



Second Language Tutoring using Social Robots



**Project No. 688014**

**L2TOR**

**Second Language Tutoring using Social Robots**

Grant Agreement Type: Collaborative Project  
Grant Agreement Number: 688014

## **D7.7 Deployment of L2TOR in associated schools**

Due Date: **31/12/2018**  
Submission Date: **20/01/2019**

Start date of project: **01/01/2016**

Duration: **36 months**

Organisation name of lead contractor for this deliverable: **Plymouth University**

Responsible Person: **Tony Belpaeme**

Revision: **1.0**

Project co-funded by the European Commission within the H2020 Framework Programme		
Dissemination Level		
<b>PU</b>	Public	<b>PU</b>
<b>PP</b>	Restricted to other programme participants (including the Commission Service)	
<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Service)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Service)	



## Contents

<b>Executive Summary</b>	<b>3</b>
<b>Principal Contributors</b>	<b>4</b>
<b>Revision History</b>	<b>4</b>
<b>1 Installations</b>	<b>5</b>
1.1 Small-scale studies . . . . .	5
1.2 Large-scale evaluation study . . . . .	6
1.3 Commercial installations . . . . .	6

### **Executive Summary**

This deliverable is a “demonstrator” and is the final deliverable of WP7 (L2TOR Evaluation). It reports on the various installations in associate (pre)schools in the various partner countries, as opposed to studies in laboratory environments. This also includes the large-scale evaluation study in a number of schools in The Netherlands. It also reports on efforts beyond the end of the project, such as the commercial offer of the Nao robot as tutor.

## **Principal Contributors**

The main authors of this deliverable are as follows (in alphabetical order):

Tony Belpaeme (Plymouth University)

Mirjam de Haas (Tilburg University)

## **Revision History**

Version 1.0 (T.B. 20-01-2018)

First and final version.

## 1 Installations

The following nurseries and primary schools took part in small-scale studies, and hosted an evaluation installation for a short duration (less than one week). See figure 1.

### 1.1 Small-scale studies

1. Kinderdagverblijf Noord, Tilburg, The Netherlands
2. Kinderdagverblijf Pendula, Tilburg, The Netherlands
3. Kinderdagverblijf Grote Beemd, Tilburg, The Netherlands
4. Kinderdagverblijf Zuid, Tilburg, The Netherlands
5. Kinderdagverblijf Reeshof, Tilburg, The Netherlands
6. Basisschool Heydonck Best, Tilburg, The Netherlands
7. Basisschool Antonius Best, Tilburg, The Netherlands
8. Basisschool Wandelbos, Tilburg, The Netherlands
9. Basisschool Het Startblok, Eindhoven, The Netherlands
10. Salisbury Road Primary, Plymouth, UK
11. Stuart Road Primary, Plymouth, UK
12. Çayrbaş Gündüz Bakm Evi, Istanbul, Turkey
13. Yunus Emre Gündüz Bakm Evi, Istanbul, Turkey
14. Ayazağa Lotus Gündüz Bakm Evi, Istanbul, Turkey
15. Çiçekli Bahe Anaokulu, Istanbul, Turkey
16. Elma Anaokulu, Istanbul, Turkey
17. Sihirli Saatler Anaokulu, Istanbul, Turkey
18. Akasya Koleji, Istanbul, Turkey
19. Günay Anaokulu, Istanbul, Turkey
20. Deniz Kabuğu Anaokulu, Bursa, Turkey
21. Ko Okulu, Bursa, Turkey
22. Gelişim Atölyesi Kreş ve Anaokulu, Bursa, Turkey



Figure 1: The L2TOR setup during an evaluation study in the United Kingdom.

## 1.2 Large-scale evaluation study

The following schools took part in the large-scale evaluation, and hosted the L2TOR setup for an average of 3 months. See figure 2.

1. Basisschool Meander, Tilburg, The Netherlands
2. Basischool Hoeven, Tilburg, The Netherlands
3. Basisschool Weremere, Wormer, The Netherlands
4. Basisschool Tuindorp, Utrecht, The Netherlands
5. Basisschool de Pionier, Maarssen, The Netherlands
6. Basisschool de Ranonkel, Purmerend, The Netherlands
7. Basisschool Nije Kroost, Zeist, The Netherlands
8. Basisschool de Borne, Tilburg, The Netherlands
9. Basisschool de Wegwijzer, Tilburg, The Netherlands

## 1.3 Commercial installations

QBMT (trading under Zora Bots) sold 12 installations to secondary schools. The schools will use the Nao robot with the Zora controller for a range of applications, from enthusing children for STEM education to supporting children in learning language (see figure 3). QBMT is currently trialing a commercial setup which helps children learn a language through reading books with the robot. While this commercial offer diverges from the L2TOR setup (which next to the robot includes a tablet), the knowledge gained in L2TOR have been instrumental in creating this product (see figure 4).

## References

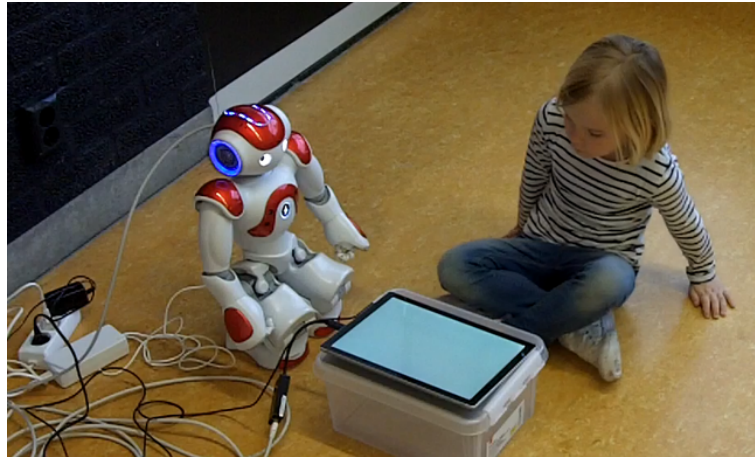


Figure 2: The L2TOR setup during the large-scale evaluation study in the Netherlands. Preschool children learnt English words and grammar from the robot.

### Robot Zora helpt leerlingen programmeren

08 november 2018 | 02u21



Foto Proot  
© Zora kan nu al op heel wat belangstelling rekenen.

De stad heeft gisteren op twaalf Oostendse middelbare scholen een robot afgeleverd. De scholen mogen Zora gebruiken om hun leerlingen te leren programmeren.

"We zaten een jaar geleden samen om na te denken over wat we konden doen met technologie en hoe we jongeren konden leren programmeren. Nu heeft de stad twaalf robots aangekocht om ze ter beschikking te stellen van de scholen. De robot op zich is niet het belangrijkste, wel het programmeerplatform dat er achter zit. We willen de jongeren klaarstomen voor de toekomst", licht schepen van Digitalisering Kurt Claeys (Open VLD) toe. "We koppelen er ook een scholenwedstrijd aan. De scholen worden uitgedaagd om innovatieve toepassingen uit te werken. Er zal een wedstrijd zijn op de twee niveaus van programmeren met als gezamenlijk thema 'gaming met de stad'."

Figure 3: News release on the purchase of 12 Nao/Zora robots from QBMT for education. The press release focuses on the opportunities for STEM education, which provided the budget for the purchase.



Figure 4: A commercial offer being trailed in a primary school in Oostende, Belgium. The robot supports the learning of a second language through jointly reading a book with a young child.