

Dear Principal

I am a Ph D student in the School of Computer Science and Statistics, Trinity College Dublin, and I wish to apply for permission for research to take place in your school. The purpose of this action research inquiry is to investigate whether Personalised Adaptive Learning systems (PALSs) can improve the effectiveness, efficiency and/or learner satisfaction of online learning in supporting carers (ie teachers, parents and key workers) when developing social skills in autistic individuals.

I have designed a user-friendly, web-based PALS called STAK, which will adapt to the needs of carers and the children they are teaching. STAK will offer support to carers based on their confidence using recommended teaching strategies and will provide educational resources based on the children's learning styles, language and comprehension abilities and prior knowledge of required social skills.

For security reasons carers must register as members of STAK before creating profiles for the children they are teaching. These profiles will comprise the children's learning styles, language and comprehension abilities and their knowledge of a set of skills required for successful social interaction. Using this information the system can determine the level of support the carers need and the most appropriate learning content for the children. The system will keep track of all the carers' interactions with the system to monitor their progress learning and applying new teaching strategies and the impact that this intervention is having on the children. All of this information will be anonymised so it will not be possible to trace any private personal details back to the individuals involved.

Teachers will incorporate the teaching strategies and educational resources recommended by STAK into their social skills training programmes for a short period each day/week over several weeks. During the lessons they will observe, monitor and record different aspects of the learning experience. It is envisaged that STAK will benefit carers by helping them to apply appropriate strategies when teaching certain required skills and also by reducing the time involved in finding appropriate educational resources to individualise the child's learning experience.

The researcher will gather evidence during this project using a number of data collection tools. The data will be anonymised and stored in compliance with the Data Protection Act. Extracts of data may be used in presentations etc but under no circumstances will identities of carers or children be made known. The information will be analysed based on the pedagogy and learning theories underpinning this research inquiry. In the extremely unlikely event that illicit activity is reported to the researcher during the interview the researcher will be obliged to report it to the appropriate authorities. Therefore, carers will be advised not to mention third parties during the study or interviews.

The documentation of the findings will be published and disclosed to a body of examiners in Trinity College Dublin as well as external examiners. There may be lectures, PhD theses, conference presentations and peer-reviewed journal articles written as a result of this project but on no account will the children and the school be identified.

Children will also require their own and parental consent to take part in the research. Participation is voluntary and you may withdraw the school from the project at any time for any reason without penalty, and any information already recorded from the school will be removed from the study. Any children, who have been diagnosed with epilepsy or, with a family history of epilepsy, may take part but do so at their own risk and only with prior written parental permission.

The research project, including information sheets and consent forms have been approved by the Ethics Committee of the School of Computer Science and Statistics, Trinity College, University of Dublin.

I should be most grateful if you would allow me to carry out this research in your school. I should be happy to meet you to discuss this investigation and clarify any points that parents might raise before, during and after the project.

Yours faithfully

---

**Theresa Doyle**  
Knowledge and Data Engineering Group  
School of Computer Science and Statistics  
Trinity College Dublin