"We Always Make It Work": Teachers' Agency in the Time of Crisis

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As of mid-April 2020, 1.5 billion learners were affected by school closures across 191 countries due to the COVID-19 pandemic (UNESCO, 2020). During the weeks of school closures, teachers were expected to become online teachers overnight. As teacher educators, we were curious about teachers' readiness for online practice. In the Teachers' Readiness Online (TRIO) survey (Gudmundsdottir & Hathaway, 2020), distributed internationally, we collected perspectives from 1186 teachers about their experiences related to online teaching in the early weeks of COVID-19 school closures. In this paper, we present preliminary data from Norwegian and US teachers related to previous experiences with online teaching and elaborations on readiness. We examined data for evidence of pedagogical, ethical, attitudinal, and technical (PEAT) dimensions (Dicte, 2019) to determine how teachers' agency was activated in the times of the COVID-19 pandemic. Findings highlight that despite teachers' inexperience and unpreparedness for online teaching, they were moderately prepared to use various digital tools and willing to make online learning work for them and their students.

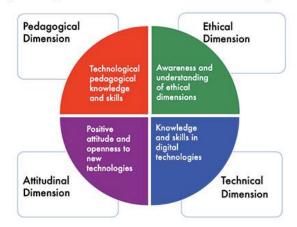
Introduction/Rationale

When schools closed in Norway and the US due to COVID-19, conversations among education stakeholders focused on the transition of teachers and students to online learning environments as a means to continue the learning process (e.g., Bender, 2020; Directorate for Education and Training, 2020; Heie 2020; Holcombe, 2020; Johannessen, 2020; St. George et al., 2020). As teacher educators in the field of educational technology, we were especially concerned about the readiness of teachers in this drastic change from predominately in-person practices to online teaching. Furthermore, media attention had quickly shifted to concerns about the inclusion of vulnerable children in the transition to online learning (Bender, 2020; Braathen & Sørgjerd 2020; Mitchell, 2020; Reilly, 2020; Støen et al. 2020). We identify vulnerable children as those with individual challenges or challenges related to their families, peer relationships or in their immediate environments which could potentially pose difficulties in the transition to online learning. We asked ourselves, "Are teachers ready to transition to online learning in ways that include all learners?"

We believed it was important to grasp teachers' perceptions of their readiness in the first weeks of the COVID-19 crisis. We sought an accurate representation of their abilities and needs as they transitioned to fully online environments. Our aim was to inform our practice and that of other teacher educators about ways to enable teachers to activate transformative agency and cope with unforeseen happenings within the classroom (Lund et al. 2019; Sannino et al., 2016) as well as with outside threats such as a virus outbreak. In the TRIO (Teachers' Readiness Online) study, we explored teachers' readiness for online teaching in a global crisis situation through the lens of teacher agency.

Teacher agency as a construct emphasizes the capacity for doing the work of teaching given the resources and limitations of the working environment as well as considers teachers' personal beliefs, values, and attributes (Brevik et al., 2019; Lennert da Silva, & Mølstad, 2020; Lund et al., 2019). The PEAT model (see Figure I) served as an analytical framework for categorizing teachers' attributes to teach online and their capacity for teaching during school closures. The PEAT model consists of four dimensions. The *pedagogical* dimension relates to pedagogical design and practices with technology use in different subjects and professional practice. The *ethical* dimension focuses on issues such as online responsibility, privacy, critical use of resources, plagiarism and copyright issues. The *attitudinal* dimension attends to teachers' attitudes toward technology, their ability to

adapt technology use in their practice as well as agentic stance when using digital technology. The *technical* dimension refers to the ability to use software and hardware and understanding how technological devices operate.



Pedagogical, Ethical, Attitudinal and Technical dimensions (PEAT model)

Figure 1. PEAT Model (Dicte, 2019).

Process

As schools shut down, we crafted a survey to grasp teachers' experiences and readiness to teach online and in particular, how teachers included vulnerable learners in their online practice. Eight primarily open-ended questions addressed: consent, frequency of online teaching, elaboration on preparation, measures by schools/teachers to include vulnerable learners, additional comments on challenges and/or opportunities, country, and teaching level.

The survey was piloted in English and Norwegian languages and subsequently translated into eight other languages. Survey links were shared on social media platforms and sent as personal emails to professional networks. We used snowball sampling to increase our sample size. The English and Norwegian versions of the survey were open for four weeks from March 31, 2020 and completed by 1186 participants from different parts of the world, with the majority of respondents from Norway and the US (see Table 1).

Country	Number of Participants
China	21
Estonia	45
Finland	16
Germany	14
Iceland	57
Italy	73
Malaysia	11
Norway	574
Romania	32
South Africa	25
Spain	14
US	239
Countries with less than 10 participants: Argentina, Australia, Austria, Bosnia Herzegovina, Canada, Denmark, France, Ghana, Greece, Iran, Jordan, Kazakhstan, Macedonia, Malta, Nigeria, Portugal, Saudi Arabia, Slovakia, Slovenia, Sweden, Tajikistan, Uganda, UK, Zambia	49
Country not indicated	16
Total Participants	1186

	Tabl	e 1			
r of TRIO	survey	partici	pants	per	count

Data related to previous online teaching experiences were analyzed descriptively. We used thematic coding based on the four dimensions in the PEAT model to analyze elaborations on readiness. In this paper, we provide a snapshot of the preliminary analysis of data related to previous experiences with online teaching and elaborations on readiness described by 574 Norwegian teachers and 239 US teachers.

Results

We found that a great majority of teachers in Norway and the US did not have any experience with online teaching prior to the crisis (see Table 2). In the US, 92% of teachers had no online teaching experience. In Norway, 67% of teachers answered the same. In the US, 5% of teachers had often taught online while 4% had seldom taught online. Teachers in Norway had more experience as 19% had previously taught online, but seldom, and 14% of teachers had often taught online.

Р	revious online Norwegian a	U	*	
Country	Number of	Never	Yes, Seldom	Yes, Often
	Participants	%	%	%
Norway	574	67	19	14
US	239	02	4	4

Table 2

We also asked teachers to elaborate on how prepared they were to teach online. A selection of teachers' voices is provided to represent the most common themes within the PEAT model (Dicte, 2019). Teachers in both Norway and the US reflected extensively on the digital tools they had access to and how they used these tools. Evidence was found in statements similar to "[I am] familiar with websites, digital books, various digital tools. I use Office 365 at work" (Norway) and "We used Google Classroom regularly to support what we do in class" (US).

Some teachers reflected on the pedagogical aspect of their online teaching: "What I was most uncertain about...was the degree and methods of following up the pupils, plus how I/we should solve assessment situations" (Norway), whereas others reflected on what implications it brought to transform their teaching into online teaching "I was not particularly prepared to conduct online teaching. The school has long had plans to implement MS Teams but this has always been postponed. When we now had to conduct online teaching, the teachers themselves had to figure out how to do it" (Norway), and "We use many online programs ... but received no training on how to teach on a digital platform" (US).

Very few teachers mentioned aspects of ethical implications of privacy, copyright and source criticism when teaching online. In general, teachers' attitudes were positive and they were quite willing to try out new ways of teaching as this Norwegian teacher stated, "Initially [I was] not prepared, but I was relatively quick to get a minimum of skills and knowledge in place that laid the foundation for getting started" and as this US teacher remarked, "No preparation. I'm resourceful and inventive...hanging on!"

Implications

Despite teachers' lack of experience with online teaching, our findings show that teachers are both willing and able to cope as online practitioners. Reflecting on the preliminary findings of this study, we wonder what we

might take back to our own practice and offer to other teacher educators. What can teacher educators learn from this study?

First of all, we see the need of greater *modeling*. A first implication is thus related to teachers lack of prior online experience. This may indicate that teacher education could serve as a model for working in a blended learning environment to better prepare teachers to teach both online and offline (Gudmundsdottir & Vasbø 2017; Hathaway & Norton, 2017).

Even with clear tool emphasis, teachers were able to take an agentic stance and find a way to cope with the challenging situation. A second implication is nevertheless connected to limited *pedagogical emphasis*. The majority of the Norwegian and US teachers indicated they had experience with various digital tools, hence being occupied with the *technical* aspect in the PEAT model. Those mentioning the *pedagogy* behind using these tools, reflected on how they had used or planned to use them in their online classrooms. Our findings indicate a general tool-based emphasis in professional development and in teacher education rather than a clear pedagogical or design emphasis. This is not sustainable long term. Professional development and teacher education need to support teachers further in developing the pedagogical dimension of their online practices.

What most stood out in teachers' responses were the positive *attitudes*. Although teachers lack of experience in online teaching and preparation, they were willing to go the extra mile to move teaching to online platforms. The third implication emerged from Norwegian and US teachers who indicated they were somewhat prepared for online teaching, however, lacked actual online teaching *field experience*. This study highlights the need to prepare all teachers for teaching in online and blended environments with real students and guidance from teacher educators. Field experience in online environments is a decade long call to teacher education (Archambault et al. 2016; Kennedy & Archambault, 2012). In the least, teacher educators should design opportunities for both pre-service and in-service teachers to develop lessons for online delivery, implement those lessons with primary and secondary students in an online environment with mentoring from teacher educators, and analyze implementations through reflection practice.

A fourth implication relates to few teachers in this study were preoccupied with aspects of the *ethical dimension*. This may indicate their primary goal was to cope and support students in their online environment. A recent news article describing disruptive behavior by some online students (Natanson, 2020) illuminates the need to address digital citizenship and responsibility education in ways that ethical decisions associated with digital responsibility are situated in community participation and content learning (Hathaway, 2018; Hathaway & Korona, 2019, Gudmundsdottir et al. 2020; Gudmundsdottir & Hatlevik, in press) rather than as a *one and done* lesson. A fifth implication relates to the possibilities for *replication* of the TRIO survey. That is, adapting the survey to examine later stages in school closures and how education stakeholders responded in time to the needs of teachers and students may elicit further insights to guide teacher education.

We acknowledge the implications that emerged from our study confirm or align with what we and other researchers have previously suggested for teacher education. Rather, our study captured early perspectives from teachers as the crisis unfolded and heightened awareness of the consequences for not making necessary improvements to teacher education. Perhaps our study will invigorate efforts toward designing teacher education and professional development experiences that enable teachers to continue their work with all students in any learning environment.

Future research

Future research should examine how these positive practices and coping strategies in virtual classrooms will or can be transferred to physical classrooms when the schools reopen. The next step in the TRIO project (Gudmundsdottir & Hathaway, 2020) is to analyze measures teachers took to include the most vulnerable learners in their online teaching, bringing hope to all learners affected by the COVID-19 crisis.

References

- Archambault, L., Kennedy, K., Shelton, C., Dalal, M., McAllister, L., & Huyett, S. (2016). Incremental progress: Re-examining field experiences in K-12 online learning contexts in the United States. *Journal of Online Learning Research*, 2(3), 303-326.
- Bender, L (2020, March). Key messages and actions for COVID-19 prevention and control in schools. UNICEF. https://www.who.int/docs/default-source/ coronaviruse/key-messages-and-actions-for-covid-19-prevention-and-controlin-schools-march-2020.pdf?sfvrsn=baf81d52_4
- Braathen, F., & Sørgjerd, C. (2020, March 31). Ny rapport: Flere fylkesmenn bekymret for sårbare barn [New report: County Governors worry about vulnerable children]. *Aftenposten* https://www.aftenposten.no/norge/i/50gnRW/ ny-rapport-flere-fylkesmenn-bekymret-for-saarbare-barn
- Brevik, L. M., Gudmundsdottir, G. B., Lund, A., & Strømme A. T. (2019). Transformative agency in teacher education: Fostering professional digital competence. *Teaching and Teacher Education*, 86, 1-15. https://doi. org/10.1016/j.tate.2019.07.005

- Dicte (2019). *Pedagogical, ethical, attitudinal and technical dimensions of digital competence in teacher education*. Developing ICT in Teacher Education Erasmus+project. https://dicte.oslomet.no/dicte/
- Directorate for Education and Training (UDIR), (2020). Opplæring hjemme under koronakrisen [Home School in Corona Crisis]. https://www.udir.no/ kvalitet-og-kompetanse/sikkerhet-og-beredskap/informasjon-om-koronaviruset/ rad-til-hvordan-dere-kan-gjennomfore-opplaringen-hjemme/
- Gudmundsdottir, G. B., Gassó, H. H., Colomer Rubio, J. C., & Hatlevik, O. E. (2020). Student teachers' responsible use of ICT: Examining two samples in Spain and Norway. *Computers & Education*, 152,1-12. https://doi.org/10.1016/j.compedu.2020.103877
- Gudmundsdottir, G. B., & Hathaway, D.(2020). TRIO Teachers' Readiness Online. An international research project exploring educators online teaching during the Covid-19 crisis. https://www.uv.uio.no/ils/english/research/projects/trio/index.html
- Gudmunsdottir, G. B., & Hatlevik, O. E. (in press). Developing professional digital competence and preparing student teachers to exercise responsible ICT use. *Nordic Journal of Comparative and International Education*, 4(3-4).
- Gudmundsdottir, G. B., & Vasbø, K. B. (2017). Toward improved professional digital competence: The use of blended learning in teacher education in Norway. In Paul Resta & Shaunna Smith (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* 2017 (pp. 499-509). Association for the Advancement of Computing in Education (AACE).
- Hathaway, D. (2018). Examining a "five community typology" to support designing for community participation in PK-12 practice: Does "it" belong? In E. Langran & J. Borup (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2018* (pp. 1427-1435). Association for the Advancement of Computing in Education (AACE).
- Hathaway, D., & Korona, M. (2019, June 23-26). Exploring PK-12 teachers' perspectives about digital technologies to support community participation [Paper presentation]. International Society for Technology Education, 2019, Philadelphia, PA.
- Hathaway, D., & Norton, P. (2017). Taking blended learning to graduate teacher education: Examining a blending strategy. In L. Liu & D. C. Gibson, (Eds.), *Research highlights in technology and teacher education 2017* (pp. 117-124). Association for the Advancement of Computing in Education (AACE).
- Heie, M. (2020, April 23). Digital kompetanse i skolen handler om mer enn tekniske ferdigheter [Digital competence in school is more than just techical skills]. *Forskning.no [Research.no]*. https://forskning.no/partner-skoleog-utdanning-teknologi/digital-kompetanse-i-skolen-handler-om-mer-enntekniske-ferdigheter/1669849

- Holcombe, M. (2020, March 18). Some schools closed for coronavirus in US are not going back for the rest of the academic year. CNN. https://www.cnn. com/2020/03/18/us/coronavirus-schools-not-going-back-year/index.html
- Johannessen, M (2020, March 14). Løsningsorienterte lærere på korona-dugnad [Solution oriented teachers corona work for the common good]. Lærebloggen. https://martinjohannessen.blogspot.com/2020/03/lsningsorienterte-lrerepa-korona-dugnad.html
- Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences in K-12 online learning: A national survey of teacher education programs. *Journal of Teacher Education*, 63(801), 185–200. https://doi.org/10.1177/0022487111433651
- Lennert, A. L., & Mølstad, C. E. (2020). Teacher autonomy and teacher agency: comparative study in Brazilian and Norwegian lower secondary education. *The Curriculum Journal*, 31(1), 115–131.
- Lund, A., Furberg, A. L., & Gudmundsdottir, G. B. (2019). Expanding and embedding digital literacies: Transformative agency in Education. *Media and Communication*, 7(2), 47–58. http://dx.doi.org/10.17645/mac.v7i2.1880
- Mitchell, C. (2020, March 19). How will schools provide special education during the coronavirus crisis? *Education Week*. https://www.edweek.org/ew/articles/2020/03/19/are-we-going-to-get-ourselves-in.html
- Natanson, H. (2020, April 15). Tech glitches, harassment mar Fairfax County schools' online learning rollout. *The Washington Post*. https:// www.washingtonpost.com/local/education/fairfax-schools-onlineharassment/2020/04/15/841b0406-7f3b-11ea-9040-68981f488eed_story. html
- Reilly, K. (2020, March 15). As schools close amid coronavirus concerns, the digital divide leaves some students behind. *Time*. https://time.com/5803355/ school-closures-coronavirus-internet-access/
- Sannino, A., Engeström, Y., & Lemos, M. (2016). Formative interventions for expansive learning and transformative agency. *Journal of the Learning Sciences*, 25(4), 599-633. https://doi.org/10.1080/10508406.2016.1204547
- St. George, D., Natanson, H., Stein, P., & Lumpkin, L. (2020, March 22). Schools are shut, so how will kids learn amid the covid-19 pandemic? *The Washington Post.* https://www.washingtonpost.com/local/education/schoolsare-shut-so-how-will-kids-learn-amid-the-covid-19-pandemic/2020/03/22/ dac4742e-6ab7-11ea-9923-57073adce27c_story.html
- Støen, J., Evertsen-Stanghelle, C., & Fandrem, H. (2020, April 2). Hvem er de sårbare barna? [Who are the vulnerable children?]. *Stavanger Aftenblad.* https:// www.aftenbladet.no/meninger/debatt/i/Qokl7A/hvem-er-de-sarbare-barna
- UNESCO (2020, April 15). COVID-19 Impact on education. https://en.unesco. org/covid19/educationresponse

Appendix A

I – TRIO survey in English

We weren't ready for this. Or were we?

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(Photo: Colourbox)

Educators' readiness and inclusion of vulnerable learners in online teaching practices during the COVID-19 crisis

The purpose of this brief survey is to collect information about the readiness of educators (teachers and student teachers) for online teaching and what opportunities and challenges educators relate to online teaching. We are also concerned about the inclusion of vulnerable learners in online practices during shutdown and the COVID-19 crisis.

While you may not gain personally by participating, your answers are valuable as they will contribute to an information pool shared with practitioners, researchers and policymakers. We will compare participants' responses between different countries in order to identify various ways to include all learners in the continuity of education through online learning. Feel free to discuss the questions and share them with colleagues or anyone in your network. Your responses are completely anonymous and without any personal identifiers.

If you like to participate and make a difference, please answer the survey questions. By answering 'Yes' to the first question in the survey, you are giving your consent for your anonymous responses to be used in the research project.

If you have any further question regarding the study, please contact either Dr. Greta Björk Gudmundsdottir (gretag@ils.uio.no) at the Department of Teacher Education and School Research, University of Oslo, Norway or Dr. Dawn Hathaway (dhathawa@gmu.edu) at the College of Education and Human Development, George Mason University, USA. You can download a full version of this information sheet at the project's website (https://www.uv.uio.no/ils/english/research/projects/trio/index.html).

We greatly appreciate your answers and sharing of this survey with colleagues around the world. Let us hear your voice, comments, questions, and concerns during these challenging times. Stay safe!

 I am willing to proceed with the survey and consent that my anonymous responses are used in the research project *

1	Yes

O No

2. Have you taught online before the COVID-19 crisis?

By online we mean that you deliver instruction **completely** through computer network, usually the Internet, without requiring face-to-face meetings with learners. Online teaching maybe synchronous, asynchronous, or a combination. (Also, commonly referred to as online distance education, distance education and online learning).

0			

O Yes, seldom

O Never

3. Please, elaborate on how prepared you are to teach online:

4. Do you know of any measures (and if so, which ones) that have been put in place due to school shutdowns and the COVID-19 crisis aiming at the inclusion of vulnerable learners in particular?

Vulnerable learners can include aspects related to a learner's:

- individual situation (for example illness, diagnoses, individualized education programmes, language difficulties)
- · family situation (such as neglection, mental disability, high level of conflict, addiction)
- · peer relationships (such as builying, the challenge of establishing and staying in stable friendships)
- environment (such as poverty, criminal background, lack of social network)

5. Do you take any measures in your own capacity as educator to reach out to vulnerable learners in particular (if so, which ones)?

6. In what country do you currently reside?

7. In which education level do you primarily teach?

- O Primary school (approx. ages 5-12 years)
- Secondary school (approx. ages 13-18 years)
- O I am a pre-service teacher
- O Other

Please elaborate on the "other" education level you primarily teach

0	Dette elementet vises kun dersom alternativet «Other» er valgt i spørsmålet «7. In which education level do you primarily teach?»
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8. Is there anything else you would like to add which might be relevant to understanding your teaching practice during this crisis (for example challenges and/or opportunities you and/or your colleagues have encountered with the digital, lesson planning, school hours, how to follow-up learners, learners' attendance, handing in assignments, various routines)?

