



Lifelong
Learning
Programme

ViPi – ATLEC Symposium
04 December 2013
Bussels, Belgium

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**Fostering social
competence through
educational (serious)
computer games**



SGSCC: Serious Games for Social & Creative Competences

- Despite the importance of social competence (SC), its systematic use within school programmes and vocational training is under-developed.
- SGSCC is a 30 months project dedicated to the conceptualisation & development of social competence training related to adult education, school curricula & professional development.
- Outcomes: A set of training materials on social competences and creativity using 3D scenarios, web and mobile games will be created in English, Bulgarian, German, Dutch, Turkish, Serbian & Lithuanian.

Partners

- Plovdiv University “Paisii Hilendarski” - Bulgaria
- Dr. Pretis – Social Innovative Network - Austria
- PhoenixKM BVBA - Belgium
- VSI Hi.Te.Co. – High Technology for Cooperation - Lithuania
- Nottingham Trent University - UK
- İstanbul Milli Eğitim Müdürlüğü - Turkey
- Belgrade Open School (Beogradska otvorena škola) - Serbia
- INTERPROJECTS - Bulgaria

STEP1: What are social competences

Background

- The concept of social competence also presents problems of conceptualisation and assessment (Waters & Sroufe, 1983)
- Most authors agree that social competence has diverse component variables, which may vary along continuous dimensions, and which is constructed through social interaction in different contexts (Topping et al. 2000)

The importance of social competences related to employability

- It has to be emphasised that social competence, or soft skills themselves, have been identified by the European commission as one of the key benchmark indicators proving prosperity and well-being in the EU member states (EU 2005).



Social Skills

Model of social competence

- Social competence has different subgroups aimed at achieving different goals in the space of social life of the self, who lives with others.
- Social competence was examined by two dimensions:
 - **Intra-subject dimension:** self-concept of the confidence in own abilities, attitudes and behaviours of reflection on the self - experiences, motives, objectives pursued by self-regulation and responsibility for their own behaviour and self-realization.
 - **Interpersonal dimension:** cognition, abilities and attitudes, which provide complete construction of social relationships based on understanding, acceptance and respect of others, skills and attitudes ensuring cooperation and joint problem solving of responsibility for one's own behaviour and attitude for others.

1st Sub-group - Communication Skills

This subgroup includes:

- Ability to initiate conversations on various topics;
- Ability to listen;
- Ability to express their emotions in accordance with the context;
- Empathy;
- Acceptance;
- Respect;
- Self-discovery;
- Self-presentation.



2. Sub-group - Cooperation

This subgroup includes:

- Planning and problem solving;
- Standing on a someone else point of view;
- Following the rules, regulations, guidelines;
- Recognition of achievement and merit of others;
- Gratitude;
- Engaging in pro-social behaviors (promoting, sharing, comforting, assisting).



3. Sub-group - The Ability to Solve Interpersonal Problems

This subgroup includes:

- Definition of the conflict;
- Search for a solution;
- Evaluation of decisions;
- Selection of solution based on mutual satisfaction of both parties (no loss) and its application;
- Ability to avoid a conflict;
- Implementation of the decision.



4. Sub-group - Self-Esteem

This subgroup includes:

- Linking success with their own abilities;
- Not overestimating of failure;
- Realistic comparisons;
- Acceptance of a negative feedback;
- Avoid self-destructive criticism;
- Sensitivity to their own strengths.



5. Sub-group – Self-Control

This subgroup includes:

- Pre-consideration of responses and behaviour;
- Efforts in solving difficult tasks;
- Resistance to temptation;
- Prioritization of objectives;
- Regulation of negative emotions.



6th Subgroup - Assertiveness

This subgroup includes:

- To defend their own rights and beliefs (open expression of thoughts and feelings);
- Reject unreasonable demands;
- Launch applications/ direct requests;
- Making decisions without succumbing to external pressure.



Definitions of soft employability skills and attributes (Blades et al. 2012)

Skill/ attribute	Definition
(Self) confidence	Belief in oneself or one's own abilities
Self-esteem	A positive or negative orientation toward oneself; an overall evaluation of one's worth or value
Motivation	Interest/ engagement, effort and persistence / work ethic
Self-efficacy	Belief in one's ability to succeed in a particular situation
Social/ interpersonal skills	Ability to interact appropriately with other people, without undue conflict or discomfort
Communication skills	Ability to convey information effectively so that it is received and understood; appropriate verbal/ nonverbal communication with colleagues, managers and customers/others
Teamwork	Ability to work cooperatively with others
Assertiveness	Ability to confidently express views or needs without either aggression/ dominance / undue submissiveness towards others
Self-control	Ability to control own emotions and behaviour, particularly in difficult situations or under stress
Reliability	Attendance, time-keeping, consistent standards
Positive attitude	Keen to work, learn, accept feedback and take responsibility
Presentation	Consistently clean, tidy and appropriately dressed, with a polite and professional manner
Planning	Ability to plan tasks and monitor progress
Problem-solving	Ability to identify problems and devise solutions
Prioritising	Ability to identify and focus on priority tasks

Social competence and creativity in adolescents/young adults with mild learning difficulties

- Children and adolescents with mild learning disabilities are more likely to show problems related to emotional literacy, empathy, perspective taking, friendship, communication skills, anger management, interpersonal problem solving and how to be successful at school or at work (Guralnick, 2004).
- Students with intellectual disabilities may experience difficulty adequately performing an array of important social skills, including engaging in reciprocal interactions, elaborating social exchanges, adapting to novel social circumstances, and discerning and interpreting relevant social cues (p. 179) Carter and Hughes (2005)

STEP2: Social competences and computer games

Why to use computer games (in terms of educational games) Nygren, (2011)

- Educational games could
 - Allow the teenager to geek out
 - Be a place for peer-to-peer learning
 - Be a safe-place for messing around
 - Be an arena to express one's identity
 - Let the teenager relate the material in the game to his- or her own life
 - Appeal to teenagers' wannabe adult side
 - Be a place to get challenged and increase self-efficacy
 - Be a place where the teenager creates his or her own rules
 - Be a place where teenagers meet peers

Little is known about the effect of educational computer games to promote social competence

- Margalit (1995) showed that a trained groups with the computer program “I found a solution”. showed increased skills related to different measures of social competence
- Breen and Haring (1991) use computer games to initiate communication between adolescents with learning difficulties and non-disabled students. The participants socially initiate more verbal contacts with peers during exchanges based on computer gaming than controls.

Research question

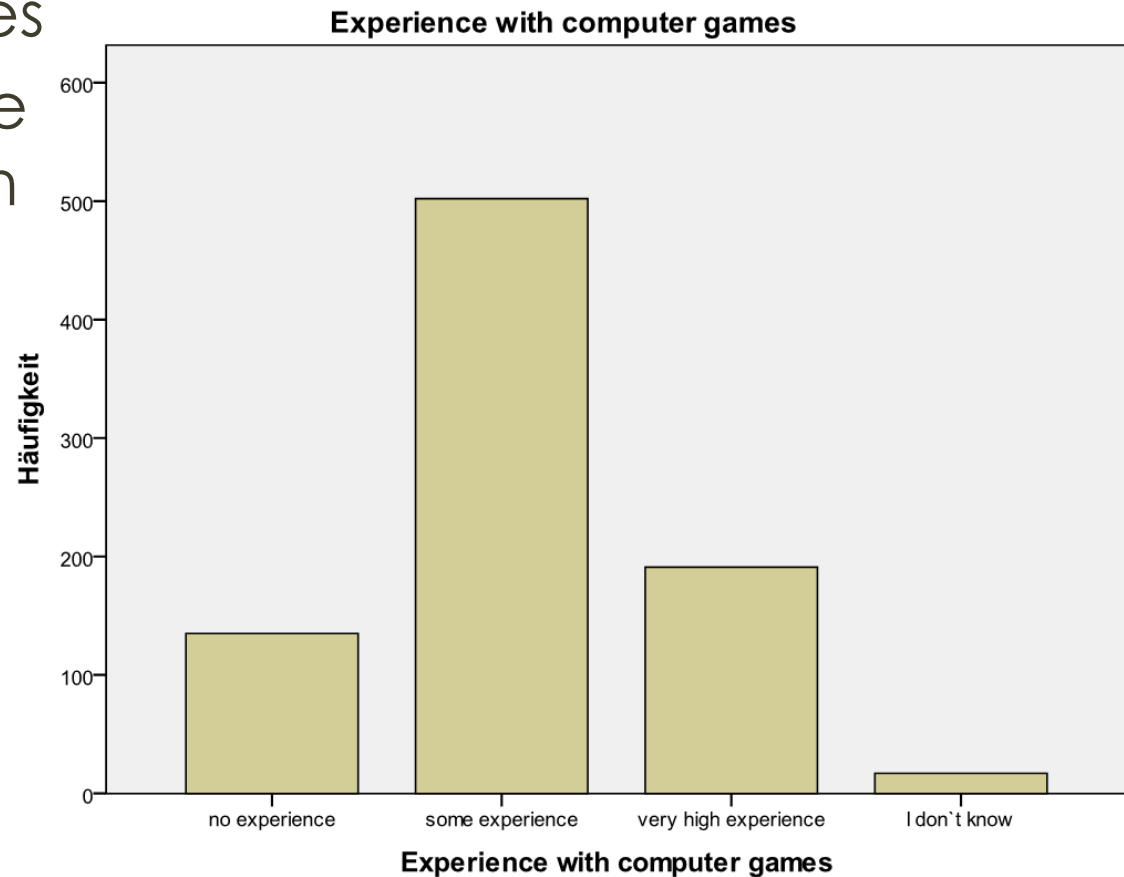
- In which way can „serious“ (educational) games be used (for young adults with learning difficulties) to promote their social competence and creativity

Methodology

- Survey (online and via focus groups) among 573 stakeholders (family, trainers, teachers, end-user organisations, etc.) and 300 beneficiaries (young adults with learning difficulties)
- 851 participants made indications of their gender. 53.7 % of them were female, 46.3 % were male.

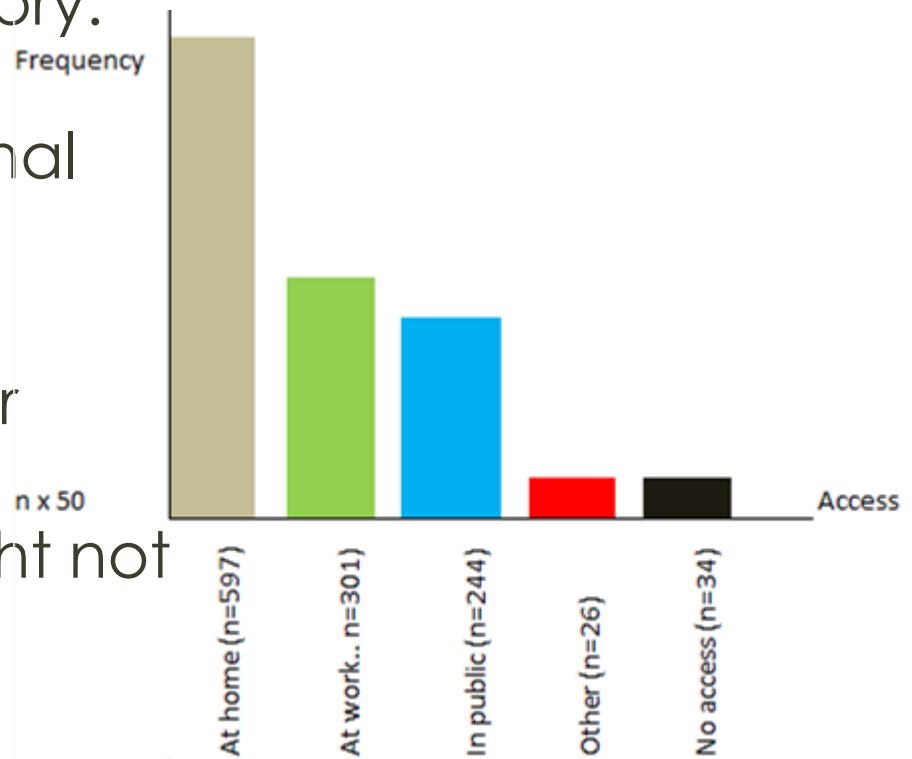
Experience with computer games

- Majority beneficiaries has some experience with computer games
- Boys report more experience than girls



Access to internet and games knowledge

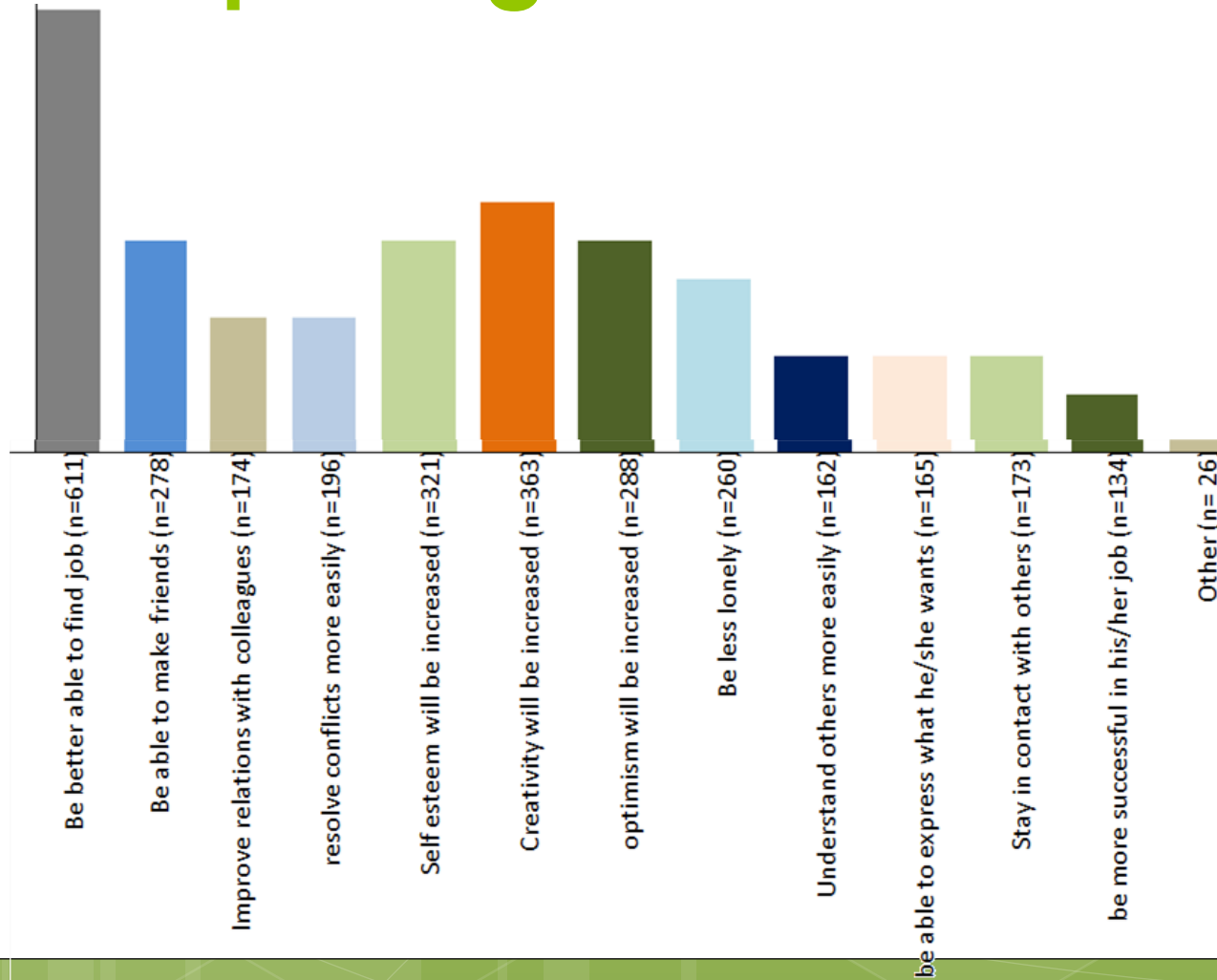
- Majority beneficiaries has access at home, followed by work and public areas (libraries).
- Most prevalent category: “I do not know” or playing “no educational game”
- In comparison to commercial computer games “educational computer games might not be known enough”.



Fostering social competences by playing educational computer games (stakeholders)

- Which social skills might be fostered by educational games?
 - Motivation, self efficacy, problem solving
- Strengths of educational games in the context of social skills development for young adults with learning difficulties
 - Playing educational computer games is fun
 - Peers and friends also play educational games
 - Educational games can help the learner to be more creative and pro-active
- Percieved weaknesses
 - Not having teacher/tutor/ facilitator who can show how to play
 - Lack of ability to apply those skills -learnt in the game- in real life
 - Lack of availability of computer/tablet/smartphone

Opportunities of educational computer games



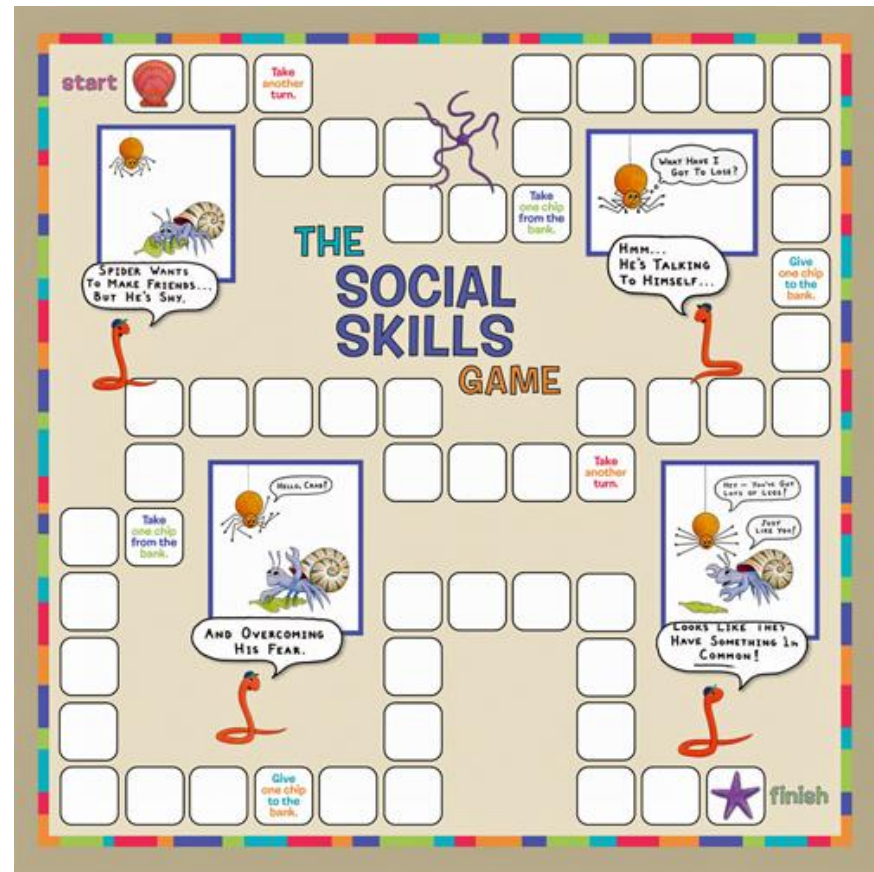
Threats of educational computer games

- Social isolation
- Giving up other interests/hobbies
- Addiction



Narratives (situations) that might be useful within educational games

- What to do during crisis and difficult situation at work
- Express myself at work
- Solve conflicts with colleagues
- Maintain one's own opinion



Necessary computer skills

- Using the keyboard: 54,6%
- Using the mouse: 51,8%
- Basic computer knowledge: 60,9%



Usage of educational games within social skill training processes

- Playing computer games is very common (for young adults with learning difficulties), however educational games are not well known and rarely used (played)
- Strategically educational computer games should focus on:
 - Motivation, self efficacy & problem solving
 - Supporting/monitoring teachers/tutors
- Educational games must:
 - Be fun, include social-exchange processes (multitplayer) and stimulate creativity

STEP3: Expected benefits

Opportunities and expected effects

- To get a job easier
- To increase creativity
- Optimism will be increased
- What do we need to reach this goal?
 - research showing efficiency/effectiveness
 - computer and internet
- Useful narratives:
 - Express myself at work
 - Solve conflicts with colleagues
 - Maintain one's own opinion
- "How I am able as a young person with learning difficulties to express and present myself in a social adequate way"



Credits

This presentation is built upon two papers:

- Fostering social competence through educational (serious) computer games by **Prof. Manfred Pretis**.
- The model of social competence and SC sub-groups are prepared by **Prof. Dr. Rumen Stamatov, Dr. Svetlana Sariyska and Mariya Goranova**.

For further information about the project

- ◉ <http://games4competence.eu/>
- ◉ <https://twitter.com/game4competence>
- ◉ <http://www.facebook.com/sgsccproject>

- ◉ Free of charge games available from October 2014 onwards in Bulgarian, Dutch, English, German, Lithuanian, Serbian and Turkish