COOKING TO LEARN: a digital educational resource for the promotion of curricular integration in primary school

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Present results of *Cooking to Learn*, a digital educational resource which aims at promoting an integrated development of skills of students attending the 3rd grade of Primary School (age 8/9).
Digital Educational Resources for Teaching and Learning Portuguese at Primary School (6-10 years)

Objectives

General
- Promote innovative practices for teaching and learning Portuguese using digital resources

Specific
- Create, develop and implement DER
- Share open education resources
- Conduct research into the implementation of DER
SUMMARY

1. Instructional design
2. Multimedia design
3. Interactivity
INSTRUCTIONAL DESIGN

ADDIE (Branch, 2009).

Constructive approach to learning.

Integrated development of skills (Portuguese Language, Mathematics and Natural Sciences).

A genre-centred approach to language instruction, drawing upon the notion of text genre (Marcuschi, 2008, a.o.) and the model of didactic sequence (Shneuwly & Dolz, 2004).
INSTRUCTIONAL DESIGN

RECIPE: DIDACTIC PATH OF THE DER

BACKGROUND

Introducing the restaurant and the chef

Task 1
Chef uniform

Task 2
Chef responsibilities

EXPLORING RECIPES

ACTIVITY 1: MULTIVITAMIN JUICE
• Task 1. Obligatory components of a recipe
• Task 2. Season fruits
• Task 3. Pictograms

ACTIVITY 2: THREE DELICIOUS RECIPES
• Task 1. Optional components of a recipe
• Task 2. Combinatorial problem

ACTIVITY 3: HEALTHY CHICKEN BURGER
• Task 1. Quantifier
• Task 2. Multiplication

ACTIVITY 4: ORGANIZING THE WORK SPACE
• Task 1. Hierarchical relations between words
• Task 2. Parts of a plant
• Task 3. Lexical fields

ACTIVITY 5: STEP BY STEP
• Task 1. Ordering actions in a recipe

WRITING

Production of a written recipe after watching a cooking video

PORTUGUESE LANGUAGE
NATURAL SCIENCES
MATHEMATICS

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INSTRUCTIONAL DESIGN

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Cooking to Learn

- Design principles for multimedia interfaces (Costello, 2012)
- Principles of multimedia learning (Mayer, 2009)
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Warm colors to background areas.

Color composition logic serves pre-training principle (Mayer, 2009).

Cold colors to accommodate instructional and content information.
COOKING TO LEARN: a digital educational resource for the promotion of curricular integration in primary school (Peters, 2014)
MULTIMEDIA DESIGN

Cozinhar a Aprender

> O uniforme de chefe

Vou começar por te apresentar o uniforme de chef.

O uniforme de chefe de cozinha tem como finalidade proteger da queimaduras e aborrecer o suor, amenizando o desconforto causado pelo calor excessivo.

As peças que compõem o uniforme de chefe de cozinha são:

**Strategies**

- graphics that support learning
- line drawing illustrations
- no extraneous graphics
- minimal or absent backgrounds

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INTERACTIVITY

Design and interactive patterns

- textual elements
- voice narration
- sound effects
- music
- hot spots
- navigational elements
- rewards for progress
- gestures
- zoom
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INTERACTIVITY

- **OnClick/OnTouch**

**Chapéu de chefe**

É um majestoso chapéu alto usado para evitar a queda de cabelo na comida. Hoje em dia, o seu uso é cada vez mais raro, por ser uma peça desconfortável e pouco prática. É frequentemente substituído por rede descartável, touca ou lenço à pirata.

**drag & drop**
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INTERACTIVITY

corrective feedback
Cooking to Learn

Guidelines for the future development of DER.

An opportunity to evaluate if the methodology adopted is worth pursuing for a sustainable development of DER.
Thank you!
References


