INNOVATION IN INITIAL TEACHER EDUCATION
Emerging trends, issues and recommendations

Spring 2019
This briefing paper draws on the work of the ITELab project, which aims to foster innovation and knowledge exchange in Initial Teacher Education (ITE). The paper summarises and draws conclusions and recommendations arising from the project’s activities which involve: monitoring research, developing case studies, and investigating the digital pedagogical competences of teacher educators; alongside, evaluating new flexible teaching module frameworks and a student teacher MOOC co-designed by ITELab university and industry partners, to support the development of digital pedagogical skills in beginning teachers, and piloted within the project by universities and student teachers.

ITELab welcomes all stakeholders (Universities, Industry, Policymakers) interested in the digital pedagogical skills of future teachers, to join the project as associate partners (non-funded), participating in the online ITE Forum discussions, following the Spring 2019 pilots, engaging in the Autumn 2019 programme. Email any questions and your interest to ITELab project officer, zuzana.sorocinova@eun.org.

Note: papers referenced* in the briefing are published here.

Five issues and trends are outlined below, together with some preliminary recommendations arising from them. These, along with others emerging in the final year of the project, will continue to be monitored and developed. The final briefing paper, will be published following the closing ITELab workshop at European Schoolnet’s annual EMINENT conference in November/December 2019.

1. INCREASING FOCUS ON ITE AT POLICY LEVEL

There is an increasing focus on initial teacher education in education policy and practice. The European Commission’s communication “School development and excellent teaching for a great start in life” sets the tone, highlighting the importance of “exchange of best practice among providers of Initial Teacher Education” and supporting student teachers to become “career-long learners”:

“The quality of teacher education requires more attention. Initial Teacher Education is most effective when pedagogical theory is combined with both subject knowledge and sufficient classroom practice. Student teachers need to be prepared for collaborative work and career-long professional development, for dealing with diversity in the classrooms and for using digital technologies with confidence. - “EC 2018, “School development and excellent teaching for a great start in life”

This emphasis on sharing practice and teaching as a learning career has influenced the design of the innovative teaching modules and MOOC for student teachers under development in the ITELab project, both of which encourage collaboration and emphasise the importance of lifelong learning.

The ITELab case studies show the national policy initiatives in schools that are feeding through and having an impact on initial
teacher education. In Portugal, the National School of Promotion for School Success challenge from the Ministry of Education strongly supports the methodology of digital pedagogy and collaborative teaching in the classroom as well as in initial teacher education. In Ireland and Italy, national digital strategy plans have been published and in Norway the recent publication of the Framework for Teachers’ Digital Competence takes such plans further. In a survey of ITELab partners, one respondent commented: “Regarding ICT skills development there should be a continuum in terms of national policy from primary to secondary and then higher education.” The survey also revealed some of the practical challenges when integrating digital pedagogies in ITE programmes, highlighting the critical role played by top-down, ‘joined up’ policy initiatives in sponsoring, validating and prioritising change.

Constraints on innovation experienced by partners are at both national and institutional level. In Portugal for example, one of the ITELab case studies describes how all teacher training courses are required to undergo central quality and legal review, making it difficult for an institution on its own to change its teaching programme and courses. At institutional level, the lack of top-down pressure from management (and government) for widespread change results in change occurring only in the most innovative institutions and in small pockets.

In its analysis of the case studies, the report noted a trend towards a “a blurring of the boundaries between universities and schools, between university staff and teachers, and between student teachers and in-service teachers, for the benefit of all. Imaginative new learning spaces and joint projects help cement these new relationships and ensure that tomorrow’s teachers are well prepared for tomorrow’s schools.” This supports the two-way exchange of ideas and information on changes and innovations in schools, leverages synergies in the continuum of initial teachers and continuing professional development, and promotes links between universities and teachers as action-based researchers.

Recommendation: Emphasise the place of digital competence in ITE, as part of a policy continuum from school to primary to secondary and then higher education.

Recommendation: Encourage more joint ITE actions between universities and schools.

Recommendation: Address constraints with ITE curricula that prevent experimentation and innovation.

Recommendation: Provide top-down leadership on the importance of ITE.

2. THE IMPORTANCE OF DEVELOPING DIGITAL PEDAGOGY SKILLS

The ongoing development of competence frameworks and tools support career-long or lifelong learning, supporting analysis and self-reflection, both at institutional level (e.g. SELFIE) and at individual level (e.g. The Digital Competence Framework for Educators - DIGCOMPEDU and the diagnostic tool TET-SAT). TET-SAT has been used in ITELab and the University of Würzburg’s evaluation found that the tool worked efficiently and combined evaluation with a valuable experience for participants.

This focus on digital competencies is echoed in the academic research which provides in-depth analysis and case studies and is reported in the ITELab Monitoring Report 2. An example is Gudmundsdottir and Hatlevik’s ‘Newly qualified teachers’ professional digital competence: implications for teacher education’ (2017).

In focus groups held in June 2018 and echoed in a follow-up survey by the University of Newcastle of their student teachers, student teachers highlighted pressure on time within the ITE curriculum, limiting the time available to experiment and develop digital pedagogical skills. The priority when starting
as a beginning teacher in the classroom, is the ability to manage behaviour, maintain discipline and use management information systems to track student progress.

Recommendation: Prioritise the importance, echoed through assessment of the development of digital pedagogical skills as part of the ITE curriculum.

Recommendation: Help student teachers appreciate the value of experimentation as part of ITE and the development of digital pedagogical skills, even if they may not find or need them in placement schools. Help them handle conflicting priorities

3. LACK OF OPPORTUNITIES TO PRACTISE DIGITAL SKILLS

The survey of partners revealed that one of the most frequently cited challenges was a lack of suitable teaching placements for students to practise digital pedagogy skills and the wide variety of school environments making it difficult to use digital skills. Yet opportunities to practise newly acquired skills in real contexts are major elements in successfully developing and using digital pedagogy skills. This was also mentioned as an issue by student teachers in focus groups held in June 2018, in a survey by the University of Newcastle of student teachers’ experience in school placements and in research featured in the ITELab Monitoring Report 2 (2018). As one survey respondent stated: “It’s a real challenge. But we are getting there. I think the best thing we can do for our students is encourage them to think about what’s doable in their own school settings because it’s all so different and to have a go at things.” A practical suggestion made by another survey respondent was for every school to have a teacher nominated as a Digital Animator, a strategic role to promote digital skills across the school”.

A further challenge is the mindset of student teachers themselves; they tend to be more concerned with managing learners than with their own digital pedagogy competencies.

Recommendation: Develop closer links with schools offering suitable teaching placements that enable student teachers to practice digital pedagogy skills.

4. ARE TEACHER EDUCATORS’ DIGITAL COMPETENCES ADEQUATE?

Although much work is taking place on the digital competence of school students and their teachers and, to some extent, of student teachers, teacher educators in ITE have perhaps been less in focus.

That is why research led by ITELab partner the University of Agder is looking at the pedagogical digital competences of those who teach future teachers themselves, comparing the opinions of ITE tutors in partner countries and examining them in the light of the University of Würzburg’s evaluation work on student teachers’ digital competencies, as well as case studies, student teacher focus group findings and an ongoing literature review. This triangulation of data will supplemented by interviews and presented in the third and final monitoring report to be published later in 2019. However preliminary results are already raising important questions.

The University of Agder designed and administered a survey of tutors in order to obtain a deeper understanding of how they see their own pedagogical digital competence. They identified 30 competences relevant to ITE tutors in five
competence areas (Professional engagement, Digital resources, Teaching and learning, Assessment, Empowering learners) adapted from both DIGCOMPEDU and TET-SAT. The results from 162 self-selected respondents show that the area considered to be the most important is Teaching and learning, and Assessment the least important. Of particular interest is that tutors rated as high both their own pedagogical digital competence and their capacity to provide guidance to learners (i.e. student teachers in the case of ITE) in developing their own pedagogical digital competence. Teacher educators tended to agree strongly or partially with all statements of their competence regarding professional engagement, digital resources and teaching and learning. They had lower self-assessed competence and there was higher variation in the agreement scale on statements regarding assessment and empowering student teachers.

The survey raised further questions:

- What does it mean to have sufficient or ‘adequate’ pedagogical digital competence?
- What levels of competences should TEs have?
- Who should define it – TEs, Student teachers, school leaders?
- How do we develop further knowledge about areas with lower self-assessed competence?

**Recommendation:** Further investigate ITE tutors’ pedagogical digital competence

### 5. TOWARDS MORE DIFFERENTIATED ITE LEARNING PATHWAYS

Insights from recent research chime with work underway in the ITELab project. For example, trialling of ‘Live to Air’ sessions in the ITELab module pilots builds on O’Dowd (2017), Exploring the Impact of Telecollaboration in Initial Teacher Education: The EVALUATE project. In addition, one of the conclusions from recent research strongly echoes the findings from the piloting underway in ITELab: “*Instead of considering pre-service teachers as one homogenous group, we need to understand the variations among their abilities and knowledge in order to be able to provide them with support they need within teacher education.*” (Valtonen T. et al, 2018).

An evaluation of pilots of both the face to face module and MOOC developed in ITELab by the University of Würzburg found that there were different perceptions and expectations about the course and different ideas of relevant content. The survey found that both the module and the MOOC allowed student teachers to expand their views and to learn about others in the same situation. They enjoyed exchanging, collaborating and connecting and discovering new aspects of their future profession.

In 2019 the aim is to reach 3,000 European pre-service teachers with a revised MOOC and to have the module frameworks considered by 30 or more ITE institutions drawn from universities across Europe. Based on the pilot 1 evaluation, we are confident that also the pilot 2 participants will benefit from the materials and enjoy improving their respective digital competencies.
Participation rates could be higher except for the fact that ITE institutions are finding it difficult to integrate these additional opportunities for future teachers into existing programmes.

**Recommendation:** Build closer links between national and regional training programmes for on teacher professional development and initial teacher education.

**Recommendation:** Allow some flexibility in programmes to include training opportunities outside ITE institutions. Harness the power of MOOCs to support ‘as and when learning’ and to build teacher communities. Encourage local assessment, support and recognition.

**Recommendation:** Recognise the value of lifelong Professional Learning Networks to support/develop skills as student progress as teachers. Build links with schools-teaching communities such as eTwinning to strengthen peer support in and out of the classroom and school.

**CONCLUDING REMARKS**

The trends and issues outlined above suggest that some changes in ITE might be beneficial, particularly in terms of the curriculum, digital competence development of both tutors and student teachers and school partnerships.

A prime focus for the final year of the project, will be working partners, the Pedagogical Board and all stakeholders on the need to develop an ITE Institutional change plan, to innovate the ITE curriculum as meets local needs and circumstances, including:

- Review of partnerships with industry and other departments to encourage innovation to meet local priorities and needs for future teachers and the development of skills of pupils.
- Appointment of a digital skills innovator as part of the senior management team to lead the change. Providing a visible recognition of the importance being assigned to the change.
- As part of the change programme, an initiative to develop and prioritise the digital pedagogical skills of the teacher educators, with time for teacher educators themselves for experimentation, innovation, digital pedagogical competences on the curriculum.
- Exploring and experimenting with new training models – MOOC, modules, and international collaboration, taking advantage of OER content from EC-funded projects such as ITELab. Investigating the links that can be established with the EC eTwinning-Teacher Training Institutes initiative.

These strands will be brought together in the final briefing paper, to be published at the end of the project (December 2019).

*Note: papers referenced in the briefing are published here.*

1. ITE Monitoring Report 2018, includes the external publications and research papers cited in the briefing.
2. ITELab Case Studies 2018
3. ITE Forum – October 2018 presentation (bringing together the key messages from 2018 ITE Monitoring Report and Case studies)
4. ITE Course Modules Evaluation Report 1
5. ITE MOOC Evaluation Report 1
6. EMINENT 2018 workshop – University of Würzburg and University of Agder
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