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BELIEFS

ABOUT

AGILE

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BELIEFS ABOUT AGILE

Introduction

The term ‘belief’ is not explicitly defined. In general by this term we consider statements that people hold about themselves, others, the world, and/or the future (Beck, 2011). A person’s beliefs will guide them in their decision making and response to situations.

Beliefs are influenced by personal experience as well as of external factors, such as recorded second-hand experiences, arguments, community values etc. In this context, the collection of beliefs, values and best practices are referred to as development methodologies or processes (*Matthies, et al, 2019*). The perceptions and attitudes of agile team members have a clear impact on adoption of agile mindset and practices.

The aim of this report is to find out what are ACCED project team members' beliefs about Agile learning. At the end of the project we can repeat the study, raising a research question: **How do project team members' beliefs about Agile learning have changed during the ACCED project?**

THE CORE BELIEFS OF AGILE

Agile principles describe a mix of behaviours and values of an Agile team. These can be further distilled to find the essential, often tacit beliefs that underpin Agile- sometimes called the Agile mindset or beliefs (Goodhew, 2020).

Peha (2011) has stressed: I'm amazed at how easily it translates to education, and how perfectly-suited Agile is for running schools. He adapted Agile core values for schools to set clear priorities that help educators make better choices:

- Individuals and interactions over processes and tools
- Meaningful learning over the measurement of learning
- Stakeholder collaboration over constant negotiation
- Responding to change over following a plan

DATA ANALYSIS

The thematic analysis method was chosen for analysing the data, as it allows the most prominent themes in the data to be highlighted. In order to maximise the reliability, investigator triangulation was used.
Data can be seen at
https://miro.com/app/board/o9J_lG8FNYo=/

1 WHAT I HOPE **THIS PROJECT** MAKES POSSIBLE IS...

The pandemic has forced students, teachers and teaching to move to online platforms and use new methods. Also our project - ACCelerating future EDucation online in the time of Virus - is called into life to discuss and create new opportunities we have in education. The project partners from different countries have similar hopes for this project. The majority of respondents hope to learn the new way of teaching and learning - receive tools and methods that are fun, applicable for online learning, student-centred and engaging.

2 I BELIEVE THE **ROLE** OF THE AGILE TEACHER IS...

Teachers and educators see themselves in the process of agile learning mainly as facilitators of the learning process. The teacher rather supports the student than tells him/her what and how to do. The main responsibility moves from the teacher to the student. The teacher should promote teamwork, create new teaching materials and collaborate. Last but not least - the teacher also must be the student, always learning and also re-learning, if necessary.

3 SOMETHING WE SHOULD **CHANGE** IN THE CLASSROOM IS...

When facing new challenges, change is necessary. The bigger the challenges, the more needs to change. That also resulted from the research. It was mentioned several times that both the teacher and student roles need to change and in a way that makes them come closer. The hierarchy should be replaced with equal collaboration: “As a facilitator, the teacher can sit among the students; also, cooperation should be used to make students feel free to respond spontaneously”.

Every process has cycles, and feedback to improve the process is necessary, also in education. One way teaching should be replaced with collaboration and active interaction on both sides; static learning with dynamic learning; repetitiveness with innovation. When changing the learning and teaching process, also the assessment and evaluation systems need to change.

4 AN **UNCERTAINTY** I HAVE WORKING WITH AGILE IS...

Lack of knowledge about the Agile framework is the main aspect that creates uncertainty among respondents. Teachers doubt in themselves (“Will I succeed in implementing these methods in the classroom?”), in students (“Will the students manage the new way of learning?”), in the school’s community and also the parent's reaction and in the framework itself (“Does it really work?”, “How to adapt IT concepts into education?”). It should be noted that two respondents did not have any uncertainty, and they shared their enthusiasm instead.

5 SOMETHING WE SHOULD **LEARN TO LIVE** WITH IS …

By describing the aspects that we should learn to live with two clear categories emerged: *technology* and the *constantly changing world*. In the context of the technology category, it was pointed out that technology is part of our lives and it is best seen in learning and teaching context (blended learning). There were two sub-categories for the category constantly changing world: *uncertainty about the future* (unexpected conditions, doubt) and the *features that helps to adapt to a rapidly changing world* (e.g., flexibility, learning to rely on others, the need to constantly review the acquired skills, the need to come up with new strategies).

6 FOR **HOW LONG** COULD WE IMPLEMENT AGILE IN THE LESSON?

In terms of how long we could implement Agile in the lesson, two clear categories appeared: *forever* and *certain timeframe*. In the category forever it was emphasized that if this approach has proven itself as useful and necessary, it could be in the teacher's toolbox from where he/she can take it if it helps to fulfil the teaching purpose. In short, Agile was considered something that could enrich teaching regardless of time. It was also seen as an alternative to traditional learning. In the context of the certain timeframe category, the proposed period was mostly a year, but also a week, few weeks, a term were mentioned. It was also seen as part activity of longer or shorter projects.

7 WHAT COULD BE THE FAMILY`S **CONCERNS**?

By describing the family concerns the mayor category that appeared was the *concerns about the outcomes and future*, more precisely whether the teacher is following the curriculum so that the child reaches all the objectives in the official curriculum to accomplish the exams and to enrol the university/ work market. It was said that parents may consider this approach more as a game or experiment and not as "proper" learning that took place at schools during their time. It was interesting that only one person pointed out that parents may not like the fact that children are even more behind the computers. There was also a view that the teacher is competent enough to choose a method without worrying about what the parents think.

8 WHAT ABOUT THE **BUREAUCRACY** YOU CARRY ON EVERYDAY, DO YOU FEEL THIS IS AN **EXTRA BURDEN**?

In this regard, two main categories appeared: *no pressure/no bureaucracy and lack of time*. In the context of the category of no pressure/no bureaucracy it was explained that getting familiar with the new approaches and methods is a part of teachers' job and if this ends up being an effective method/tool then it is hard to perceive it as an extra burden. In short, the time and effort you must put in to get familiar with new approaches will pay off in the future. If it was perceived as an extra burden then the main concerns were related to the time, more precisely the lack of time. It was pointed out that there is a lot of paperwork and the grading test consumes a lot of time.

9 HOW DO YOU OVERCOME **SCHOOL RULES**?

By describing the ways to overcome the school rules two categories appeared: *flexibility* and *inflexibility*. In the flexibility category it was pointed out that the rules can be combined, changed, or adapted, for instance by explaining the nature and usefulness of the method. In short, if the approach proves to be useful, then it is easy to overcome the school rules. In the inflexibility category it was pointed out that the education authorities are concentrated on the curriculum, rules and the final exams are established by laws. Thus, schools were seen as relatively inflexible organizations and therefore it was perceived that it may be difficult to overcome the school rules.

10 HOW WOULD YOU **EXPLAIN** THIS METHOD TO A **STUDENT**?

Three categories emerged when the Agile team tried to figure out how they would explain this method to students. Firstly, the most widespread was the explanation by pointing out *the benefits of the method for the student*: keeps you active, helps to understand material, creative way to complete your curriculum, learning is much easier, you can be more productive, structures your day, learning by playing. The second category was e*xplaining by doing* so that the students get an idea of the method during teaching. Thirdly, there were explanations that described the *method itself*. The method was named as an innovative and team-based method, technological tool, interactive learning game.

11 WHAT KIND OF **REACTION** WOULD YOU EXPECT FROM **OTHER TEACHERS** WHEN YOU START TO IMPLEMENT AGILE?

Half of respondents confirmed positive reactions like *interest* and *curiosity* because Agile is a new and modern approach. Positive feedback was expected specially from young teachers who are more innovative and open minded. On the contrary senior teachers are expected to be overwhelmed with different tasks and their willingness to learn and use the new method is lower.

It was also pointed out that some teachers are *always against new things* because of limited sources and extra work. In one case, the reason cited was a complex subject and a difficult student body. Here the respondent thought that the Agile method *is not adaptable to all target groups.*

12 IF USERS WERE TO WRITE AN ONLINE REVIEW FOR OUR METHOD, HOW WOULD THEY EXPLAIN THE **BENEFITS** OF THIS METHOD?

By describing the benefits of Agile, four major categories emerged: *it makes learning easy and fast*, it supports *learner motivation*, enables fun and interactive learning journey and it is adaptable to different target groups.

Interestingly, most of the benefits were written from the learner's point of view. Only the last category refers to *Agile's effect for the teacher*, enabling inclusion and adaptability to different students. This leads to one of the conclusions: more attention needs to be paid to make teachers benefits visible for all.

13 THE PROGRAM CONTENT IS THE PROGRAM CONTENT AND IF THEY HAVE TO **PASS AN EXAM** HOW DO YOU THINK THIS CAN BE DONE WITH AGILE?

As most of respondents do not have experience in applying Agile in the assessment process, it was challenging to discuss. One clearly distinguishable category was *Agile as an alternative assessment* method, for example using team-based project, peer-feedback, self-assessment. Participants share the idea that if we are teaching in a non-traditional and different way, it also requires a different kind of assessment, and this cannot be limited to summative assessment (like midterm or final exam). At the same time, *restrictions were emphasized,* coming from national curriculum or other policy framework documents which can be restrictive and inflexible.

14 WHAT MAY **PREVENT YOU** FROM DOING BLENDED CLASSES?

There are some *barriers to blended learning*: lack of resources, in terms of time and equipment. Some respondents also highlighted learning barriers of students (emotional, insufficient learning skills and previous negative learning experience in blended settings).

The attitude and prejudices of parents, colleagues and wider school community has an effect as well.

15 HOW WOULD YOU EXPLAIN THE PURPOSE OF THIS METHOD **TO A COLLEAGUE** WHO DOES NOT WORK WITH THIS METHOD?

Here the answers were classified into two main categories: learner/learning oriented and teacher/teaching oriented.

Learners-oriented examples are those where the purpose of this method is explained by attractiveness for students (technology-rich, creative and spontaneous, leads to academic success). *Teacher-oriented* examples are describing the method as „revolutionary method of the future, powerful and challenging". It was highlighted that Agile method increases teachers job satisfaction because it will make teachers work easier and enjoyable. It also raises teacher professional competences.

16 HOW DO YOU **MATCH WITH** OTHER TEACHERS THAT TEACH THE SAME SUBJECT?

Matching with other teachers was explained concisely but as a positive option. As teachers already work in collaboration, using different channels (whatsapp group, videoconferences), sharing ideas, materials, methodologies and good practices – it is an easy task to accomplish. There was only one respondent who found that it is „not necessary to match with the other teachers". Based on Agile values (interactions and stakeholder collaboration) it can be a barrier in the application of the Agile methods.

CONCLUSION AND DISCUSSION

ACCED participants were optimistic about spreading the Agile mindset among other teachers. They hope that through the Agile framework they will learn the new approach in teaching and learning -in student-centred, fun and engaging way. They emphasized on benefits like innovative, cooperative and student directed learning. Teachers are acting primarily as mentors and coaches, who facilitate the learning process and guide learners rather than direct them. However this could be a challenge for senior teachers who are used to implementing more teacher-centred methods. The results of analysis shows that special attention should be paid to senior teachers to encourage them to use agile methods. One of the options is, for example, a paired or team-teaching approach. Paired teaching supports sharing the knowledge and different expertise of junior and senior teachers. This technique is discussed by Peha (2011) and Parsons (2019, p 10). Both are applying paired learning, where switching roles within pairs between „driver“ and „navigator“ and regularly switching pair partners, are effective ways of adding value, sharing knowledge between colleagues and learning from others.

By describing the benefits of Agile, most of them were highlighted from the learner’s point of view (what kind of new knowledge, skills and attitudes they gain). Only one category refers to Agile's effect for the teacher, enabling inclusion and adaptability to different students. The results also showed that if the method is being perceived as effective then it is not considered as an extra burden for the teacher and it can lead to a longer implementation period and does not remain a one-off project-based event. This leads to the conclusion that more attention should be paid to effects and benefits for the teachers' work.

Based on participants' beliefs, it appears from the analysis that Agile methods are not adaptable to all target groups. However, previous studies confirm that Agile teachers reported about adapting the content according to the needs of students, teaching to “their strengths, expanding where there is interest, cutting short where there is none, slowing or speeding the pace to make content” (Magnuson, et al, 2019, p 124).

Assessment strategies were highlighted by most of the participants. Participants share the idea that if learning and teaching goes on in a “non-traditional” way, it also requires a new assessment format. As an alternative assessment methods were mentioned team-based projects, peer-feedback, self-assessment, including learning diary and portfolio. This topic is extensively discussed in educational theory with focus on how assessment impacts on learning to understand the extent to which assessment can help learning occur (Pittaway, et. al 2009). Agile methods support learning that is goal driven rather than plan-driven (Parsons, 2019, p 6). The challenge is, how to harmonize national policy documents and philosophy behind agile assessment. According to Parsons (2019, p 8), many educators feel that assessment takes precedence over learning in many jurisdictions. Visible feedback, continuous reflection, trust, collaboration and authentic learning (ACEL, 2016) are part of Agile learning journey and help to track learning processes. At the same time Agile school environment accepts failures and enables students to fail safely while the „traditional“ school avoids uncertainty and failure. Even more, uncertainty is an essential part of life that everyone has to deal with. Our project’s participants shared that they too feel uncertain because of the lack of knowledge they have about the Agile framework. Also, they are concerned about students, school community and parents' reaction and adaptability to implement Agile. For instance, in the context of family beliefs, it was pointed out that parents may have doubts as to whether this method is effective in achieving the official curriculum objectives to accomplish the exams and to enrol the university/work market.

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