

Assessing Secondary School Curricula in the Light of Developing Quality of Life Standards of High School Students

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Abstract—This study assessed the curricula of secondary schools given requirements to enhance the quality of life of students. The components of quality of life were described to build a list of standards and indicators. A questionnaire assessing the dimensions of mental (cognitive and emotional), physical, digital, and social health, and environmental awareness was prepared. A descriptive-analytical approach was used on a sample of 258 teachers and educational supervisors in Tabuk. The results indicated shortcomings in the secondary school curricula regarding developing standards and indicators of components of quality of life. Results also indicated that secondary school curricula incorporated few practices to improve student's quality of life. No significant differences were found regarding the core subject, job, gender, and years of experience.

Keywords—Assessing curricula, teacher practices, quality of life, Secondary School.

I. INTRODUCTION

THE curriculum is the educational system's tool in developing a personality in the mental, linguistic, social and emotional dimensions. Curricula include a set of educational activities and experiences that are selected and planned to achieve the main goals. Curricula are planned in light of the needs of society and students, by designing a document of standards and indicators of cognitive abilities, processes and skills. It is designed with the participation of specialists, educational supervisors, teachers, parents and students. Their inclusion in the planning process is essential for active participation in achieving educational goals [1]. Curricula in the 21st century must focus on integrating theoretical and applied dimensions. The curricula should focus on life skills, and strengthen the student's connection with the real world through the investigation of life problems and the search for solutions to them that are fluent, flexible and creative. The curriculum should also include contemporary concepts. The components of quality of life are among the contemporary concepts that must be included in the school curricula in an integrative manner through the different academic subjects [2].

Quality of life (QoL) is a complex concept that is of relevance to the fields of health, education, psychology, and social science. This concept needs to be integrated into the previous fields to enhance the development of QoL [3]. The

main aim of the educational system is to build a lifestyle for all students based on the development of QoL. QoL determines the state of students' mental and cognitive health, and is linked to the process of developing the necessary skill set for potential academic and career choices. The main aim of education is thus related to building capabilities and the ability to enjoy life [4].

The concept of QoL is related to the general goals of the educational system, especially at the secondary level. It emphasizes the necessity of linking the school curriculum to the development and measurement of cognitive, emotional, digital, and social health, and environmental awareness. In addition, teachers enhance students' life skills through continuous learning, educational activities, and training. These skills are related to the components of QoL [5]. Further, the concept of QoL is of great significance for acquiring 21st century skills in the digital age. The components of QoL assist students with developing a variety of cognitive and business skills, learning and innovation skills, digital literacy skills, and career and life skills [6]. QoL is a term with which most students are familiar, regardless of their ability to define it. However, its meaning can have different implications for different students. The concept of QoL is much broader than the standard of living or material living conditions; it also considers working environments, the amount of social engagement, health status, educational attainment, and socio-economic status [7]. Furthermore, emphasis is placed on developing the necessary functional, life, and academic skills to enhance the quality of physical and mental performance of all students and teachers [8].

In addition, curricula should be based on preparing students for life and must support students by providing basic skills that enhance QoL. This approach should focus on the dimensions of cognition, skill acquisition, and emotional development. Further, curricula must be based on the integration of core subjects, physical education, environmental education, and all educational activities that help the student and teacher to develop the components of QoL. In general, it is important to enable students to develop self-regulation skills, self-efficacy, continuous learning, environmental responsibility, and psychological and mental health [9]. On the other hand, the teachers play a crucial role in school society by influencing the process of developing appropriate behavior. Their role in shaping behavior is of relevance to public health and the

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development of professional, scientific, and environmental capabilities. Teachers also enhance students' development of social skills, self-efficacy, and flexibility in cognition and solving social, life, and academic problems. In general, teachers contribute significantly to the QoL of students [10].

II. LITERATURE REVIEW

Previous studies have emphasized the importance of developing and measuring the components of QoL and related aspects in terms of improving levels of academic achievement and developing students' skills and capabilities [11], [12]. Also, a deficit in the inclusion and treatment of QoL components was determined by secondary school teachers and students [13]. The studies have stressed the importance of developing and measuring the components of QoL due to a lack of such treatment at the level of elements of the curriculum including aims, content, activities, teaching, and evaluation [14]. In addition, the necessity of designing integrated educational programs to develop the components of QoL is very important [15]. The study considered the need to select educational experiences that balance students' personal and academic life while developing their future skills. The development of QoL components promotes reduced academic anxiety while increasing students' academic achievement. It depends on the integration of educational experiences, and the integration of subjects. It also depends on the necessity of choosing educational experiences from reality, related to the student's life and familiar and unfamiliar problems.

The development of QoL components focuses on teaching treatments and teaching strategies. Developing the components of QoL requires teaching strategies that focused on building mental processes while enhancing educational environments that foster students' satisfaction. Students should feel enjoyment and satisfaction with school life [16], [17]. Many studies have also stressed the importance of including QoL components in teaching practices related to development and measurement of students, especially insufficient performance of teachers in addressing such components in an integrated manner within the school community. In addition, teachers need training to develop components of QoL through teaching practices and activities [18]-[20].

Bhattacharjee indicated the necessity for secondary school teachers to understand the concept of QoL, which encompassed areas such as physical, psychological, social, and spiritual well-being, personal functioning, and general limitations [18]. QoL refers to the degree of excellence of one's life, which benefits the individual and society as a whole. It is also evident from education research that some indicators identify deficits in the development and measurement of QoL components, especially at the secondary stage; this stage is foundational for university education, and academic and career life. Also, the studies have also revealed shortcomings in the integration of curricula to include a matrix of components, standards, and indicators of QoL.

Also, QoL components are related to the quality of school life. So, the educational environment is one factor that affects

the development of QoL components. Educational environments must be prepared in consideration of mental and physical health. Learning environments should be designed that enhance students' enjoyment of learning, interaction, and communication with others [21]. Such environments should focus on the provision of psychological support. Curricula in the scientific, religious, environmental, and physical education fields must also build students' knowledge and skills and develop their abilities. Emphasis should be placed on physical health as a necessity for the development of emotional and mental health [22]. In general, curricula should be developed that comprehensively consider the scientific content of courses, the practices of teachers, educational activities, safety of the learning environment, and provision of an active school community.

The Kingdom of Saudi Arabia developed the school curricula in the year 2008/2009 AD. The development process focused on international standards documents, integrating contemporary concepts, especially those related to thinking skills, teamwork skills, work and learning ethics, communication skills, and mastery of information and communication technology skills. The list of components of QoL was used in the analysis of some secondary school courses. The analysis process included literary and scientific courses to determine the extent to which the components of QoL are included in the study objectives, scientific content, educational activities, problems and exercises within the educational tools, including (student's book, teacher's guides, and assessment guides). Through the analysis process, it was found that most of the components of QoL are included in the educational goals, content and activities. Since the teacher is the main factor in implementing the curricula with students, the study relied on a survey of a sample of teachers and educational supervisors in the secondary stage, to determine the extent to which components of QoL are included in the curricula, and the extent of the teacher's commitment to developing and measuring these components among secondary school students.

Research Questions

The Kingdom of Saudi Arabia emphasizes the development of secondary school curricula based on international standards. It also emphasizes the sustainable professional development of all teachers. Nevertheless, many shortcomings exist in the development of the components of QoL among secondary school students. Due to the importance of developing and measuring the components of QoL for students, the current study addressed the following questions:

1. What QoL standards and indicators should be developed and measured for high school students?
2. What is the level of inclusion of QoL standards and indicators in secondary school curricula?
3. Are there any differences among respondents based on the core subject, job, gender, and years of experience?

Research Objectives

The main aim of this study is related to determining the appropriate QoL standards, indicators, and components for high

school students. Also, the study aims to assess the level of inclusion of QoL standards, indicators, and components in the curriculum elements in the Kingdom of Saudi Arabia. In addition, the study aims to investigate the differences in the levels of teaching practices among secondary school teachers in terms of job, specialization, educational qualification, and the number of years of experience.

Importance of the Study

- The study is linked to the National Vision 2030 in the Kingdom of Saudi Arabia, which emphasized the appropriate development of personality in terms of mental, physical, psychological, and social dimensions.
- The study determines the extent to which QoL components are included in the objectives and content of secondary school curricula, including mental (cognitive and emotional), physical, digital, and social health components.
- The study determines the teaching practices of secondary school teachers related to developing and measuring QoL criteria and indicators.
- Curriculum planners are provided with a list of QoL components, standards, and indicators to be included in the components of scientific content and educational activities.

III. METHODS

The current study used a descriptive-analytical approach to analyze the existing literature to determine a list of components of QoL standards and indicators. In addition, content analysis was used to study the level of inclusion of components, standards, and indicators of QoL in curricula at the secondary level. The teaching practices of secondary school teachers in the Kingdom of Saudi Arabia were also assessed in terms of developing and measuring the QoL standards and indicators for the National Vision 2030.

A. Participants

Tabuk region includes 399 secondary schools. These schools are distributed over the Tabuk city, and the governorates belonging to the Tabuk region. The study was implemented in secondary schools of the Tabuk region. The sample of the current study comprised secondary school teachers and educational supervisors in all specializations and all governorates of the Tabuk region in the Kingdom of Saudi Arabia (N = 258). The study sample is described in Table I.

TABLE I
DESCRIPTION OF THE STUDY SAMPLE

Core subject		Title job		Gender		Years of experience	
Type	Number	Type	Number	Type	Number	Type	Number
Scientific disciplines	107	Teachers	225	Male	131	Less than 10	93
Humanities disciplines	151	Supervisor	33	Female	127	More than 10	165
Total = 258							

B. Material and Procedures

To answer the study questions, existing literature on the

dimensions of QoL was analyzed to determine the study variables and prepare a list of QoL components: strands, standards, and indicators. A list of QoL standards and indicators was used to prepare a questionnaire for the study sample. The questionnaire included four main strands: (i) mental and cognitive health; (ii) emotional and mental health; (iii) physical health, digital health; and (iv) environmental health and social health. Each strand included standards and indicators. Table II describes the study tool.

TABLE II
DESCRIPTION OF QUESTIONNAIRE

No.	Strands	Standards	Numbers of indicators
1	Health literacy related QoL (S1)	Physical health literacy (SS1)	4
		Psychological health literacy (SS2)	5
2	Environmental literacy related QoL (S2)	Use resources effectively (SS3)	5
		Environmental responsibility (SS4)	4
3	Quality of social life (S3)	QoL of family (SS5)	4
		QoL of the society (SS6)	4
4	Quality of working life (S4)	QoL of learning system (SS7)	4
		Professional development (SS8)	5
Total	4	8	35

Health literacy denotes measuring the extent to which the content of the curricula at the secondary level includes educational experiences that promote physical and mental health among students. Environmental health denotes the extent to which students develop their abilities to invest resources per sustainable development standards, with the development of the skills and values of environmental responsibility. Social life includes the relationship between the school and the home, as well as building family awareness about the quality of family life while constructing attractive learning environments and teaching communities that stimulate students to communicate and engage in discussion. Finally, quality of working life is linked to the quality of the educational system; objectives are linked to developing critical and creative thinking skills, problem solving, and decision-making, with emphasis on self-directed learning skills.

The study obtained participants' responses on a 5-point Likert scale. The Likert scale include five levels of sample response to the tool items, including strongly disagree (1.0-1.8), disagree (1.8-2.6), somewhat agree (2.6-3.4), agree (3.4-4.2), and strongly agree (4.2-5.0). We communicated electronically with the study participants, including high school teachers and educational supervisors, to clarify the purpose of the study. In addition, the teachers and educational supervisors were able to understand the method of responding to the items of the tool. Also, the tool's instructions were clarified for the study sample. We discussed the items of the questionnaire. It was explained that curricula evaluation is linked to a set of elements and components, the most important of which are general and procedural objectives, scientific content, educational activities, teaching strategies, and evaluation methods. The tool was applied electronically during the second semester of 2020/2021. Data were prepared for statistical processing.

IV. RESULTS

To answer the question, “What is the level of inclusion of QoL standards and indicators in high school curricula?”, the averages and standard deviations were calculated and used to describe the main strands, standards, and indicators included in the QoL measurement tool according to the Likert scale: very large (4.2-5.0), large (3.4-4.2), medium (2.6-3.4), weak (1.8-2.6), and very weak (1.0-1.8). Table III shows the results of applying the study instrument.

Table III shows that the mean score for the first standard (SS1) was moderate in magnitude. In addition, the score for the first indicator *introducing the concept of health and its importance to the student and community* was large, while those

for other indicators were moderate in magnitude. In addition, Table III shows that the mean of the second standard (SS2) was small, while the indicator scores varied between moderate and small magnitudes. Table III shows that the indicator developing the components of psychological and academic engagement among students was ranked last with a small score, indicating the scarcity of practices related to this indicator according to the responses of the study sample. Also, the secondary school students need to be trained in methods of building self-confidence. This result indicates the need to review secondary school curricula in light of the requirements of psychological well-being as one of the standards for QoL. In particular, curricula should focus on psychological and academic engagement and building self-confidence among students.

TABLE III
STANDARDS AND INDICATORS OF THE STRAND: HEALTH LITERACY-RELATED QoL

Standards	Indicators	Mean	Standard deviation
Physical health literacy	Introducing the concept of health and its importance to the student and community	3.59	0.97
	Motivating the students to practice physical education as part of daily life	2.61	0.88
	Training the students in methods of disease prevention	2.91	1.02
	Promoting correct eating habits among students	2.80	1.01
	Total of standard: Physical health literacy	2.98	0.54
Psychological health literacy	Developing the components of psychological engagement among students	2.37	0.88
	Developing the components of academic engagement among students	2.57	1.10
	Training the students in methods of building self-confidence	2.54	0.97
	Training students in methods of communicating with themselves and with others	3.03	1.21
	Motivating the students to participate in psychological counseling sessions to face behavioral and learning problems	2.34	0.85
Total of standard: Psychological health literacy	2.57	0.48	

TABLE IV
STANDARDS AND INDICATORS OF THE STRAND: ENVIRONMENTAL LITERACY-RELATED QoL

Standards	Indicators	Mean	Standard deviation
Use resources effectively	Building students' awareness of the elements of the environment and its importance for life	3.47	0.96
	Presenting the concept of ecological balance and the factors affecting it, using examples in the surrounding environment	3.38	0.85
	Training students to discover sources of pollution in the ecosystem	3.45	1.03
	Investigating the relationship between pollution of the ecosystem and the spread of some diseases	3.65	0.98
	Training the students in methods of rationalizing consumption in the fields of energy, water, and technology	3.13	0.86
Total of standard: Use resources effectively	3.42	0.39	
Environmental responsibility	Interpretation of environmental problems in the local community to students	3.27	0.97
	Training the students on problem-solving skills and their use in environmental problems	3.04	1.02
	Training students in decision-making skills related to protecting the environment	2.29	0.95
	Motivating students to participate in camps, seminars, and workshops on environmental protection	1.85	0.70
Total of standard: Environmental responsibility	2.61	0.46	

Table IV shows that the mean score of the third standard (SS3) was large. The scores of the indicators varied between moderate and large in magnitude. Note also that the score of the indicator *training the students in methods of rationalizing consumption in the fields of energy, water, and technology* was moderate in magnitude and ranked last on the standard level. In addition, Table IV shows that the mean of the fourth standard (SS4) was moderate in magnitude and the indicators varied between moderate and small in magnitude. Table IV shows that the indicator *motivating students to participate in camps, seminars, and workshops on environmental protection* ranked last, with a low score. This indicates a shortcoming in preparing educational activities to build students' skills in environmental responsibility. The current finding indicates that the curricula

do not promote the development of environmental responsibility skills among secondary school students as a component of QoL. Therefore, the curricula should be reviewed in light of the indicators of environmental responsibility. In particular, the curricula should focus on training secondary school students to participate positively in environmental activities, and to participate in making and taking decisions related to environmental responsibility.

Table V shows that the mean score of the fifth standard (SS5) was low. Indicator scores varied between moderate and low in magnitude. Note also that the score was low for the indicator *connecting the family to society's desired values in the 21st century*, and ranked last. In addition, Table V shows that the mean of the sixth standard (SS6) was of moderate magnitude,

and the indicator scores varied between moderate and low in magnitude. Table V shows that the indicator *developing students' digital citizenship skills* ranked last with a low score.

This result indicates that secondary school curricula are not linked to the requirements for developing components of digital citizenship.

TABLE V
STANDARDS AND INDICATORS OF THE STRAND: QUALITY OF SOCIAL LIFE

Standards	Indicators	Mean	Standard deviation
QoL of family	Training students in the skills of dialogue, good listening, and the rules of discussion within their family	2.81	0.99
	Clarifying the basic roles and tasks within the family	2.43	0.89
	Connecting the family to society's desired values in the 21 st century	1.95	0.62
	Developing the concept of identity among students	3.01	1.15
	Total of standard: QoL of family	2.55	0.49
QoL of society	Developing citizenship values (participation, responsibility, privacy, respect for the law, etc.)	2.89	1.11
	Developing students' digital citizenship skills	2.53	1.07
	Introducing the different cultural components of society	2.94	1.10
	Promoting the values of community participation among students	2.63	0.90
	Total of standard: QoL of society	2.75	0.51

TABLE VI
STANDARDS AND INDICATORS OF THE STRAND: QUALITY OF WORKING LIFE

Standards	Indicators	Mean	Standard deviation
QoL of learning system	Training students in basic skills in reading literacy, mathematical literacy, and scientific literacy	3.13	1.01
	Training students in critical thinking, creative thinking, and problem-solving skills	2.72	0.99
	Training students in the use of information and communication technology	3.00	1.08
	Training students in skills of planning their academic and professional future	2.44	0.98
	Total of standard: QoL of learning system	2.82	0.54
Professional development	Training students in teamwork skills as a member or leader	2.92	1.12
	Training students in skills to self-assess their performance and identify gaps	2.57	0.96
	Training students in self-learning skills to develop performance	3.48	0.91
	Training students in entrepreneurship skills	2.35	1.03
	Training students in effective management and leadership skills	3.21	0.84
Total of standard: Professional development	2.91	0.45	

TABLE VII
STRANDS AND STANDARDS OF QoL

No.	Strands	Standards	Mean	Standard deviation
1	Health literacy related QoL	Physical health literacy	2.98	0.54
		Psychological health literacy	2.57	0.48
		Total of strand: Health literacy related QoL	2.76	0.35
2	Environmental literacy related QoL	Use resources effectively	3.42	0.39
		Environmental responsibility	2.61	0.48
		Total of strand: Environmental literacy related QoL	3.01	0.30
3	Quality of social life	QoL of family	2.55	0.49
		QoL of the society	2.75	0.51
		Total of strand: Quality of social life	2.65	0.36
4	Quality of working life	QoL of learning system	2.82	0.54
		Professional development	2.91	0.45
		Total of strand: Quality of working life	2.87	0.35
	Total of questionnaire		2.83	0.16

Table VI shows that the mean score of the seventh standard (SS7) was moderate. The indicator scores varied between moderate and low in magnitude. Note that the score of the indicator *training students in the skills of planning their academic and professional future* was low, and ranked last among the standards. Table VI also shows that the mean score of the eighth standard (SS8) was moderate, while the indicator scores varied in magnitude between moderate and low. Table

VI shows that the indicator *training students in entrepreneurship skills* ranked last, with a low score. This result indicates that secondary school curricula are not linked to training students in entrepreneurial processes, despite their importance in the 21st century.

Table VII shows that the mean scores of the strands and standards of QoL were generally moderate. Additionally, the means were similar among the four strands. Table VII also shows that the mean score of SS3 (use resources effectively) was large, while the scores of the standards SS5 (QoL of family) and SS2 (psychological health literacy) were low. The scores of most standards were moderate.

TABLE VIII
INDEPENDENT SAMPLES T-TESTS OF STUDY VARIABLES

Variables	Levels	Sample	Mean	Standard deviation	t-test	df	p
Core subjects	Scientific disciplines	107	2.81	0.17	1.559	256	0.120
	Humanities disciplines	151	2.84	0.15			
Job	Teachers	220	2.83	0.16	1.087	256	0.278
	Supervisor	38	2.80	0.15			
Gender	Male	137	2.82	0.16	0.132	256	0.895
	Female	121	2.83	0.17			
Experience	Less than 10 years	123	2.82	0.16	0.431	256	0.724
	More than 10 years	135	2.83	0.17			

To answer the question “Are there differences among the respondents based on the core subject, job, gender, and years of experience?” means and standard deviations were calculated and compared using independent samples t-tests (Table VIII).

Table VIII shows the means were generally similar between groups for each variable; no comparisons were statistically significant in terms of core subject, job, gender, and years of experience.

V. DISCUSSION

The results of the study showed that secondary school curricula do not promote the development of strands, standards, and indicators of QoL to a satisfactory (large) degree. This result indicates that secondary school curricula do not significantly enhance the development of QoL components for students at this stage. The scientific and literary courses are similar in this result. The reasons for this result lie in the lack of curriculum objectives and content that directly integrates those strands, standards, and indicators. This result is also driven by the fact that teaching approaches still rely on traditional strategies that do not meet the needs of secondary school students in the 21st century. The results also indicate that teaching practices are still primarily linked to cognitive processes, without focusing on skill-based and emotional aspects. Secondary school curricula face the problem of a lack of connection with life and a lack of direct connection with students’ needs. In addition, teaching and school practices neglect school activities, which are necessary to build students’ abilities and skills in the components of QoL. These results are consistent with previous studies [15], [22], [23] on the necessity of integrating QoL standards into objectives and content. Curricula should be planned in ways that integrate components of QoL into educational objectives. Also, educational experiences should focus on standards and indicators of QoL. In addition, the teacher should plan the teaching according to the requirements and needs of the students to enhance these components for them. QoL standards and measures must be continuously and comprehensively measured among students, and deficiencies should be identified and remedied. Finally, the teachers need to be aware of methods of integrating them into teaching processes and practices which enhances the development and measurement of quality-of-life components among secondary school students. Also, the educational supervisors must enhance the teachers of this stage with appropriate teaching strategies, train them to employ digital tools in teaching, and use interactive teaching, through sustainable professional development programs [24].

VI. CONCLUSION

A QoL standard is one of the contemporary and necessary concepts for students, especially in the 21st century. School curricula represent educational tools for building concepts and skills to promote QoL among students, especially at the secondary level. Curricula include objectives, content, instructional activities, teaching strategies, and assessment methods. The results of the study indicated that there are

shortcomings in school curricula in terms of developing standards and indicators of QoL. Therefore, the current study recommends integrating strands, standards, and indicators of QoL according to a multidisciplinary approach, across curricula. Curricula must include components of QoL as an integrative concept that includes mental (cognitive and emotional), physical, digital, and social health, and environmental awareness. In addition, the training of secondary school teachers on teaching strategies and practices is very important to link scientific content and life situations, design student-centered real educational experiences, and enhance QoL development practices. The study also highlights the constant need to measure the components of QoL among secondary school students using appropriate measuring tools.

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