N_xt
Gener_tion
Plac_ment
Tests

Co-funded by the
Erasmus+ Programme
of the European Union

# Newsletter #3

Winter 2021/2022 - Project updates

## Transnational project meeting held in Čačak, Serbia

During the covid-19 pandemic, online and blended meetings became a new norm for transnational projects. Luckily, when the time came to organize our third transnational project meeting, Italy was the only partner country with travel restrictions in place. While our partners from British School Pisa joined us online using Zoom, the rest of us got a chance to experience the southern region of Serbia, its main city hub Čačak and the beautiful Morava river.

While the main purpose of transnational meetings is, indeed, project-related activity planning and revision, they also contribute to strengthening and promoting the European dimensions by allowing partners to experience different cultures and learn from each other. For most participants, this was the first trip to Čačak, and indeed there was a lot of cultural and historic content to absorb.

In the center of the city lies the Cultural Centre, a large concrete structure typical of the socialist era architecture. Inside that structure, a 48-year-old Ficus tree, the largest specimen on the Balkan's peninsula, grows straight out of the concrete floor. The tree was, interestingly enough, brought to Čačak from Split in 1971. The story was, naturally, particularly interesting to two partner organizations coming from Split 😊

The city also has rich history related to World War II. Every institution we visited hosts a photograph of Ratko Mitrović's execution, one of the more significant events in the history of Yugoslav resistance. Of course, we had to experience some popular lore as well, so we went for a coffee at a coffee shop where apparently Tito came once with his alleged lover.

### Down to business...

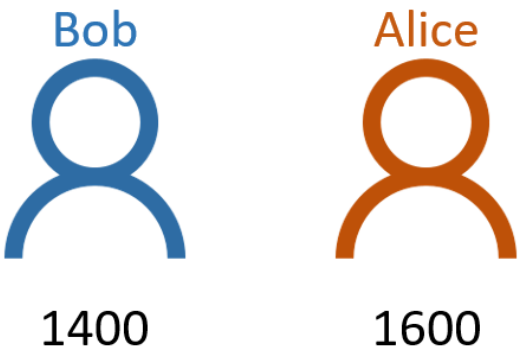
Project-related topics covered during the meeting included:

- full revision of the first intellectual output (task builder and database)
- discussion and development preparations for the second intellectual output (rating algorithm)
- review of the previously submitted Interim Project Report along with supporting documentation
- considerations for test-delivery GUI
- early piloting activities
- revision of all project management and implementation activities (quality management, dissemination, impact)

*Ficus tree brought to Čačak from Split in 1971.*

## ELO rating system

Named after its creator, a Hungarian-American physics professor Arpad Elo, the ELO rating system is a method for calculating the relative skill levels of players in zero-sum games. Sounds complicated? Let's simplify it a bit.
Let's assume we have two individuals facing each other in some sort of a game, Bob and Alice. Each of these players is assigned a numeric value which corresponds to the player's skill level **relative to other players**.




The ELO rating system relies on statistics. In this case, Alice is statistically likely to beat Bob in a match. When that happens, there will be a very small adjustment in the rating of both players (for example, Bob's score will go down to 1390, while Alice's score will raise to 1610), because this was a statistically expected outcome. However, if Bob manages to beat Alice, there will be a larger change in the rating, because this was an unlikely outcome - Bob might go up to 1450 and Alice will fall to 1550. The ELO rating system expects a higher-rated player to usually win, but when anomaly happens, there will be swift adjustments to player ratings.

The system was first applied to rate chess players back in the 1960s. Today, it is used in sports (FIFA World Rankings, Universal Tennis Ranking, NCAA), board games (Scrabble, Magic: The Gathering, Pokemon TCG) and all competitive video games.
So how can we use the ELO rating system to improve placement tests? We can begin by assigning numerical values (or scores) to each question in the database (or each question that can appear on the placement test). The score corresponds to its CEFR level, which is practically a linear system from A1 to C2. Obviously, A1 questions will have the lowest score, going up level by level all the way to C2. Each question, having its own numerical value, now becomes player 1: Bob.
Our test-taker, Alice, begins with a middle-range score. Alice is randomly assigned a few questions from the middle-score range (mostly B1-B2 level questions). Depending on her initial performance, Alice will be assigned a much more accurate score after the first few questions, and will further be "matched" with questions of the similar score.
The test will keep putting Alice up against a range of "opponents" and keep adjusting her score accordingly. Expected outcomes (Alice successfully answers a question of the level lower than hers, or fails to answer a question with significantly higher level than hers) will yield small changes in her score, while anomalies (e.g. Alice correctly answers significantly higher level questions) will make slightly larger adjustments.
The best part of this rating system is that the Alice's final score is determined by pure statistical analysis, and not some arbitrary rating scheme set forth by a human being. That's why we believe NGPT will yield more accurate results and better placement testing for all the languages included.

N_xt
Gener_tion
Plac_ment
Tests

**Connect with NGPT**

https:/nextgenplacement.org

https://web.facebook.com/nextgenerationplacement