

3 CURRICULAR REORGANIZATION OF SECONDARY EDUCATION IN THE STATE OF CEARÁ

3.1 Context for Curricular Reorganization of Secondary Education in the State of Ceará

According to the document entitled "(preliminary) Report - Curricular Reorganization of Secondary Education" published in 2012 by the Education Secretariat of Ceará (SEDUC), the Curricular Reorganization of Secondary Education in Ceará began to be devised in 2011 during a seminar organized by SEDUC, with the goal of developing the 2011-2014 Management Plan. At the time, the guidelines were discussed and the general objectives were defined, alongside cross-cutting strategies that would cover many of these objectives.

According to the report, the objectives to be achieved are:

- Build the foundation of Curriculum Integration based on a four-pronged approach - Work, Science, Technology and Culture, to make student learning more meaningful;
- Ensure the identification of young people with the pedagogical proposal of secondary education;
- Stimulate student protagonism, with a strong emphasis on the autonomy and participation of young people in the construction of their identity and in the cognitive development process. (CEARÁ, 2012, p.8)

Cross-Cutting Strategy No. 4 consists of curricular reorganization for day and night Secondary School classes. Since then, many efforts have been made in designing a viable proposal, by understanding the legal basis and recognizing other experiences in this regard. In this study we will address only the reorganization of Daytime Secondary School.

The inspiration for the definition of a proposal arose from the study of the "Curriculum Prototypes for Secondary Education and Integrated Secondary Education" prepared by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

After analyzing the projects already developed by the secretariat in search of educational technologies that would contribute to the discussion of the curricular reorganization of secondary education, some projects were identified for the good results observed and for catering to the demands of young people, among them the Com.Domínio Digital, a youth training program for labor market inclusion developed by Instituto Aliança.

The idea, therefore, was to adapt the methodology of the Com.Domínio Digital Project to the curricular organization suggested by the prototypes, through a partnership with Instituto Aliança. This partnership involved preparing structured materials for workshops, as well as for training the teachers who would teach them and also to follow the process of implementation and application of the proposal in schools.

The next sessions will present a more detailed approach of the Curriculum Prototypes, as well as of the role of Instituto Aliança and Com.Domínio Digital in the construction process of the proposal for the Curricular Reorganization of Secondary Education in Ceará.

3.2 The Curriculum Prototypes of UNESCO

Through its representation in Brazil, the United Nations Educational, Scientific and Cultural Organization (UNESCO) produced in 2011 a document titled *Curriculum Prototypes for Secondary Education and Integrated Secondary Education: Executive Summary*, proposing a model of curricular organization that meets the needs of the students, reducing the distance between what is done in school and in the actual social practices. These practices include work and research as educational and pedagogical principles, respectively.

With respect to work in its ontological sense, the Prototypes articulate the curricular components so that the entire learning process has its origin or foundation in activities developed by the students, aimed, ultimately, at a promoting a transformative intervention in their reality. Research, in turn, is considered an instrument of articulation between the knowledge accumulated by humanity and the work proposals that will be at the core of the curriculum.

In this regard, the curriculum proposed by the Prototypes

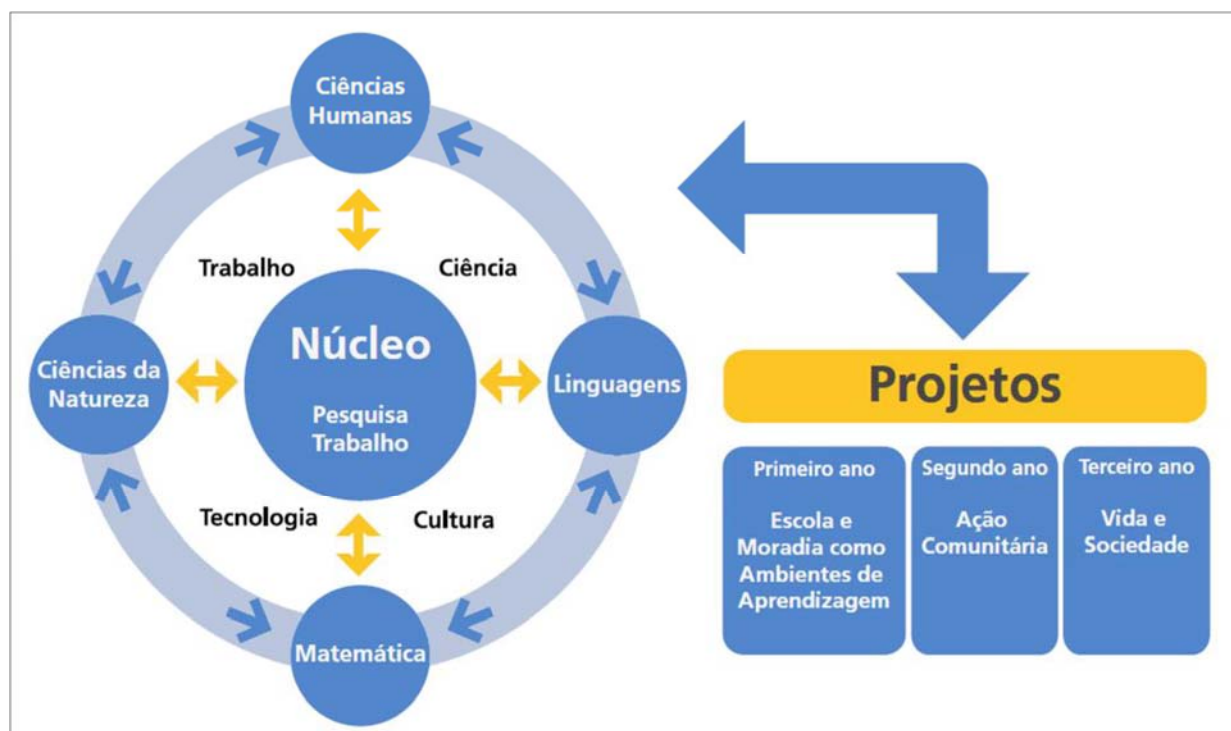
is designed to guarantee the learning processes necessary for the development of knowledge, attitudes, values and basic skills for carrying out any type of work. By valuing the continuity of studies it seeks to prepare young people to cope with the problems of everyday life and participate in the definition of collective directions, promoting the improvement of human values as well as of personal and community relations. (KÜLLER, 2011, p.6)

The preparation of this document arose from the need to develop an educational model that followed social transformations, with a curriculum focused on young people who are in the process of development for life and work. With an emphasis on participation and autonomy, it aims to foster reflection on the concept of curriculum as the set of all learning opportunities provided by the school, as well as help in the definition, organization and operation of an integrated curricular structure (KÜLLER, 2011, page 7).

This means proposing a different way of organizing the curriculum, which would break with the traditional model and replace old curricular matrices and standard schedules, always based on a division of classes of different disciplines happening consecutively every 50 minutes (KÜLLER, 2011, P.9).

This organization is arranged in the illustration below, which summarizes the integration mechanisms addressed by the Prototypes:

Figure 1 - Summary of UNESCO's Curricular Prototypes.



Source: KÜLLER, José Antônio. "Protótipos curriculares de Ensino Médio e Ensino Médio integrado: resumo executivo." ED-UNESCO 1 Debate Series (2011)

	Human Sciences				
Work	Science				
Nature Sciences	Center Research Work	Languages	Projects		
Technology	Culture		First year	Second year	Third year
	Mathematics		School and Home as Learning Environments	Community Action	Life and Society

What the Prototypes suggest, in practice, is the creation of a Center of basic preparation for work and other social practices, which is the main integration strategy and an object common to all areas of knowledge. In each year of secondary education the Center proposes an articulating project and a research and intervention context.

From the Prototypes perspective, the areas of knowledge do not necessarily have to be divided into disciplines, but all the curricular contents provided by law should be considered. The integration of contents occurs through learning objectives, which are based on the LDB (Law of Guidelines and Bases of National Education) and the reference matrix of ENEM (National Secondary Education Exam), thus ensuring the possibility of continuing the studies.

The work, culture, science and technology dimensions cover the whole process of diagnosis and transformation activities,

In the diagnosis they will be the categories that will organize questions, problems or research variables that originate from the objectives of the areas and have as a context the annual project of the Center. In the transformation activities, they will give rise to work groups that will be responsible for them under the Center's projects. (KÜLLER, 2011, p.12)

As seen in the previous chapter, according to CNE's Opinion these four dimensions dialogue with the assumptions that underpin social quality Secondary Education, in order to include the school context in the permanent dialogue with the need to understand that these fields do not occur independently of society and have the mark of its historical and cultural condition (BRAZIL, 2012, p. 162).

The methodological option advocated by the Prototypes is the one that privileges the students' activity in the development of their capacities and in the construction of their knowledge. This option is based on a fundamental finding: it is not possible to prepare the students for the world of work and social practice without their involvement and participation in research, intervention or learning activities that require the skills and knowledge necessary for this participation (KÜLLER, 2011, p.14).

The continuing education of educators is placed as a condition for using the prototypes in curriculum designs, in addition to aspects such as voluntary adhesion of the school, participatory management and adequate infrastructure among others. However, it is not UNESCO's intention to offer a packaged curriculum. On the contrary, it aims to make a contribution, a reference to be used by the school when designing the secondary school curriculum.

3.3 The role of Instituto Aliança

Instituto Aliança com o Adolescente (Alliance with Adolescents Institute) is a Civil Society Organization of Public Interest (OSCIP) headquartered in the city of Salvador, in the state of Bahia. Its mission is to educate people, organizations and communities for sustainable human development at the national level. As methodological assumptions, it suggests a model of vocational education that combines the development of skills for the 21st century and the creation of opportunities; work with participatory methodologies that stimulate the protagonism and autonomy of young people; focus on the full

development of young people, involving the four pillars of education: learning to be, to live, to do and to know, whose areas are the Strengthening of Identity and Life Projects (INSTITUTO ALIANÇA, 2014).

Its relationship with the Education Secretariat of Ceará began in 2005 with the implementation of the Com.Domínio Digital (CDD) program in the state's public schools. Initially the schools were only spaces for disseminating the program aimed at including young people in the labor market through their development as persons, citizens and workers.

The idea to offer the CDD in schools arose from a meeting held in 2007. The following year, a school in the José Walter neighborhood of Fortaleza was chosen for the pilot project. However, despite the fact that the school space was being used and the students were participating in the project as an after school activity, the CDD methodology at the time was neither part of the school curriculum nor had any relation to its organization.

However, in the years that followed the project experienced an important increase in the number of schools involved. The competency-based approach, coupled with a participatory and engaging methodology for young people, drew the attention of SEDUC which, when considering the model for the Curricular Reorganization of Secondary Education chose to build upon this positive experience in the proposal for the redesign of the secondary school curriculum in Ceará.

The experience of Instituto Aliança until then was in participatory methodologies, personal and social development, information and communication technologies, and training for work. The research, however, was something totally new. Therefore, UNESCO's prototypes as well as other references on the subject were extensively studied, in order to inspire the adjustment of the CDD methodology to what SEDUC was proposing.

During the pilot experience, teacher training was the main focus of Instituto Aliança, based on the belief that the educator is the backbone of the formative process and that the educator-student relationship is the basis for the transformation of the young person (INSTITUTO ALIANÇA, 2014). The training sought not only to include the theoretical and methodological assumptions of the CDD in the teachers' practice, but also to get them to reflect and change their mindset, posture and relationship with their students. Therefore, participating in the training was a sine qua non condition for the teacher to teach the classes dedicated to the Work, Research and Social Practices Center (NTPPS), which will be discussed later in this paper.

During the training sessions the teachers contributed to the development of the structured material which, throughout the process, was validated by the teachers themselves after testing it in the classroom. It was a reflection-action-reflection exercise about the pedagogical practice developed by the teachers.

In addition to the preparation of the material and the training of teachers, the IA also monitored the implementation of the proposal in the schools through periodic visits, phone calls or online, always supporting teachers and managers in the face of emerging challenges.

3.4 NTPPS implementation process at João Mattos School

Initially, SEDUC invited state schools that were already developing the Com.Domínio Digital program and later others that wished to test the proposal. Through consultation with the school community, twelve schools agreed to participate in the pilot experiment, which consisted basically in reviewing the school's curricular matrix and adapting it to one of the three types of organizations suggested: by semester, by week or by weight. And also add five class hours to the curriculum map, of which four would be allocated to Personal, Social and Research Development and one to the development of competences focused on the use of Information and Communication Technology (ICT) as a research tool.

So in 2012 the twelve schools started the pilot, each with its own organization, which seemed interesting to the Secretariat, considering that they would evaluate the various possibilities of applying the proposal. The school that was the object of this study chose to continue with the annual system, since all other

options seemed very bold and there was some fear of changing so drastically all at once. The proposal was really cutting edge, unprecedented.

In the João Mattos EEFM (Primary and Secondary State School), this was a moment of tension, because although there was a vote among the teachers, it was a close call with 16 “yes” votes and 15 “no” votes. This caused the pilot to start facing the rejection of half the teachers. The reason for the rejection was mainly the fact that some disciplines had to have their number of hours reduced in order to accommodate the proposal.

One Portuguese class and one Math class were eliminated and the school then had six classes Monday to Friday. The school’s new curricular matrix is shown in the table below:

Table 1 – Curricular Matrix of Secondary Education at EEFM João Mattos.

AREA	DISCIPLINE	GRADES		
		1 st YEAR	2 nd YEAR	3 rd YEAR
LANGUAGES AND CODES	Portuguese	4	4	4
	Foreign Language (English)	2	2	1
	Foreign Language (Spanish)	1	1	1
	Arts-Education	0	0	1
	Physical Education	1	1	1
HUMAN SCIENCES AND THEIR TECHNOLOGIES	Geography	2	2	2
	History	2	2	2
	Philosophy	1	1	1
	Sociology	1	1	1
	Education for Citizenship	1	1	1
NATURAL SCIENCES, MATHEMATICS AND THEIR TECHNOLOGIES	Mathematics	4	4	4
	Biology	2	2	2
	Physics	2	2	2
	Chemistry	2	2	2
CURRICULAR REORGANIZATION (NTPPS)	ICT	1	1	1
	DPS/P	4	4	4
WEEKLY HOURS		30	30	30

Source: School files.

The Principal then invited two teachers to teach the new DPS/P curricular component. One of them was this researcher, who promptly accepted the invitation for having identified herself with the proposal. The other resisted a little, but ended up saying yes, and the teacher from the Computer Laboratory obviously taught the ICT classes.

The first training, in 2012, was held in a hotel in Fortaleza and took two weeks, which coincided with the school break and the pedagogical week. We returned to the school on the first day of school, still not sure how the students would react to so many new things. And so the pilot was experienced, week after week, because during that period training sessions were held practically every Friday.

In the two years that followed, training and workshop validation meetings were held bimonthly and had a much greater number of teachers, as other schools joined the proposal during the process.