D2.4 Report on Student Voices

Summer 2019

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1 EXECUTIVE SUMMARY

As an EC funded Knowledge Alliance project between universities and industry, ITELab fosters innovation and knowledge exchange in initial teacher education (ITE), addressing the issues of how student teachers currently receive training on the pedagogical use of ICT, and the mainstreaming of innovative pedagogical practice that involves ICT.

Throughout this process, the project has involved a core group of a dozen student teachers in the co-design and evaluation of its content. As a result, student teachers have become an integral part of the project, participating in various activities, ranging from attending workshops and conferences, to being part of the ITELab Pedagogical Board.

By working alongside the student teachers, the project team has gained a unique perspective on their opinions, worries and desires. In fact, the student voice has become a positive ‘by-product’ of the project, with many student teachers reporting working collaboratively alongside their educators for the first time. This has provided them with a great deal of confidence and a feeling of appreciation.

Therefore, this report provides details on the student teachers’ involvement in the ITELab project, the activities they were involved in, as well as their opinions. The paper describes the mechanisms developed throughout the project, which enabled student teachers to make their views and opinions heard. Similarly, the paper also presents the student teachers’ opinions on how their ITE curricula is preparing them for their future professions at different school levels and what competences related to ICT they would like to acquire.

Although, due to the thematic content of the project, the ITELab student teacher voice concentrated mostly on student teachers’ digital pedagogy skills, the student teacher voice also looked at what benefits the student teachers could bring to the design of their curricula and whether they feel ‘listened to’ in their ITE institutions.
2 KEY FINDINGS

The table below presents the key findings related to the student teacher voice. The findings are based on the activities performed with student teachers within the ITELab project, up to July 2019 (date of report).

Table 1 ITELab Student Teacher Voice Key Findings

KEY FINDINGS

• **Although the student teachers themselves, possess very good ICT skills, their digital pedagogy skills - implementing ICT skills in their teaching - are not as advanced.** This is due to the fact that possessing ICT skills and knowing what technology could be implemented in pedagogy and have learning outcomes, are two different skills. Not being given a training on digital pedagogy, including practical training to experiment in new classroom settings, can result in future teachers' lack of confidence in using ICT in their teaching or unwillingness to implement technology at all.

• **The vast majority of the student teachers would like to learn more about digital pedagogy and widen their knowledge in terms of new tools and devices that can be used in the classroom.** In general, the student teachers participating in ITELab were very eager to learn more about digital pedagogy and apply the newly gained knowledge in practice.

• **Even when provided training on digital pedagogy by their ITE institutions, most student teachers do not feel prepared well for the challenges of the 21st century, in terms of technology and often must develop their digital pedagogy skills in their free time, after finishing their ITE training.** ITE training which takes into consideration the needs of future teachers might prevent this, although the training needs to focus more on practice, rather than theory.

• **Strengthening the links between schools and initial teacher education institutions can help the student teachers, as well as their educators, stay updated on the 21st century developments in the classrooms.** The ITELab case studies, published in 2017 and 2018, showed that both student teachers and their educators benefit from closer links between ITE and schools. Such approaches show the student teachers new developments in education, provide them with practical tips and let them face real classroom situations, before receiving their diplomas. However, it is recognised that the technology in schools, and the digital pedagogical approaches used by schools' varies considerably.

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1 [http://itelab.eun.org/research](http://itelab.eun.org/research)
- **Student teachers** particularly appreciate being part of wider student teacher and teacher communities and networks, regional, national or Europe-wide, as they feel they can exchange practices and learn from their peers.

- **Student teachers wish to learn about technology** during their ITE training more practically in universities, with opportunities to experiment with active learning spaces and try the technology themselves before going on their teaching practices. If exposed to such an approach, the student teachers might potentially face less anxiety when implementing a tool in their teaching and they will be better prepared to deal with any technical difficulties they might face.

- **The feedback culture** is already present in most of the ITE institutions in Europe, however:
  
  - **The feedback is usually limited to end of course surveys, not allowing the student teachers to fully express their opinions.** There is little evidence from the research and from the student teachers of them being involved on an on-going basis, with the opportunities to express their opinions in terms of the curricula and active involvement in course design.
  
  - **The student teachers might not have the necessary experience and skills to provide a constructive feedback.** In their first years’ of study, the engagement of student teachers in feedback is more limited given their lack of direct teaching experience. In addition, student teachers need to develop the necessary skills to provide constructive feedback and express their opinions clearly. These skills are important both to their future teaching profession, as well as to the feedback and improvement of ITE curricula.
  
  - **The feedback might be asked for either too early in the course, when the student teachers do not know much about the course yet, or too late, during the exam period or when they already left the institutions.** Both situations limit student teachers’ possibilities to express their opinions. If asked too early, they might not have the full overview of the course and if asked too late, the student teachers might be already occupied with other responsibilities, such as exams or summer period.
  
  - **The value given to and importance of the feedback might not be stressed enough by the university.** Many student teachers see providing feedback as something not valued or acted on by the institution. The ITE institutions should also inform the students what purpose will the feedback be used for, so the student teachers understand better why their opinions matter and how it is used.
3 THE IMPORTANCE OF STUDENT VOICE

3.1 CURRENT STATE OF PLAY

The annual monitoring reports\(^2\) published by the ITELab project indicate that European student teachers’ experience of initial teacher education varies considerably, as do opportunities for them to learn about and practise using educational technology.

Desk research in the early stages of the project showed that in some countries, the Netherlands for example, ITE providers – which are usually universities – set their own curricula for ITE; in other countries, a set curriculum or core programme is followed by all ITE providers. These curricula vary considerably, and little has been published about the views of student teachers themselves on the various training programmes. Moreover, where ICT is mentioned in curricula it tends to be vaguely worded and aspirational.

In some countries, there are ICT skills and competences development in ITE policies, although monitoring of their implementation can be patchy. Some policies include certification (e.g. Austria, France and the United Kingdom (England)), others (notably Norway) are based on digital competence being one of the core competences of a qualified teacher. In the absence of certification, policies or clear statements about ICT, its teaching and use ITE institutions tend to develop on an ad hoc basis according to individual tutors’ priorities. In many cases student teachers are expected to pick up digital skills in addition to the prescribed curriculum in their own time.

Published studies analysed in the monitoring reports suggest that, overall, student teachers receive little training in the use of ICT, even less on new technologies and tools (e.g. social media) and learn little about the integration of ICT into teaching and learning. When student teachers do use ICT, it tends to be because of personal competence and interest. Levels of teacher educators’ own competence in ICT and ability to apply it in pedagogical settings may be low, yet student teachers tend to see their tutor as a role model, often throughout their career. Such a state of affairs is all the more disappointing, as, in a 2016 European Commission paper\(^3\):

“New teaching graduates can [...] be an asset to schools as they bring fresh knowledge, often including skills, such as integrating ICT and new media and different perspectives on existing routines and cultures.”

However, ITE research – other than the studies mentioned below – has little to say about student voice: what student teachers can bring to their training – their knowledge and ICT skills – and their views on the content, delivery and value of the

\(^2\) \text{http://itelab.eun.org/research}

\(^3\) \text{Shaping career-long perspectives on teaching: A guide on policies to improve Initial Teacher Education, European Commission, 2015}
training they receive. That is why one of the objectives of the ITELab project is to capture the requirements and concerns of both student teachers (during and at the end of their courses, after they have completed classroom placements) and newly qualified teachers related to the pre-service training they have received related to the use of ICT.

3.2 Student Voice in Creating University Curricula and its Potential Impact

The term ‘student engagement’ is widely used in schools to describe processes and activities that encourage student pupils to actively participate in and take ownership of their learning, yielding positive outcomes in terms of, for example, attendance, behaviour and examination results. Is it relevant in ITE?

Going further, the notion that student teachers are ‘consumers’ of institutions’ products (i.e. courses) is novel, controversial and challenging. Nevertheless, it is gaining traction as means of designing needs-based curricula and effective teaching. A number of studies explore the notion.

Brooman et al (2015)4 presented a small-scale case study illustrating the potential value of enhanced student participation in higher education curriculum development, in this case, law, “in response to an absence of research in this area.” Lecturers and students had divergent views of the effectiveness of a staff-led redesign of a module curriculum. Focus groups were used to investigate reasons for the opposing views informing a second, more successful, redesign evidenced by improved feedback, attendance and marks. A closer alignment with the ‘student voice’ facilitated the emergence of perceptions not revealed by usual feedback routes. The results of this study “challenged staff assumptions about the learning and teaching process. […] Educators cannot assume that their curriculum design will be welcomed by students.” Although not specifically about ITE, these results and the techniques taking into account student voice was heard – chiefly the use of focus groups – could well transfer to ITE.

A study by Maslin, P., and Smith, N., (2017)5 of student voice in ITE looked at the issue of student teachers' confidence and competence to use actively digital pedagogy being undermined by a mismatch between digital expectations and the reality of programme experience. The authors gathered the perspectives of graduating student teachers:

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teachers looking back on their studies through an anonymous online questionnaire (n=35, a 50% response rate from the sample). Analysis of the responses suggests:

- “Digital confidence is clearly linked to practicums (and not to coursework)
- Students clearly experience coursework and practicums as separate things
- Students associate their ITE experience with coursework, not practicum
- Confident students do not expect their ITE to equip them digitally
- The students’ experience of ITE did not build their digital confidence.”

Two models are proposed following analysis of the student teachers’ views: the first is a whole course strategy for ITE to “empower practicum [i.e. teacher practice, school placements] as the nexus for the development of digital pedagogical confidence” and the second “provides an approach ITE could use to create space in coursework and practicum to safely develop digital pedagogical confidence.” The conclusion is highly critical of ITEs’ development of student teachers’ pedagogical digital competence:

The student data gathered in the research correlated with the emerging picture in academic literature of a mismatch between student teachers’ digital expectation and the actual reality they experienced in ITE in being able to find the support frameworks needed to develop digital pedagogical confidence for professional practice. A range of challenges emerged, including disconnected learning space, a lack of intentional digital space and ineffective methods, and all contributed to the development of this mismatch that often left student teachers digitally disempowered rather than confident at the conclusion of their study.

Following these research findings, in particular little training on ICT, the utilisation of the student teacher voice and the student teachers’ role in the design of their curricula, the ITELab project adds further support to these research findings and explores what additional added value could the student teacher voice bring to ITE training.
4 ITELab: Student Voices

4.1 Student Teacher Voice

Being aware about the lack of student teacher involvement in design of their curricula and having little space for expressing their views, opinions and desires regarding the training they are provided, ITELab developed new approaches to improve student teachers’ digital competences, while, at the same time, providing them with a voice on their preparedness for their future profession.

While ITELab university and industry partners have been co-designing course modules and an online course, the process has involved a core group of a dozen student teachers directly in the project as student teacher ambassadors, in addition to the wider group of students in their universities who have been involved in the trialling and evaluation process (surveys, focus group). The student teacher ambassadors were selected by the participating universities, each university selecting up to four student teachers. The student teachers’ role and type of involvement has varied, ranging from participating in the Pedagogical Board, co-creating and evaluating course modules and online course, participating in the ITE Forum discussions, attending workshops and focus groups and promoting the student voice through their networks and university channels.

Table 2: ITELab Student Teacher Ambassadors 2018/19

<table>
<thead>
<tr>
<th>Name</th>
<th>Partner University</th>
<th>Country</th>
</tr>
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<tbody>
<tr>
<td>Seamus O’Sullivan</td>
<td>University College Dublin</td>
<td>Ireland</td>
</tr>
<tr>
<td>Chloe Stanley</td>
<td>University College Dublin</td>
<td>Ireland</td>
</tr>
<tr>
<td>Aoife Carew</td>
<td>University College Dublin</td>
<td>Ireland</td>
</tr>
<tr>
<td>Mirko Susta</td>
<td>University of Perugia</td>
<td>Italy</td>
</tr>
<tr>
<td>Valeria Vagnarelli</td>
<td>University of Perugia</td>
<td>Italy</td>
</tr>
<tr>
<td>Niki Tash</td>
<td>University of Wurzburg</td>
<td>Germany</td>
</tr>
<tr>
<td>Emma Palmer</td>
<td>University of Newcastle</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Rita Catarina Luís Laranjinha</td>
<td>Polytechnic Institute of Santarém</td>
<td>Portugal</td>
</tr>
<tr>
<td>Maria Catarina Canelas de Sousa</td>
<td>Polytechnic Institute of Santarém</td>
<td>Portugal</td>
</tr>
<tr>
<td>Maria Alburquerque</td>
<td>Polytechnic Institute of Santarém</td>
<td>Portugal</td>
</tr>
<tr>
<td>Juliana Lopes Peixoto Cunha</td>
<td>Polytechnic Institute of Santarém</td>
<td>Portugal</td>
</tr>
<tr>
<td>Elin Maria Berg</td>
<td>University of Agder</td>
<td>Norway</td>
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</table>

Throughout this involvement, the project team has been monitoring the student teacher voices, their opinions and desires for any changes related to digital competences. Moreover, the project has also provided the student teacher...
ambassadors with various networking opportunities, where they were given opportunities to interact with the project’s industry partners and the policy makers at the national and European level.

Where more explanations were necessary, or new outcomes were produced as a result of the student teacher voice, the student teachers were asked to participate in focus groups, interviews or surveys, to gain a better insight on their experience and to provide them with a space for discussion to find and offer solutions.

Linking to previous research findings on student teacher voices, and the thematic content of ITELab, the project concentrated on two main aspects concerning the student voice:

- Student teacher digital pedagogy competences; and
- Student teacher voice in design of the ITE curricula.

In addition to developing a framework that enabled the project to work with and capture the ‘student voice’ requirements and concerns of student teachers, the student teacher competencies and their preparedness for the classroom were also researched through the course module and MOOC evaluation work carried out by University of Würzburg.

University of Würzburg, led the formal evaluation of the trialling of the co-designed content (course modules and online course), following a methodology that captured the views of student teachers, alongside teachers, university teacher educators and industry partners. The methodology and reports are published here, with key points summarised in the section 4.1.1 below.

### 4.1.1 Student Teacher Competences - Module and MOOC Evaluation

In total, ITELab has co-designed and tested three course modules dedicated to developing good practices related to digital, online resources and networks (Module A), designing and teaching in digitally enhanced classrooms (Module B) and exploring principles and practical issues relating to working with learners (Module C). The online course (MOOC) was a short, practical course for future teachers aimed at becoming a ‘networked teacher’ learning about collaborative and active approaches. (ref. ITElab course content). The course modules and MOOC were delivered in English language, with local support by the universities. Module handbooks for Module A and B, and MOOC videos are available in Italian, Portuguese and Norwegian (Module C, Autumn 2019).

The course module A and MOOC were first piloted in Spring 2018, with the aim of evaluating student teachers’ experience and test the materials before the second cycle of trialling in Spring 2019 (module A, B, C and MOOC). For many students, the modules and/or MOOC were the first courses dedicated to digital pedagogy practice and innovative pedagogical practice that involves ICT. After
the pilots were finalised, the student teachers followed the University of Würzburg content evaluation methodology filling out a survey and a focus group, evaluating and describing their experience with the courses, provide suggestions for improvements and identify any drawbacks. The University of Würzburg evaluation process is explained in more detail in section 5.3 below, with the evaluation reports published here.

One of the findings highlighted that the student teachers would have appreciated being taught more about the use of social media in the classroom\(^6\), such as Facebook, as well as other online communities. This supported the launch of the Student Voice Facebook page (ref section 5.4) and the ‘Networked Teacher’ MOOC.

In the focus groups, some student teachers, particularly those whose native language is other than English, said that they would have appreciated if the language contained in the courses was simpler, contained clearer explanations and instructions or was delivered in simpler English. Optionally, some student teachers would have preferred the courses to be delivered in their native languages. This type of feedback was fed into the next iteration of the co-design, with for example, universities encouraged to provide support mechanisms to help students collaborating internationally with their peers, in the English language MOOC and translation of videos into the three main project partner languages (IT, NO, PT).

Despite the language difficulties, the majority of the student teachers found the course modules and/or MOOC very helpful and relevant for their future career. They reported an increase in acquired knowledge about technology and tools that can be incorporated in the classroom. Moreover, student teachers reported a change in their attitudes towards technology, the importance of professional learning networks (PLN) to their on-going professional development, and more awareness about their role to educate their pupils for the 21\(^{st}\) century.\(^7\)

4.1.2 ITELab Case Studies 2018

In 2017 and 2018, ITELab published a set of eight case studies (here), researching how student teachers are being prepared for the future classroom, how their ITE institutions respond to the drive for more schools and initial teacher education and how they ensure that their students are practically ready to assume their roles. The 2018 case studies featured partner universities: University of Agder (UoA, Norway), University

\(^6\) Although the course modules did implement Twitter, the student teachers preferred also other social media instruments to be included in the curriculum.

\(^7\) ITELab (2018) ‘Course Module Evaluation Report I’ Available at: http://itelab.eun.org/documents/452109/470959/D5.2+ITE+Course+Modules+Evaluation+Report1_fin.pdf/1ab1f2d5-6487-4e7a-a467-acd9a511e31a
College Dublin (UCD, Ireland), Newcastle University (UoN, United Kingdom), University of Perugia (UoP, Italy) and the Polytechnic Institute of Santarem (IPS, Portugal).

Two primary approaches to improving student teachers’ preparedness for their future profession were identified:

- Closer links with schools and initial teacher education; and
- Emphasis on developing digital competences.

There are significant differences between student teachers training to be Primary teachers (UoP, IPS) and Secondary teachers (UCD, UoA, UoN), and also the approaches between countries. For example, training to be primary teacher typically involves a programme of study over 3 to 5 years. Training to be a secondary teacher is a Master’s one year conversion course. This impacts when in their studies, they are introduced to direct school experience. Master’s level Secondary student teachers typically based in schools for 2 to 3 days a week. Primary student teachers direct school experience increasing in their final years.

4.1.2.1 Schools and initial teacher education approach

The published case studies showed that, to support students’ skills and confidence, the selected universities gradually increase their cooperation with schools. Developing the closer links with schools helps bring current school and classroom practice into initial teacher education, ensuring that the student teachers are not only theoretically, but also practically ready for the classrooms. For example, the University of Agder organises online training modules co-developed by schoolteachers and university lecturers and implements a scheme, where student teachers take over the teaching in a school, including the role of the school headmaster for three weeks. University College Dublin employs teachers as methods lecturers and their student teachers spend approximately 50% of their time teaching at schools. At the University of Newcastle, student teachers spend approximately two thirds of their time in placement at schools, with the university reviewing their own curriculum to inspire the student teachers on new ways and to experiment with digital pedagogies in their practice. A small piece of research by the University of Newcastle with their student teachers showed, however, how varied their experience was in schools in supporting the development of digital pedagogical practice.

4.1.2.2 Digital competences

University of Perugia and the Polytechnic Institute of Santarém concentrate on equipping their student teachers with digital competences within their programmes of study. Both universities have developed online courses, for both student and in-service teachers, on use of ICT in inclusion and digital pedagogy. To help develop their skills in the early years of their 3 to 5 year programme of studies to become primary teachers, where students spend the majority of their time in the universities (increasing schools placement in later years), Polytechnic Institute of Santarém have created several flexible learning spaces, with various seminars (e.g. project based learning and
collaboration), where the student teachers have a chance to develop their digital pedagogical skills.

In summary, in order to prepare their student teachers better for their future profession, and to meet the demands of the changing 21st century employment market, the case studies show that the universities are cooperating more with schools and in-service teachers in the initial teacher education curriculum; and introducing online learning courses, as well as creating new learning spaces within the universities to provide their student teachers’ with the opportunities to learn and practice their digital skills competences. This comes as a response to the increasing importance of teachers’ digital pedagogy skills, making teaching more relevant for the future and building the linkages between schools and the ITE institutions.

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5 MONITORING STUDENT TEACHER VOICE

5.1 METHODOLOGY

The twelve student teacher ambassadors (ref Table 2) have been actively involved in ITELab since the second year of the project (2018). They were appointed following the course design and evaluation workshop with student teachers which took place in June 2018. In addition to taking part in the co-design and evaluation of the course modules and the online course, the student teacher ambassadors have been offered a variety of ways to engage with the project, as presented in the table below.

Table 3 Student Teacher Ambassadors ITELab activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>Course design workshop and Focus Group evaluation 2018</td>
<td>Attended by 18 student teachers from the 5 ITELab partner universities, course co-design partners’ workshop and focus groups on course evaluation of ITELab course module and online course.</td>
</tr>
<tr>
<td>Facebook page ambassadors</td>
<td>6 student teachers are active Facebook page ambassadors, promoting and participating in the page.</td>
</tr>
<tr>
<td>Workshop with wider stakeholders 2018</td>
<td>5 student teachers presented and led the workshop discussion on initial teacher education with stakeholders at European Schoolnet’s EMIMENT conference 2018. Similarly scheduled for EMINENT 2019.</td>
</tr>
<tr>
<td>School Innovation Forum 2019</td>
<td>4 student teachers presented their views on their needs related to digital pedagogy during the June 2019 Forum.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Throughout the project, several student teachers were interviewed to express their opinions on courses, ITELab and their preparedness for their future profession.</td>
</tr>
<tr>
<td>ITE Forum</td>
<td>3 student teachers participated in the online ITE Forum discussions between</td>
</tr>
</tbody>
</table>

Co-funded by the Erasmus+ Programme of the European Union
## Online student ambassadors focus group
4 student teachers met online to discuss their digital pedagogy skills and their involvement in design of the ITE curricula.

## Pedagogical board
2 student teachers are members of the ITELab pedagogical board.

## Online Survey
In June 2019, an online survey was launched in order to collect views from more student teachers on digital pedagogy and ITE curricula. 12 student teachers were asked to disseminate the survey and asked their peers to contribute.

The project team has been encouraging and monitoring student teacher voices since their participation in the project. Apart from the course modules evaluations, the student teachers were also asked about their skills, their opinions on their curricula and whether they would like to be more involved in the ITE curriculum design at their universities. The results of this monitoring are presented in the following chapters.

### 5.2 Motivation to join ITELab

The student teacher ambassadors were asked to contribute to this report, specifying their motivation to join the project, how beneficial they think the course modules and the MOOC have been for student teachers. Additionally, they were asked to provide information on where they acquired their digital skills, what digital skills they possessed prior to joining the project and how their involvement in the project changed their view on using technology in the classroom.

Four student teachers agreed to write their parts for the report: Séamus O’Sullivan (University College Dublin), Niki Tash (University of Würzburg), Mirko Susta (University of Perugia) and Valeria Vagnarelli (University of Perugia).

The inputs show that the student teacher ambassadors joined the project mainly because of particular interests, such as interest in technology and learning more about the practical use of technology in the classroom, or interest in digital literacy. All of the student teachers were motivated by their teacher educators to join the project.

Apart from learning more about implementing technology in the classroom, the student teachers particularly appreciated being part of the European-wide student teacher network. As part of the project, they could interact with other peers from
across Europe, compare their experience and practices and discuss the differences in the use of technology.

All of the student teacher ambassadors agree that their ICT skills have improved as a result of taking part in ITELab as well as their digital pedagogy skills. In comparison to the period before taking part in ITELab, they now feel much more confident to implement technology in their classrooms. Similarly, the student teachers report learning a lot about the tools that could be used as digital educational tools and what learning outcomes they could bring.

### 5.2.1 Mirko Susta, University of Perugia (IT)

My name is Mirko Susta, I’m twenty-seven years old and I’m from Italy. I’m a student teacher from the University of Perugia and I’m studying to become a primary school teacher.

I’ve joined ITELab project because I have always had passion for digital technologies, and the possibility to learn new ways of using technology at school got me interested immediately.

I was part of the pilot group of the project, joining the MOOC and the Module A. B experiences gave me very much in terms of knowledge and understanding the use of digital technology in education. Another aspect which I enjoyed was the possibility to connect with other student teacher from all over Europe, we’ve reflected together on our practices and on our experiences.

I gained digital skills mostly at university: I already used digital technology before university, but in that period it was rather an unconscious use; during the university period I learned what it means to use technology with competence. Thanks to the course of education technologies and to ITELab project I’ve reached an awareness of using digital technologies and how I can use ICT to improve my digital pedagogy.

The education technologies course gave me knowledge and improvement of my digital skills; we were also provided space related to the subject to create activities with ICT. I surely will use digital technologies in my future classroom and in my profession, thanks to university and to ITELab too; both experiences made me grow in my professionalism.

Thanks to ITELab, I now know more instruments and more tool for my teaching. I really appreciated the PLN (Personal Learning Network) concept: I had never thought of social networks as professional teaching tools. One of the aspects that I like about the course is the new way to think about tools and instruments.

Another aspect that gave me new possibilities, and I’ll surely use in the future, is the practice of registering the lessons by using video camera: it’s very important to see the class and how do you approach your teaching while you’re in action in the class; I think this practice, to reflect by watching you and your pupils, gives you more awareness and allows you to improve your teaching.
5.2.2 Niki Tash, University of Würzburg (DE)

My name is Niki, I am a 23-year-old student teacher from Würzburg in Germany with English as major subject and German studies, mathematics and physical education as minor subjects.

I became a part of the ITELab project, because the supervising professor of my final thesis thought I might be interested in an innovative project that included learning about digital skills and ICT. As my final thesis discusses possibilities on how to support primary school students’ information literacy with the use of digital media, I was very pleased with the offer.

Another reason for joining the project, was the fact that my studies have not taught me very much about the influence educational policy making has on my future job and in how far we, future teachers, can influence educational policy making ourselves. Furthermore, I expected that becoming part of an international network, with student teachers from all over Europe, would be a once-in-a-lifetime experience.

Being recruited as student ambassador of the Student Teacher Voice Network, my main task was to spread information about the project. A very important tool in order to do so, was the Facebook page we established. In online conferences and WhatsApp Chats we discussed ideas on how to present the benefits and advantages of projects like this one. Interesting competitions, surveys, leaflets and a free MOOC for student teachers concerning the topics digital media and ICT were created. I encouraged numerous fellow students to join as we all wanted to improve and update our digital skills. In particular, I enjoyed expressing my opinion openly on several social media channels and experiencing how students and teachers from other countries use new technologies to improve their teaching. Thus, I was able to become familiar with various new methods and topics for future lessons and I am more than excited to apply them.

I have always been interested in the use of technology, so I acquired most of my digital skills through everyday use or watching online tutorials. Some skills, like the use of smartboards and how to make proper use of them, were acquired in advanced education seminars on media in schools. Internships, especially the one related to my final thesis, helped me deepen and gain practical skills. Nevertheless, education about implementing technology in classes should be dealt with more at university, as our knowledge and information society is always changing and technologies are constantly developing.

Before the ITELab project, I was already planning the use of digital media for a unit, in order to find out if information literacy could be enhanced by researching a topic with the use of tablets, Bookii pens and Tonie boxes. This idea was realized during my last internship and positive results were achieved. Considering the results of this unit, I am very confident that we are able to make a positive contribution to education when ICT and other media is engaged in a meaningful manner.

During the project I have learnt that connecting to other students and experienced teachers can be inspiring and bring forward new and innovative ideas. I think it is of great importance, to stay interested in and open to new findings and challenges and the ITELab has proven to me that international projects like this one, constitute a great opportunity to make a change and improve the quality of education. But not only big project like the ITELab should bring teachers together. Even little teaching staffs should meet up and carry out joint brainstorming to upgrade their teacher qualifications.
As the 21st century represents a time of innovation, creativity and diversity, universities should adapt and do so as well. Traditions can be followed as long as future is made possible. With this in mind, let us create an educational future that opens endless possibilities for our students to become what they want to become and give them new impulses to create the future for their own future students.

5.2.3  Valeria Vagnarelli, University of Perugia (IT)

I am Valeria Vagnarelli and I’m 24 years old; I live in Perugia and I’m a student teacher. I’m attending the fifth year of the Science of Primary Education of the Perugia’s University.

After the exam of education technologies held by our lecturer Professor Floriana Falcinelli, she asked me to participate at the ITELab project in 2017. During 2018, I was involved in Module A and MOOC; afterwards, I became a Student Teacher Ambassador and disseminated information about the ITELab Project.

I was honoured to have been involved in this project because I can see a different and interesting reality from the national one. I could compare with student teachers and trainers from other country and discovered new ideas on which to refer. I learned the benefit of the technology and how use it; in particular the importance of teachers’ formation in 21th century.

During this year, 2019, I participated in the ITELab project, spreading its ideas and principles to other student teachers. I provided information and guidance to student teachers who wished to take part in the project or wanted to take the courses.

Before the course of education technologies, I was sceptical about the use of technologies in the classroom. More exactly I had some doubts about their benefits. After that, my point of view changed, and I became curious about this scope.

I have an average knowledge about ICT and most of this knowledge has been gained thanks to ITELab project; now I’m quite confident with the using of technology and I try to use technology in every discipline. This because I have seen that they could be a great support of the learning and inclusion in the class.

From the project, I have learnt to select the adequate resources for the learning, to use Twitter and I discover its training side; I learn the importance of formation course, also in its online forms and I learn one thing that a teacher cannot do: knowing how to change one’s point of view and see in the comparison an opportunity for growth.

5.2.4  Séamus O’ Sullivan, University College Dublin (IE)

My name is Séamus O’ Sullivan. I am 27 years of age. I’m Irish and have attended University College Dublin from 2017 to 2019 studying my Professional Masters in Education.

I volunteered to take part in the ITELab project in my first year of my Masters program, after it was offered to us by one of the teacher educators in the department. I decided that it is important for all teachers to become acquainted with the technology available in education, ensuring that they are make full use of all resources available so that students achieve the best learning outcomes. I expected that the project would give me some insight into the use of technology and the best ways to implement it into my practice.

I was briefly involved in the Module A in 2017, however, because of a scheduling conflict I could not fully participate. Although, I was selected to attend the 2017 June Workshop in Brussels, where I gained further insight into the project, the project partners, and main aims.
of the project. I was then included in the Student Voice and given the opportunity to take part in the second running of Module A in September 2018 and to complete the second installation of the MOOC in February 2019. In the meantime, I was selected to be Student Voice representative of the Pedagogical Advisory Board and attended the EUN conference, Eminent, in Lisbon in December 2018. Most recently, I attended the School Innovation Forum in June 2019. I have thoroughly enjoyed all these events, gaining more than I expected when first signing up for the project; I have acquired a much more in depth knowledge of the uses of technology in the 21st classroom and a better understanding of the relevant concepts.

Before the ITELab project, my digital competencies were limited – though, not non-existent. I had taken a Digital Humanities module in my M.Phil. in Classics, and I had some knowledge of the ways by which we might apply technology. I had also some knowledge of ICT through secondary school and computer games – but this was targeted at very specific uses of technology in recreation (games), presentation (PowerPoint), or composition (Word). I had been given some hints for the use of technology by my subject methodology lecturers and tutors. However, we rarely discussed what we used and were rarely given more than a superficial education in the technologies, their applications, and the importance of related pedagogical theories with which the technology must work.

My competencies for the use of technology in the classroom was quite limited; even though, I had always intended to use technology in my classroom, I was often at a loss as to where to start. However, now that I have taken part in the project, I intend to use technology much more often – within the limitations of the school context. I feel more confident and capable than before.

The most important things I have taken from the project is perhaps this confidence. However, I have also taken away much more than technological and pedagogical knowledge. I have learned the value of created a social network of teachers in various school contexts, from various backgrounds; their experiences and contexts have often enlightened my own. Furthermore, I have gained insight into the different kinds of relationships which lay behind the developments in educational practice: a look at policy making, industry, and the universities. The experience has taught me much more than I would have otherwise had I not taken part in the project – few trainee teachers see this side of education and its importance to the development of their own practices.

I think it is vital that we continue to support the education of teachers in their initial teacher education in their use of technology. The world is always changing, and it is important that teachers are given the knowledge and skills to work in that ever-changing environment. However, what is perhaps most importance is a unity of purpose within education, particularly in regard to the relationship between schools and universities, policy makers, and industry. It is often the case that what I have experienced in the school is in conflict with what I have learned in University and through this project. With better leadership from policy makers, I believe there could be more harmonious synchronisation between the theory learned in universities and the policies and practices of schools.

5.3 Workshop with Student Teachers/ ITE Focus Group Discussion

The workshop with student teachers/ITE Focus Group took place in June 2018, at European Schoolnet’s Future Classroom Lab, with approximately 18 student teachers from each of the 5 ITELab partner universities, invited to attend and participate both in the focus group, and to work with all the ITELab partners on the on-going co-design activities supporting the innovative content being development within the programme (student teacher MOOC, university teaching modules).
The methodology for the ITE focus group was set out by the project’s evaluation partner, the University of Würzburg and is detailed in the evaluation reports D5.2 ITE Course Module Evaluation Report 1, and D5.3 MOOC Evaluation Report 1. Here.

In summary, the methodology leading up to the June workshop included student teacher questionnaires (initial MOOC design - December 2017, MOOC evaluation – March 2018, module evaluation – March/April 2018).

University of Würzburg analysed the results, prior to the June workshop to design two separate ITE Focus group discussions, one with the student teachers, the other with the teacher educators. Alongside these focus groups, the survey questionnaires, together with the focus group discussions were then analysed, with the results written up in the two Evaluation Reports (D5.2, D5.3).

The evaluation findings were fed into the further cycle of co-design and update of the student teacher MOOC and university teaching modules tested in Spring 2019 and for further rollout planned in Autumn 2019. Updates of the two Evaluation Reports will be published in December 2019.

Top-level findings from the engagement with the student teachers, were that they liked the interactive and task-based nature of the work to develop their digital pedagogical skills and competences, the exchanges of experiences and international collaboration, with a request for more practical activities and tools to help them in the classroom.

Figure 1 Codesigning material, June 2018

Student teachers and ITELab partners working on co-design of materials, June 2018.

Figure 2 ITELab Workshop, June 2018
5.4 Facebook Page

As a result of the workshop 2018, and particularly after hearing how much the student teacher ambassadors enjoyed interacting together in an international environment, the project team decided to create a Facebook page, connecting together student teachers from across the globe, providing a virtual space for the student teachers to interact in.

The Facebook page was first established in December 2018 and firstly consisted only of the ITELab student teacher ambassadors. However, the ambassadors were asked to connect with their university peers to join. Student teacher related posts were created, to get attention from more student teachers and grow the network.

The posts in the page concerned mainly the use of technology in the classroom, digital pedagogy and various tips and tricks for future teachers.
However, the page also promoted the online course Networked Teacher and advertised its online events. In order to reach more student teachers and engage in a discussion, various activities were launched through the group, such as the Wall of Future Teachers, where the student teachers were asked to post a picture of themselves together with their favourite education-related motto. Student teachers could vote to select their favourite photo and picture.

Figure 4 Wall of Future Teachers on the Facebook Page

As of June 2019, the page has 716 likes, 770 followers and is led and coordinated by the student teacher ambassadors and the ITElab project team. In the future, the Facebook page will serve as a dissemination channel for the rerun of the online course Networked Teacher in October 2019 and as an international community for student teachers, enabling them to exchange opinions, experiences and best practices. The page can be visited on the following link:
https://www.facebook.com/itestudentvoice/

5.5 MOOC INTERACTIONS

In Spring 2019, ITElab delivered an online course designed for student teachers in Europe on the innovative pedagogical use of ICT for teaching and learning.

The MOOC ran in March 2019. It was joined by over 3700 participants from across Europe and beyond. The course was moderated by Bart Verswijvel, a Senior Adviser for European Schoolnet, and Arjana Blazic a Teacher Trainer at the Croatian Ministry of Education. The participating student teachers had numerous possibilities for
interacting between each other, creating an international community. In total, there were three tools allowing interaction during the MOOC:

- Facebook page;
- Twitter; and
- Padlets and the course forum.

5.5.1 Facebook page

The Student Teacher Voice Facebook page has regularly posted updates and reminders regarding the course deadlines, live events, course work and reminders about the post course survey. The participants were invited to discuss and share suggestions for resources.

Figure 5 Facebook page post and discussion
5.5.2 Twitter discussions

The most active online participation was concentrated on Twitter, where, at the beginning of the course, the participants were asked to use the hashtag #ITELab_eu. The moderators encouraged the discussions by posting various questions, asking for feedback and opinions on the MOOC content. At the beginning of the course, the
student teachers were invited to attend a Twitter chat, an introductory live event, which introduced participants to the course and asked for their opinions on certain matters.

During the Twitter chat, the participants were asked to introduce themselves. Then, five more questions were asked targeting student teachers and their experience:

1. Please introduce yourself
2. Why do you want to be a teacher?
3. How can we prepare teachers to meet the challenges of the 21st century classroom?
4. What’s your message for your minister of education?
5. What are the benefits of connecting with other teachers on social media and learning in online communities?
6. Who or what inspires you in your teaching profession?

**Why do you want to be a teacher?**

Most student teachers participating in the event would like to become teachers for common reasons. These include spreading a passion about their subjects, such as maths or chemistry and motivate their future students to excel in these subjects. Others would like to prepare and shape the future generations and help them reach their potential and achieve their goals. Some student teachers also would like to be a part of something they believe is important and provides them with an opportunity to influence future generations and the way they are shaped.

**How can we prepare teachers to meet the challenges of the 21st century classroom?**

Many of the student teachers believed that meeting the challenges of the 21st century classroom is possible, however, with the right equipment, and the right application and use of this equipment. Putting emphasis on collaboration and teamwork was also highlighted as well as reflecting on and adapting nowadays practices.

**What’s your message for your minister of education?**

Student teachers would advise their ministers of education to implement more technology in the classrooms and make sure the national education systems remain democratic and stay up to date with the current progress.
What are the benefits of connecting with other teachers on social media and learning in online communities?

Student teachers appreciate to be connected particularly to exchange and share ideas, learning from each other, share best practices and collaborate. Also, connecting student teachers and teachers together seems to provide new opportunities for sharing new techniques and getting opinions of others on implementing them in the classroom and learning what works and what does not for difficulties they might encounter in their profession.

Gizem Burcu YURTSEVEN @gizem_burcu · Mar 7

#ITELab_eu A5: I think connecting with other teachers on social media helps us gain a different point of view and it makes our lifes easier when we try to catch up with the educational innovations.

Lorna Levack @LevackTeachTech · Mar 7

A5: There are so many! Sharing ideas, hints and tips! Seeing what others are trying! Getting involved in chats like this. I have gained so much since I joined Twitter. #ITELab_eu
Who or what inspires you in your teaching profession?

The biggest inspirations for current student teachers or newly qualified teachers are their previous and current teachers. To face the challenge of preparing their students for the 21st century and providing their students with the 21st century skills, the student teachers see the importance of creating communities and interconnecting teacher networks to support interaction between teachers and creating and attending continual professional development, such as the MOOC Networked Teacher.

5.5.3 Course platform, padlets and learning diaries

Lastly, the discussions among the participants was also encouraged on the course platform, through forums, padlets and learning diaries. The analysis of the padlets and learning diaries shows that the biggest identified challenges faced by student teachers are, to name a few, personalised learning, or making sure each student participates equally in the classroom, motivating students and meeting all the expectations awaiting teachers in the 21st century.

Through their learning diaries, many student teachers also acknowledged the importance of continual professional developments, creating communities of teachers around Europe and beyond as well as the importance of non-formal learning. The student teachers reflected on creating their own learning networks.

Figure 6 Participant' learning diary
5.6 **School Innovation Forum 2019**

The School Innovation Forum took place in Brussels, on 20th-21st June 2019. It was organised by the European Schoolnet. The main purpose of the Forum was to gather together a community of key stakeholders (industry, universities, Future Classroom Lab ambassadors, policy-makers from Ministries of Education and EC) in the field of innovation in education. The participants were gathered to explore new ways of working together and find new solutions to implementing innovative practices.

ITELab used this opportunity to invite four student teachers from partnering universities, University College Dublin, Polytechnic Institute of Santarém and the University of Agder to attend the event and present their views, needs and opinions on their preparedness to implement technology in their teaching profession. The four student teachers were asked to prepare a short, 15-minute presentation, which they presented during the first day of the forum to approximately 80 stakeholders.

![Figure 7 Student Teacher Ambassadors with project team during the School Innovation Forum](image)

The student teachers presented their experience with ITELab and explained the importance the courses concentrated on digital pedagogy carry, such as those that have been part of ITELab. For the four student teachers, taking part in ITELab was a unique experience, since for all of them it was the first time they actively learnt about digital pedagogy, practical implementation of innovative tools in the classroom and were a part of an international community of student teachers. In their own words, their experience within the project brought them new skills, new knowledge and more confidence to use technology in the classroom.
However, the student teachers would have also appreciated earlier interventions or introductions to technology in their ITE curricula, to ensure better competencies and confidence. Similarly, the student teachers do not feel being prepared well enough in terms of digital pedagogy, which sometimes results in stressful situations, particularly when using a new device during their classes. Moreover, most of them were still insecure about whether the tools they were using were used correctly. Additionally, the student teachers would appreciate space and time throughout their studies to try the technology out themselves, rather than just hearing how to implement it.

All of them agreed that creating international networks, in this case European-wide ones, would help them exchange best practices and see what technology and how other student teachers use in their countries. To expand their classes internationally, technology could be used for that.

**5.6.1 School Innovation Forum Interviews**

On 21st June 2019 the attending student teachers were asked to participate in recorded interviews. The purpose of the interviews was to create a promotional material for the ITelab MOOC rerun in the Autumn 2019; and to gain more detailed opinions on their preparedness for their future profession. Each participant was asked four questions, which expanded on the opinions presented in the presentation the previous day.
1. Based on your experience gained through the teaching practice at your university, did you feel like the courses you took during your studies were relevant and prepared you well for teaching in terms of digital pedagogy for your future profession?

2. Do you think that the ITE curriculum should be adapted to the needs of the 21st century?

3. Were you ever asked to provide a feedback on your curriculum?

4. Did you feel like your voice was listened to in ITELab?

**Relevance of ITE curriculum**

All the interviewed students felt that their current courses prepared them for the present classrooms, but yet, they do not feel ready to face the challenges of the 21st century. Taking into account that the equipment in the classrooms differ, depending on the school, they would appreciate more time devoted to digital pedagogy and learning new techniques and tools. This way, if the student teachers encounter a new tool in the classroom, which they do not know the purpose of, they will have more confidence to try it and face less embarrassment. Even though some of the student teachers do get taught how to implement technology in the classroom, the amount of time devoted to digital pedagogy is negligible in comparison with other subjects. As a result, the student teachers do not feel ready for the challenges of the 21st century and lack confidence in implementing ICT in the classroom.

**Adaptability of the ITE curricula**

Consequently, all the students agreed that the current ITE curricula should be adapted. Often current curricula has not been updated for some time, because they are not perceived as outdated. In particular, the curricula should take into consideration the new skills and competences of future teachers, which will be in demand in the future. In general, the curricula were perceived as too theory based. Likewise, some schools need to adapt their attitudes to the use of technology as an educational tool. The student teachers criticised that they could not implement ICT in the classes, as many schools forbid or do not recognise some devices as educational.

The student teachers also felt that their curricula did not reflect the school-based reality enough. Many of them encountered new situations when doing their practices at schools and found out that some of what they had been taught was applicable in the past, but not nowadays.

**Feedback culture**

All of the interviewed student teachers were asked to provide a feedback for their curricula, however, the perception was that few changes were applied as a result of the feedback. The feedback was usually asked in either a form of a discussion and/or a survey. The feedback is usually asked to be provided twice: during the course and
after the course has finished. Despite the fact that very few changes were applied to the curriculum, as a result of the provided feedback, the students did feel their voice was being heard, although not always acted upon in certain areas. The questions they were asked were often steered towards certain topics, such as the functionality of the equipment in the classes (where this is identified as a problem, it is acted on). Interestingly, the feedback on the curriculum was more prone to be asked particularly when there were new course modules introduced with less feedback being asked for older courses.

Comparison with ITELab

In comparison, the student teachers felt like their voice was heard in a different way in the ITELab project. The student teachers said that, for each of them, it was the first time they were individually asked to contribute to course module design with their thoughts and experiences. Similarly, for the first time they were able to express various ideas, brainstorm together alongside all various stakeholders and have a freedom to express their opinions without judgments. The student teachers also appreciated the chance to interact with the industry partners and input ideas to help them develop products for the future classrooms.

5.7 ITE Forum

ITE Forum is a series of thematic seminars, including short reflective videocasts, linked to the project discussion theme. The discussions are led by university and industry experts.

In February and March 2019, ITE Forum has organised two thematic seminars, devoted to the student teacher voice, entitled ‘Hearing the Learner’.

5.7.1 Hearing the Learner 1

The first session took place in February 2019 and was devoted to the view of student teachers as customers of their ITE institutions. The session also explored student teacher involvement in the design of their ITE curricula. The joint chair and discussants included Dr Conor Galvin (UCD) and Peter Claxton, from SMART Technologies and two student teachers from the University College Dublin.

Throughout the discussion, it was suggested that the students should be viewed as university customers, entitled to provide feedback for the services they receive. However, it was also observed that under some circumstances, particularly in the early years at university, students might lack the necessary experience and skills to provide a constructive and useful feedback. As a result, some student teachers can feel intimidated when asked to do so. Thus, as a starting point, it was proposed that students need to develop and practise the skills needed to provide appropriate feedback, which can be captured and used by institutions and tutors. Indeed, future teachers would find such a skill useful in the span of their
professional teaching careers. The session concluded that bringing in student voices and providing them with an opportunity to express their opinions benefits both students and the initial teacher education providers. It can result in better quality courses, better outcomes for students and it can empower students by allowing them to manage their own learning processes.\(^9\)

### 5.7.2 Hearing the Learner 2

The second session took place in March 2019. It continued the dialogue on the role of the student teacher as a university customer. In order to discuss the topic in more depth, more discussants were invited to contribute to the session: Dr Conor Galvin from University College Dublin, Peter Claxton from SMART Technologies, Dr Eli-Marie Danbolt Drange from University of Agder, Dr Alessia Signorelli (University of Perugia) and Vesna Belogaska (IRIS Connect).

The participants agreed that the process of engaging student teachers to provide feedback and shape their learning is linked to the institutional culture and should be built in as part of an ongoing process.

Dr Eli-Marie Danbolt flagged the importance of developing the skills in student teachers to provide a good quality feedback. This led to the key discussion point: at what stage to bring in student teachers’ ‘voice’ in – at the start of their course, or after some experience at university when they can give other types of feedback.

Recognising that, the feedback coming from younger students might differ in content and quality from that provided by more established students, who have attended the university courses for longer and who possess the necessary soft skills and have more realistic expectations.

As a result of the two discussions, it was agreed that there is a need for a continuous dialogue with student teachers. This dialogue should aim to create a lifelong learner habit and provide room for the ability to reflect on one’s own learning and articulating where one stands and where to go next. This way, students would be aware about their needs and could indicate the direction they wish to take.\(^10\)

### 5.8 Online Survey

To add further data to the findings of the Student Teacher Voice within ITELab, and to include more student teachers across Europe in the analysis, the project team

\(^9\) ITE Forum (2019) ‘‘Hearing the Learner 1’ Available at: https://www.youtube.com/watch?v=cwmXQyvElQ

\(^10\) ITE Forum (2019) ‘‘Hearing the Learner 2’ Available at: https://www.youtube.com/watch?v=cwmXQyvElQ
launched a small online student voice survey in July 2019 covering digital pedagogical experience and experience with feedback.

The survey was disseminated through various channels, such as the Facebook page, Twitter, ITELab university network and the EUN communication channels. A total of 104 responses from student teachers, beginning teachers and current teachers, referring to their experience from their ITE institutions, were collected.

Most respondents were student teachers (50%) and recently graduated teachers (27%). However, also teachers with more than two years of experience took part in the survey (23%). The majority of respondents held a Masters degree or are currently undertaking Master studies (64%) while 36% of respondents hold an undergraduate degree or are currently studying at the undergraduate level.

5.8.1 Online Survey Results
The survey concentrated on two main aspects of student teacher voice: their digital pedagogy skills and the feedback culture of their ITE institutions. This section presents a short summary of the survey findings.

5.8.1.1 Digital pedagogy
The results of the survey show that even though the majority of the respondents are confident with their ICT skills, their evaluation of their digital pedagogy skills, implementing technology in their teachings as an educational tool, is a bit less optimistic. Therefore, even though today student teachers and beginning teachers are skilled in using technology, they might not be as confident using it in their classrooms or might not be aware of its educational value. This finding bears an important reference to adapting ITE curricula to more practical use of technology and teaching student teachers how this technology can be used to provide their future students with digital skills.

This is reflected also in the fact that 65% of respondents never attended any courses dedicated to digital pedagogy. Almost 62% of respondents stated that in order to implement technology in their future classes, they will have to further develop their digital pedagogy skills after finalising their ITE training.

5.8.1.2 Feedback culture at the ITE institutions
Almost three quarters of the respondents (72%) were asked to provide a feedback on their courses throughout their studies. The respondents were asked to provide this feedback usually after finishing their courses (62%) and one third of them reported they were asked to provide such feedback regularly during the course. However, a similar number of respondents (62%) did not see any changes being implemented as a result of their feedback.

Moreover, the results of the survey show that most student teachers felt confident their feedback could have helped their ITE institutions in improving their courses and slightly more than half of those who provided their feedback were
confident their possessed the skills to provide an adequate feedback, useful for their ITE institutions.

Likewise, more than half of the respondents, who were not given a chance to provide a feedback on their courses, felt they could have provided a useful feedback to their ITE institutions.

5.9 **Online Focus Group**

In order to add further depth to the student voice findings, an online focus group was organised on the 12th July 2019. The focus group was attended by four of the student teacher ambassadors:

- Elin Maria Berg (University of Agder)
- Mirko Susta (University of Perugia)
- Aoife Carew (University College Dublin)
- Maria Alberquerque (Polytechnic Institute of Santarem)

The main aim of the focus group was to reveal additional student teachers’ perceptions on their learning experience and provide explanations and suggestions for the future of the student teacher voice.

Prior to the start of the focus group, the participants were provided the questionnaire, consisting of four main questions. This enabled the student teachers to prepare their main ideas and topics for the discussion. The focus group took place on Adobe Connect and was moderated by the ITELab project officer, Zuzana Sorocinova. The session was recorded, with a written permission from the participants.

**Figure 10 Online Focus group Questionnaire**

1. Thinking about training in the use of ICT and new technologies and tools in your ITE institutions, do you consider it prepares you adequately for your teaching career?

2. Being a part of ITELab, did you take part in one of the teaching modules or the online course designed by the project? Do these courses fundamentally differ from those provided by your ITE institutions?

3. What are, if any, your major concerns regarding your preservice training? Do you also have concerns about your digital skills?

4. Do you think student teachers should be involved more in the design of their education curricula? For instance, should they be asked for feedback on the courses they receive?
5.9.1 Findings

Preparedness for Teaching Career

The common opinion during the focus group was that generally the student teachers do not feel well prepared for their teaching careers, considering digital pedagogy. They lack the practical training on the implementation of ICT in their classrooms, which they perceive as insufficient. The student teachers have a feeling that many times, their lecturers learn to use new tools at the same time while they present them in the lecture room. As a result, if they wish to have the digital pedagogy and ICT skills necessary to include technology in their teaching, they often have to learn about it in their own time.

‘Our teachers [educators] try really hard to prepare us, but with regards to technology, they all learn at the same time as us.’

From the experience of the student teachers, their digital pedagogy skills also depend on the individual lecturer, with some more innovative and prone to teach about the use of technology, while others might be more conservative, preferring the ‘older’ ways of teaching.

Additionally, some future teachers learn digital pedagogy from their colleagues, when doing their practice teaching at schools. The student teachers often regret not having learnt more on how to implement various tools in the classroom as an integral part of their university courses. While recognising schools vary in terms of being equipped in ICT, from their experience of the schools where they did their compulsory teaching practices, they were all well-equipped in terms of ICT. However, back in the university environment, it was not recognised as important when reviewing their practice experience with their tutors, whether they will implement the digital tools during their practice or not.

ITELab Experience

All the focus group participants attended the ITELab online course Networked Teacher and/or one of the three course modules developed by the project.

In their opinion, they considered the ITELab courses much more interactive than those they attended at their ITE institutions, introducing them to new tools and implementation methods. As a result, all participants reported higher confidence and more willingness to implement new tools when teaching at schools. For instance, one of the participants already implemented Skype in the Classroom in her teaching, as the tool was part of one of the ITELab courses.

By taking part in the ITELab, the participants also reported higher levels of confidence. They felt a part of a bigger community where also other student teachers across Europe look for ways to innovate their classes. This provided them with affirmations that the situation is similar also in other universities and countries and they are not the only ones who are learning about digital pedagogy, in depth, for the first time.
Preservice Training Concerns

The student teachers feel like they still have a lot to learn, even though most of them are in their final years of studies. They feel like they need to experiment more and look for new ways to implement technology in the classroom.

The student teachers reached a consensus that the content of their ITE courses need to be adjusted to the 21st century. They would like to have the space and time to try the technology throughout their training, instead of passively learning about it from the lecture halls. Having separate seminars dedicated to practise could be one of the ways how to gain a better practice and confidence.

‘I do not like sitting passively in the lecture hall listening to my lecturers naming the tools that we could use in the classroom. I would like to stand up and try the tool myself. I am an active person, I like to move, and I think this way, I would learn much faster.’

Design of the Curricula

The student teachers confirmed the previous findings about the feedback culture at their institutions – all of them have been asked to provide feedback on their courses. However, none of the participants felt like their institutions listened to the feedback, nor did they see any changes being implemented as a result of this feedback. The feedback has mostly been anonymous and the surveys are often ignored and not completed by other student teachers, either due to lack of time or underestimating its importance.

Sometimes, the student teachers could not express their opinions on their courses, as the request for a feedback might have come too early in the course, when the student teacher did not have much experience with the course yet, or too late during the exam period, when it was not a priority anymore.

‘A lot of the feedback that was asked from us limited our answers and was concentrated just on certain aspects of the course. I often had a feeling I could not express everything I wished to say about the courses.’

The student teachers would like to be involved more in the design of their curricula. In fact, they would like to cooperate on the design together with their teacher educators, being seen as equals and collaborate as a team.

‘While our educators are experts in teaching, we are experts in learning. We know how we learn the best. Having a say in how our courses are designed would definitely help to improve our learning outcomes.’
6 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

Work on student voice in ITELab has found only a small body of academic research has been written on the use of the student voice and that student teachers are involved in a limited way, in the design and evaluation of their courses and curricula. Yet, the experience of ITELab shows that they can have a positive impact, if included. Student teachers are able to formulate their needs and opinions clearly, providing valuable insights and opinions. Moreover, teacher educators can also benefit from student voice, making their courses more interesting and relevant for future teachers.

In the area of digital pedagogical skills, although student teachers are provided with some training on ICT and digital pedagogy, they still tend not to feel confident enough to use the skills in practice, often feeling stressed and insecure about their ICT knowledge and skills. Many student teachers would appreciate more courses dedicated to digital pedagogy, which would teach them more about digital tools, both hardware and software.

Even if taught about digital pedagogy, many student teachers report that the ITE curricula puts too much emphasis on memory-based learning and there is a lack of space to practice. They would appreciate more opportunities and places in their institution to try out the devices and applications before going to practice in schools. This way they could be better prepared in case the devices malfunction or the students have questions about their use.

Student teachers would like to acquire more digital pedagogy skills as an integrate part of their studies, as well as earlier in their studies, with opportunities to practice at the universities to gain the confidence to try new devices when out in practice in their classrooms.

In the second area of student feedback, most of the student teachers are asked to provide feedback on their courses and/or curricula mainly at the end of the course. However, very few changes to the courses are perceived to be implemented as a result of the feedback, according to the students. In some cases, the student teachers felt that the questionnaires they were given did not ask the questions they expected and did not provide them with space to give their opinion. Therefore, a more open feedback format or more consultation with student teachers throughout the course could benefit both the ITE institutions and the student teachers.

Similarly, most student teachers enjoy being involved in designing their courses as well as providing feedback on their curricula. Here, the discussions of the ITE Forum highlighted the need to give student teachers the skills to express their opinions and provide constructive feedback. This being a valuable skill in the future teaching profession, as well as helping open up a more collaborative...
approach between student teachers and student educators in the feedback and co-design of courses.

6.2 Recommendations

Based on the work with student teachers, findings presented in this report and additional research, the research team formulated the following recommendations. These recommendations aim to improve student teachers’ learning outcomes from their ITE institutions, improving their digital pedagogy skills and utilising the student teachers’ voice to improve ITE curricula and their satisfaction with the courses they attend.

1. More **emphasis should be put on developing student teachers’ digital pedagogy skills** as an integral part of the ITE curricula, as well as being introduced early into the curriculum. This supports the findings that show that despite possessing good ICT skills, the student teachers very often lack the confidence to know how to implement technology in their teaching.

2. **Digital pedagogy skills should be taught more practically**, ideally in new active learning spaces designed for student teachers to try the digital tools prior to starting their teaching practice. This would take away stress from trying new tools in front of their students and provide student teachers with more confidence to implement new tools in the classroom.

3. Initial teacher education institutions need to **develop closer links with schools**. The case studies show this proves to be beneficial for both the student teachers and their educators as it helps them stay updated with current developments in the classroom and changing expectations regarding their future profession.

4. **Engagement of student teachers in wider teacher communities** should be encouraged as part of their training. Such communities are very much appreciated by student teachers, who can exchange best practices and learn what practices their colleagues use in other regions or countries.

5. **Involving student teachers in providing feedback and the co-design of their curricula**, proves to be beneficial to everyone involved in the process. However, the timing of the feedback needs to be considered as part of an on-going process, where the feedback is shown to be valued and acted on. Linked to this, student teachers need to be given help to develop their skills in providing feedback both to express their opinions and as a key skill for their future teaching profession.

These recommendations have been drafted into a ‘Student Teacher Charter’ overleaf, which will form part of the on-going work to engage and test the charter with the wider audience of student teachers in the closing months of the ITELab project (ends December 2019).
STUDENT TEACHER CHARTER11: DIGITALLY CONFIDENT FOR C 21ST TEACHING

“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

John and Eileen Dewey, Schools of Tomorrow, 1915

We, as future teachers, face one of the biggest challenges of the 21st century: how will we provide our students with skills for jobs which do not exist yet? In recent years, technology has changed the way we work, creating new and different jobs. This shift is expected to continue and, as a result, the demand for digital skills will rise. Yet, according to research, 40% of Europeans have insufficient or no digital skills.12

Therefore, digital skills need to be addressed in the classroom. However, as highlighted by the ITELab project13, the way we student teachers currently receive training on ICT is an obstacle not only to implementing innovative pedagogical practices but also to our own development, as we need to further develop these skills after finishing our initial teacher education training.

This charter, co-written by the Student Teacher Ambassadors of the ITELab project, therefore, calls on policy makers and initial teacher education providers in Europe to innovate our university curricula and adapt them to meet the pressures and expectations of the 21st century.

1. We would like to acquire better knowledge of digital pedagogy.

The difference between digital and digital pedagogical skills needs to be recognised and our curricula should reflect that and concentrate more on providing us with digital pedagogy skills – implementing our ICT skills in our teaching.

2. We want to learn how technology can be best implemented as a teaching tool.

Even though the majority of us possess very good ICT skills, this does not mean we all know how to use technology as an educational tool.

3. We would like to acquire our digital pedagogy skills more practically and less theoretically.

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11 Student teacher charter part of the ITELab student voice, drafted by the student teachers themselves.

12 Digital Agenda Scoreboard, 2015

13 http://itelab.eun.org/research: Monitoring Report, Case Studies, Recommendations and Resources to support Innovation in ITE
Currently, some of our ITE institutions teach us to implement digital tools in our future classrooms. However, we rarely get a chance to use these tools in authentic settings prior to our first teaching appointment. This results in a lack of confidence, technical difficulties and sometimes opting for an easier option – not implementing technology in the classroom at all.

4. **We need innovative spaces to develop our digital pedagogical skills.**

We would like to practice digital pedagogy during our higher education and, if possible, have spaces dedicated to practising digital pedagogy where we could test the equipment before standing in front of our future students.

5. **We would like our voice to be heard more.**

Despite the fact that our higher institutions give us a chance to provide feedback, this often happens via targeted surveys and questionnaires, which do not allow us to fully express our opinions. Similarly, the feedback might be asked too early in the course, when we do not yet know much about the course, or the feedback might be asked too late, such as during our exam period, and its importance might not be highlighted enough.

6. **We wish to be involved in shaping our own ITE curricula.**

We believe we could help our higher institutions to better adapt the ITE curricula to the needs of the 21st century by providing them feedback on our courses. Although we might be considered being too unexperienced, once we have had school placements as part of our curricula, we gain a better overview of where our skills need to be developed better.

7. **We want to be part of international peer networks to share challenges and solutions**

Cooperating and meeting our peers in ITELab showed us the benefits of being part of international student teacher communities. We can exchange our views and opinions, provide each other with advice on teaching and discuss best practices.
7 BIBLIOGRAPHY


ITE Forum (2019) ‘Hearing the Learner 1′ Available at: https://www.youtube.com/watch?v=cwmXQyvElqQ

ITE Forum (2019) ‘Hearing the Learner 2′ Available at: https://www.youtube.com/watch?v=cwmXQyvElqQ

ITELab (2018) ‘Course Module Evaluation Report I’ Available at: http://itelab.eun.org/documents/452109/470959/D5.2+ITE+Course+Modules+Evaluation+Report1_fin.pdf/1abf2d5-6487-4e7a-a467-acd9a511e31a


ITELab (2018) ‘Preparing student teachers for the future classroom: five case studies of university school collaboration’ Available at: http://itelab.eun.org/documents/452109/470959/2.+D2.3.2+ITELab+cases+studies+2018+vfinal1.1.pdf/110301db-f273-49b4-8175-6a683faa15


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