactics' point of view which state that teachers should have knowledge of public performance and keeping students' attention for some time (Lazić, 2022).

Knowledge and critical understanding issues about the topic of the class is important for each and every teacher since their profession is to teach.

Values comes at the 3rd place and authors find this important, bearing in mind that values are beliefs that some desirable goal motivates action that serves as a guiding principle in life through many situations. In other words, values are structures around which more specific attitudes are organized. They influence attitudes because if people's values are assessed, it can help predict their attitudes and behaviour (*Reference Framework od Competences for Democratic Culture. Volume 1, 2018*).

At last, but not the least, attitudes show the persons' whole mental orientation to someone or something and they are very important in every relationship and in building rela-

³ Years of Ascent. Official Gazette – Educational Gazette no. 16/2018. Available at: <https://ecec.mpr.gov.rs/wp-content/uploads/2020/02/Godine-uzleta-ENG-fin-Edited.pdf>

tional competences. Although perception of control is a powerful predictor of neurochemical and behavioral responses to stress, it is not known whether the experience of choosing to exercise and exercising control over that exercise is a critical factor in creating resilience to the stress that is inevitable in the educational system (Vuković at all, 2021.)

This research showed that in teaching profession values are more important than attitudes and it is completely.

Conclusion

The teaching of physical and health education is an excellent educational space in which, in addition to skills and attitudes, values that are part of democratic culture are built, and this is a task that adds to the importance of this subject. This research showed that in teaching profession values are more important than attitudes and it is completely.

Therefore, continuous professional development of teachers and the inclusion of these contents in initial teacher education are necessary to achieve competences for democratic culture.

References

1. Council of Europe (2018). Reference Framework of Competences for Democratic Culture, (Council of Europe Publishing). ISBN 978-92-871-8575-4 <https://rm.coe.int/rfcds-serbian-vol3/1680a209a4>, <https://rm.coe.int/rfcds-serbian-vol1/1680a209a2d>, <https://rm.coe.int/rfcds-serbian-vol2/1680a209a3>
2. Lazić, S. (2022). Pedagogija i didaktika u sportu i vežbanju. Banjaluka: Panevropski univerzitet "Apeiron".
3. Lazić, S., Vuković, S. (2024). Lazić, S., Vuković, S. (2024). Competences for Democratic Culture in Educational System: Experiences from Serbia. In: Marinšek, Miša, Hmelak, Maja (eds.), Interdisciplinary Research in Teaching and Learning: New Perspectives and Approaches (3-18). Maribor: University of Maribor, University Press. Available at: <https://press.um.si/index.php/ump/catalog/book/882/chapter/88>
4. Reference Framework od Competences for Democratic Culture. Volume 1: Context, Concept and Models (2018). Available at: <https://rm.coe.int/prems-008318-gbr-2508-reference-framework-of-competences-vol-1-8573-co/16807bc66c>

Vuković, S., Lazić, S. (2025) *Cross-curricular competences in the teaching of physical and health education subjects in the context of external evaluation in schools* In: Dašić, D. (ed) *Sporticlopedia SMB2025, Vol 3, No 1, 257-270*

5. Reference Framework od Competences for Democratic Culture. Volume 2: Descriptors of Competences for Democratic Culture (2018). Available at: <https://rm.coe.int/prems-008418-gbr-2508-reference-framework-of-competences-vol-2-8573-co/16807bc66d>
6. Rulebook on quality standards of the institution. "Official Gazette of RS – Educational Gazette", no. 14/18. 1/24.
7. Vuković, S., Čaprić, G., Lazić, S. (2023). The application of cross-curricular competences in the teaching of physical and health education subjects in the context of external evaluation of schools. *Teme*, 47(3), 527-542.
8. Vuković, S., Đurović, R., Lazić, S. (2021). *Stres i sport, Sport i biznis*, Fakultet za sport, Beograd, 2/2021.