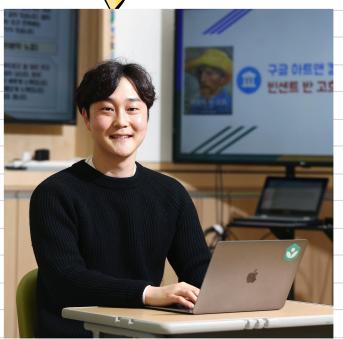
Transforming. Classroom The magic of Edtech

Presenter: Minchul Shin(Daegu Wolchon Elementary School Teacher)
(Doctoral Student in Korea Univ. Educational Technology)

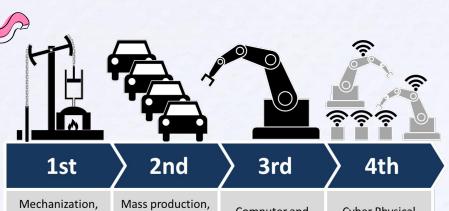


Presenter Info



- Daegu Wolchon Elementary School Teacher
- National Office of The Year, 2022
- Member of Education Big data committee
- Founder of GOGO.SCHOOL (학교가자.com)
- Korean Talent Award 2021
- Teacher of the year by Google, 2020

Minchul Shin

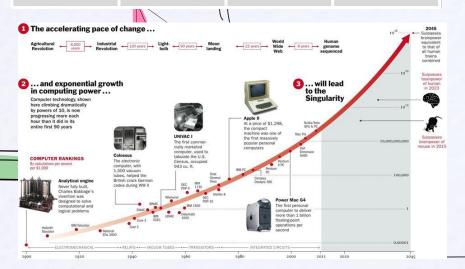


Mechanization, water power, steam power

Mass production, assembly line, electricity

Computer and automation

Cyber Physical Systems



#DigitalTransformation

Digital Transformation accelerated by COVID-19

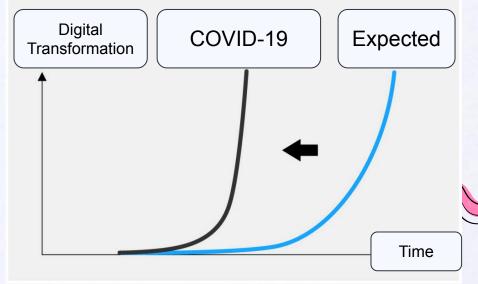


Image Source: Wikipedia, Electronic New South Korea.



Classroom is changing

[Unit: EA, 96]

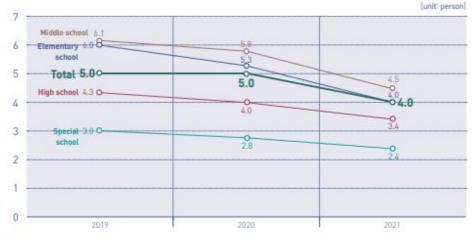


Key statistics of ICT in education in elementary and secondary schools 2021

Total number and share of devices by school level and user

Total number of units per user Students Staff Others Category Teachers Sum Units Units Units Units Sum 2,470,781 1,353,500 854,482 162,485 100,314 Elementary 1,142,099 657,200 57.54 352,355 30.85 94,692 8.29 37,852 3.31 school 300,699 38.35 Middle school 589.766 50.99 226,193 33.381 5.66 29,493 5.00 High school 703,967 384,131 54.57 257,871 36.63 30,521 4.34 31,444 4.47 18,063 1,525 34.949 11,470 32.82 51.68 3,891 11.13 4.36 Special school

Number of students per device in the last 3 years



[⊗] Source: KEDI Education statistics, Sep 30 2021

[₩] Source-KEDI Education statistics. Sep 30 2021

Calculation (ratio)- number of students / number of devices for students











(Research & Development)

Investigation of K-12 Teachers' Stages of Concern and Innovation Configuration About the Utilization of Edtech Based on CBAM

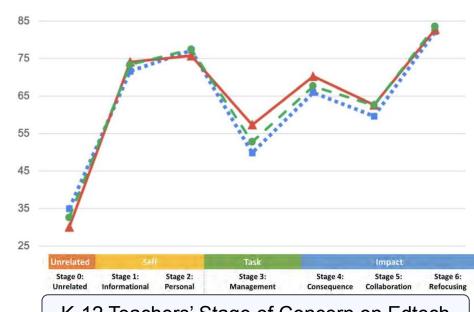
Minchul Shin (Daegu Wolchon Elementary School Teacher)

Innwoo Park (Korea University Professor)

This study aims to examine K-12 teachers' stages of concern and innovation configuration about edtech utilization in classrooms to provide an implication for revitalizing the adoption of edtech. For this purpose, we analyzed 271 surveys from K-12 teachers with Concerns-Based Adoption Model (CBAM). First, the stage of concern (SoC) showed the highest and lowest SoC in stage 6 (refocus) and 0 (perception) respectively. K-12 teachers showed similar patterns of relative strength graphs regardless of school types (elementary/secondary). The SoC of K-12 teachers differed significantly depending on school types (elementary/secondary), teaching period, training experience, and adoption experience. Second, we found that the innovation configuration(IC) of K-12 teachers had a higher proportion of the ideal and acceptable implementation than the unacceptable implementation. Moreover, no significant difference was found according to the school group. We found significant differences in the components of IC depending on gender, teaching period, training experience, adoption experience, one to one device environment, and device management environment in the classroom. Third, IC had a significant difference depending on the SoC that the higher SoC group had the higher IC. Based this study 's results, we presented implications for successful adoption of edtech utilization in classrooms for K-12.

Keywords: Edtech, Concerns-based adoption model(CBAM), Stage of concern(SoC), Innovation configuration(IC), K-12





K-12 Teachers' Stage of Concern on Edtech





Before Covid-19



Inertia: Back to before

After Covid-19



Sustainability



Change in Edu-Eco system







Teacher is not a 'Teach - er'.







With Edtech, We are learning designer





Benefits of Edtech based learning

Overcoming time-space constraints

Personalized learning based on Data

Maximized Collaboration

















4부 새로운 공간

Jinwol Elementary School



Chelsea Primary School



대구 진월초등학교 5학년

호주 멜버른 첼시 초등학교 5학년





















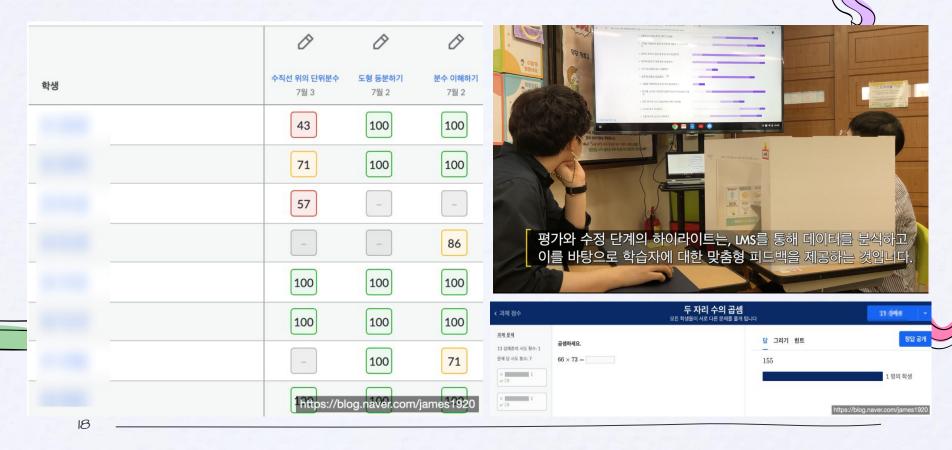








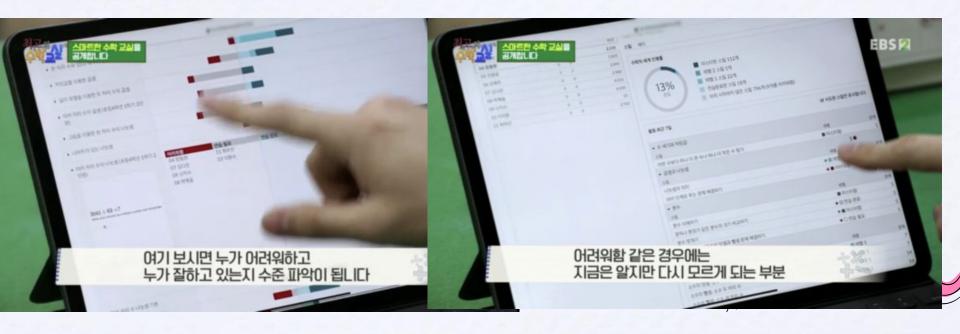
Personalized learning based on Data





Personalized learning based on Data







Maximized Collaboration















https://blog.naver.com/james1920

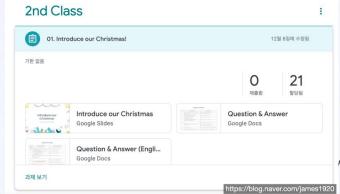


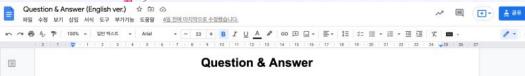


Maximized Collaboration









No./Q	South Korea (Korea)	Australia (Australia)
1 When do	you have a break or end time at your school?	Malyah – How do you decorate for Christmas?
2 Do	you learn Korean at school? What songs are the most popular there? Is BTS popular there?	Lenny – What type of flowers do have?
3	Is it cold there? What animals are there in Australia? What is the school lunch in Australia?	Lucinda - Do you believe in Santa?
4	Are there many koalas in Australia? Is it cold there? What's the best food in Australia	Dane – What do you do for Christmas?
5	Is the water clear there? What season is it? Do you wear a mask? Do you like BTS?	Charlee – Do you do PE at your school?
6		London – How often do you brush your teeth?







Teachers are making future education together





