The MaltiTek project and the Maltese database *Il-Ġabra*

Il-Ġabra is a popular Maltese-English-Maltese online dictionary. In addition to the lexemes, verb conjugations are available, and the entries display various morphological features. Since *Il-Ġabra* was generated by a rule-based system, primarily derived from the Semitic element of Maltese, it must be checked and corrected, because this system produces wrongly-spelled words, non-existent words, or it leaves out elements found in human language (see Tables 1 & 2).

Table 1: Conjugation mistakes of the verb 'tefa'' (to throw) as created by Ġabra's rule-based system (Scicluna in her MTL dissertation in 2019, p. 66)

	A	B	C	D
1	Subject	Perfective	DO p1 sg	DO p2 sg
2	p1 sg	tfajt		tfajtek
3	p2 sg	tfajt	tfajtni	tfajtek
4	Sp3sgm	tafa'	tafani	tafaek
5	Sp3sgf	tafgħet	tafgħitni	tafgħitek
6	Sp1pl	tfajna		tfajnieek
7	Sp2pl	tfajtu	tfajtuni	tfajtuek
8	Sp3pl	tafgħu	tafgħuni	tafgħuek

Table 2: The Conjugation of 'tefa'' (to throw) after being corrected by Scicluna (in her MTL dissertation in 2019, p. 66)

	A	B	C	D
1	Subject	Perfective	DO p1 sg	DO p2 sg
2	p1 sg	tfajt		tfajtek
3	p2 sg	tfajt	tfajtni	
4	Sp3sgm	tefa'	tefagħni	tefgħak
5	Sp3sgf	tefgħet	tefgħatni	tefgħatek
6	Sp1pl	tfajna		tfajniek
7	Sp2pl	tfajtu	tfajtuni	
8	Sp3pl	tefgħu	tefgħuni	tefgħuk

Since 2019, as part of their MTL studies, several students of Maltese have been working on this database of Maltese vocabulary and verb conjugations. In this way, MTL students are improving the quality of this online dictionary by ensuring there are no mistakes in the selected lexemes, while they develop a number of teaching resources (see for example the story of 'Frawlina' at https://malti.skola.edu.mt/malti-barranin/il-malti-ghall-barranin-medja/nivvjaggaw-flimkien-ma-frawlina/). They may also use this opportunity to focus on theoretical and / or practical language and pedagogical issues.

The MaltiTek project is an inter-faculty enterprise, co-ordinated by Prof. Antoinette Camilleri Grima and Dr. Jacqueline Żammit from the Department of Languages and Humanities of the Faculty of Education, in collaboration with Dr. Claudia Borg from the Department of Artificial Intelligence at the Faculty of ICT. It is envisaged that this long-term project will take on an evolutionary approach, with each phase feeding back resources or applications to each aspect, but always deepening the strength of our Maltese resources and technological applications and games (Figure 1).
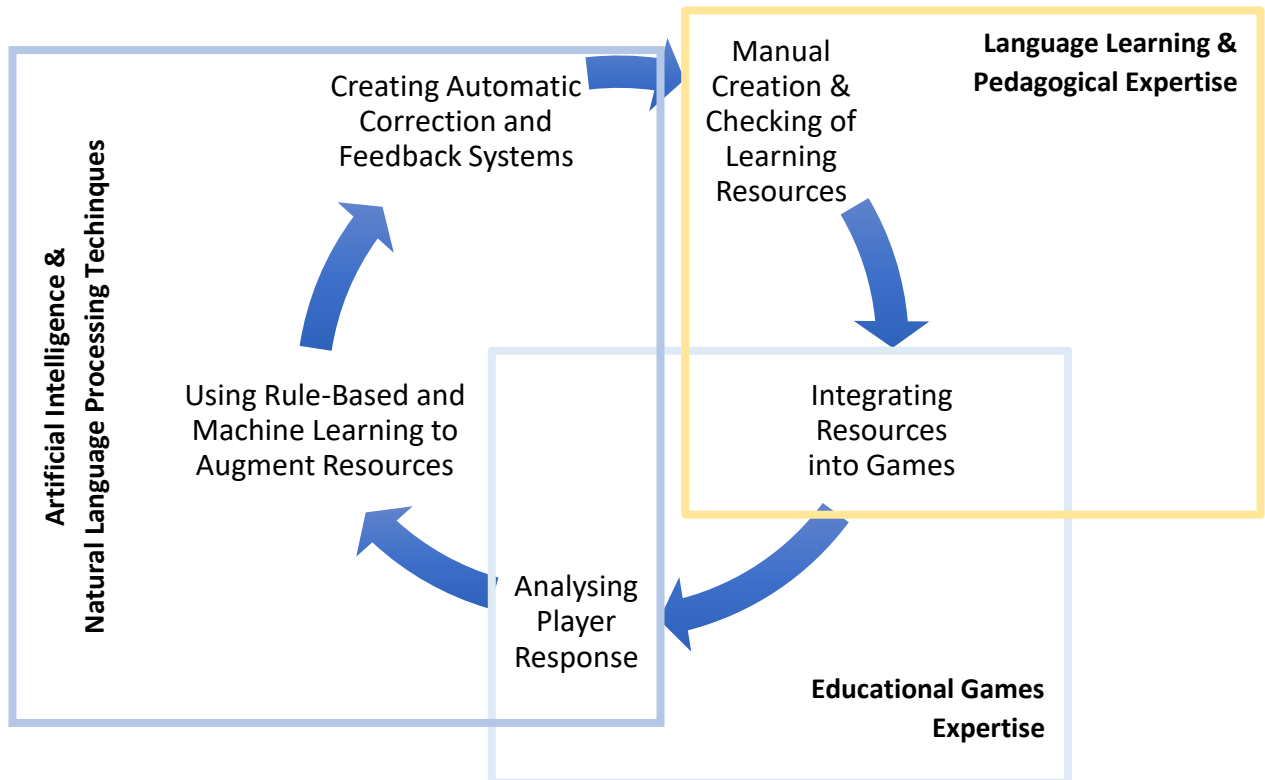

Figure 1: A cyclical approach