



Digitalisation and Innovation
by PP8 MU
(University of Miskolc, Hungary)



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Mapping successful training program



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What makes training effective and good?



Warm-up





1. Needs Assessment - the participation of the learners in naming and informing what is to be learned.
2. Safety - in the environment and the process
3. Sound Relationship - between the teacher and the learners for learning and development.
4. Sequence and Reinforcement – from simple concepts to complex, from group supported learning to solo efforts and reflection, then repetition of facts, skills and attitudes in diverse, engaging and interesting ways.
5. Praxis - action (learning) with reflection (thought after doing).
6. Respect



7. Cognitive, Affective & Psychomotor learning
8. Immediacy – useable material
9. Roles - defined the learning objectives and outcome
10. Teamwork - using small groups.
11. Engagement
12. Accountability - How does the learner know that they know?

Adapted from: Learning To Listen, Learning To Teach: The Power Of Dialogue in Educating Adults, Jane Vella, 194 pages, Josey-Bass, 1994.

<https://union.wisc.edu/assets/Uploads/Events-Activities/Wheelhouse-Studios/MiniCourses-EffectiveLearning.pdf>





Questions to think over

- Target audience
- Training needs and expectations
- Training objectives
- Training outcome
- Training material
- Pedagogical and instructional methods



Objectives

SMART Model

This model is used to build practical objectives.

S is for Specific; specify what to achieve.

M is for Measurable.

A is for Achievable.

R is for Relevant.

T is for Time-bound.

A-B-C-D Model

This model is often used to build behavioral objectives.

A is for Audience. State the learning audience within the objective.

B is for Behavior. State the behavior you wish to see exhibited.

C is for Condition. State the conditions where the behavior will occur.

D is for Degree. To what degree will the learner be enabled?

https://publichealth.gsu.edu/files/2020/07/Adult_Education_Toolkit.pdf





Training material

- Identify learning objectives
- Identify the kind of outcome: knowledge, skill, attitude
- Find the right method to teach
- Explain the usefulness of the training





Methods of Instruction

Group activities

- Role plays
- Simulations
- Games

Individual

- Self-assessments
- Evaluations
- Writing

Either

- Case studies
- Projects

https://publichealth.gsu.edu/files/2020/07/Adult_Education_Toolkit.pdf





Course Elements

- Course outline, learning objectives
- Competencies, if desired
- Evaluation tool
- Trainer's instructions
- Student syllabus
- Warm-up exercise
- Question periods
- Flexible and inclusive activities
- Resources

https://publichealth.gsu.edu/files/2020/07/Adult_Education_Toolkit.pdf





Trends driving SMEs' digital transformation



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Trends driving SMEs' digital transformation



1. Flexible working
2. Personalized customer experience
3. Data-driven decisions
4. Artificial intelligence
5. Empowered frontline workers
6. Cloud solutions
7. Cybersecurity





Flexible working

- Flexible working is changing how modern businesses operate. For small and medium companies willing to expand their reach, remote work has become one of the biggest transformation drivers.
- **This is especially true with millennials beginning to dominate the job market.** They're known to be independent, value their private time, and seek challenges at work. To appeal to that workforce, companies have to modernize and adopt a more dynamic approach.
- **By adopting technology that facilitates distributed collaboration, you can give your employees the freedom they crave, and reap all the benefits of remote work.**





Personalized customer experience

- Customers are now more informed than ever thanks to the internet. Digital technologies are reshaping how they engage with businesses and make purchase decisions. And traditional marketing doesn't always keep up with this shift.
- **Each stage of a buyer's engagement with a brand affects their perception of the business and future purchases.** That is why focusing on customer experience may be the single most important objective for small and medium-sized enterprise growth.
- **Innovative digital solutions allow businesses to identify buyers' expectations and deliver compelling value.**



Data-driven decisions

- Information is one of the most valuable assets in a rapidly changing business landscape. Skilled use of accumulated data allows organizations to improve strategic and business decision-making while positioning themselves for growth.
- **Big data and business analytics (BDA) play a vital role in the collection of accurate market and customer intelligence.** By capitalizing on that technology, SMEs can examine existing customer insights and adjust offering accordingly.
- **Small business owners no longer have to make decisions based on their gut feeling and assumptions alone.**



Artificial intelligence

- Artificial intelligence (AI) simplifies and automates routine processes for customer and tech support, product design, logistics, and many more, saving significant time and costs. It also helps companies understand customers and anticipate their behavior to deliver personalized services.
- From chatbots, self-service, and customer relationship management, to lead scoring and sales forecasting, **AI enables SMEs to capture, manage, and measure customer interactions with their businesses**
- **Integrating AI solutions allows SMEs to organize and automate laborious workflows efficiently, and deliver highly-personal customer experiences at no extra cost**





Empowered frontline workers

- When we think of digital solutions, we tend to think of office settings. However, in a typical small or medium company, office workers are as little as 10% of the overall staff. The rest are frontline workers.
- **Empowering frontline employees is key to success for SMEs as they are the first to engage your clients.** Modern digital technologies keep employees involved and motivated, and allow them to deliver a consistent brand experience
- **Frontline workers speak for your business. There's a profusion of digital tools and technologies that can help you bring the best in them to serve your customers better.**





- In the past, there was a distinct divide between large enterprises and small companies. SMEs had to struggle with significant barriers to entry. They had insufficient funds, couldn't scale quickly enough, and lagged behind with technology.
- **As cloud solutions emerged, it became possible to resolve most of these concerns.** Cloud is a catalyst for small and medium enterprises to achieve scalability and keep pace with growth.
- **Thanks to cloud-based solutions, SMEs can successfully compete with large businesses while retaining the efficiency and flexibility of a startup.**





- Cyberattacks on business are surging, and the methods employed by hackers are becoming more sophisticated each day. Despite these alarming signals, many SMEs continue to ignore security, which leaves them vulnerable.
- **Investing in reliable, compliant security solutions should be a top priority for SMEs.** Every modern business needs a cybersecurity strategy to protect their assets and safeguard customer data and privacy
- **As SMEs digitally transform, they must seek robust solutions that will protect their data and respond to threats immediately.**





Digitalization skills for SMEs



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- Communicating via email
- Researching information online
- Handling sensitive information in virtual ecosystems
- Safely using cloud-based collaboration tools like Google Drive, DropBox, and Microsoft Teams
- Creating and managing spreadsheets and online documents
- Basic device management like connecting to the internet or installing software updates
- Screen sharing during a video call
- Using online calendars and efficiently managing your schedule (and possibly others on the team)





- **Digital foundation skills** – the fundamentals of being able to use digital technologies, such as using a browser, connecting to the internet, and keeping passwords secure.
- **Communicating** – sending emails securely, using attachments, and participating on social media.
- **Handling information and content** – using search engines, being aware that not all online content is reliable, accessing content across devices.
- **Transacting** – setting up accounts to use or purchase goods/services online, using different secure payment methods, filling in online forms.
- **Problem-solving** – finding solutions to problems using FAQs/tutorials/chat, presenting solutions through software, and improving productivity.
- **Being safe and legal online** – understanding best practice in data storage/sharing, updating and keeping passwords secure, and taking precautions against viruses.





Advanced digital skills (v1)

- Original content creation
- E-commerce
- Network and information security
- UX/UI design
- Digital marketing
- Social media marketing
- Data analytics





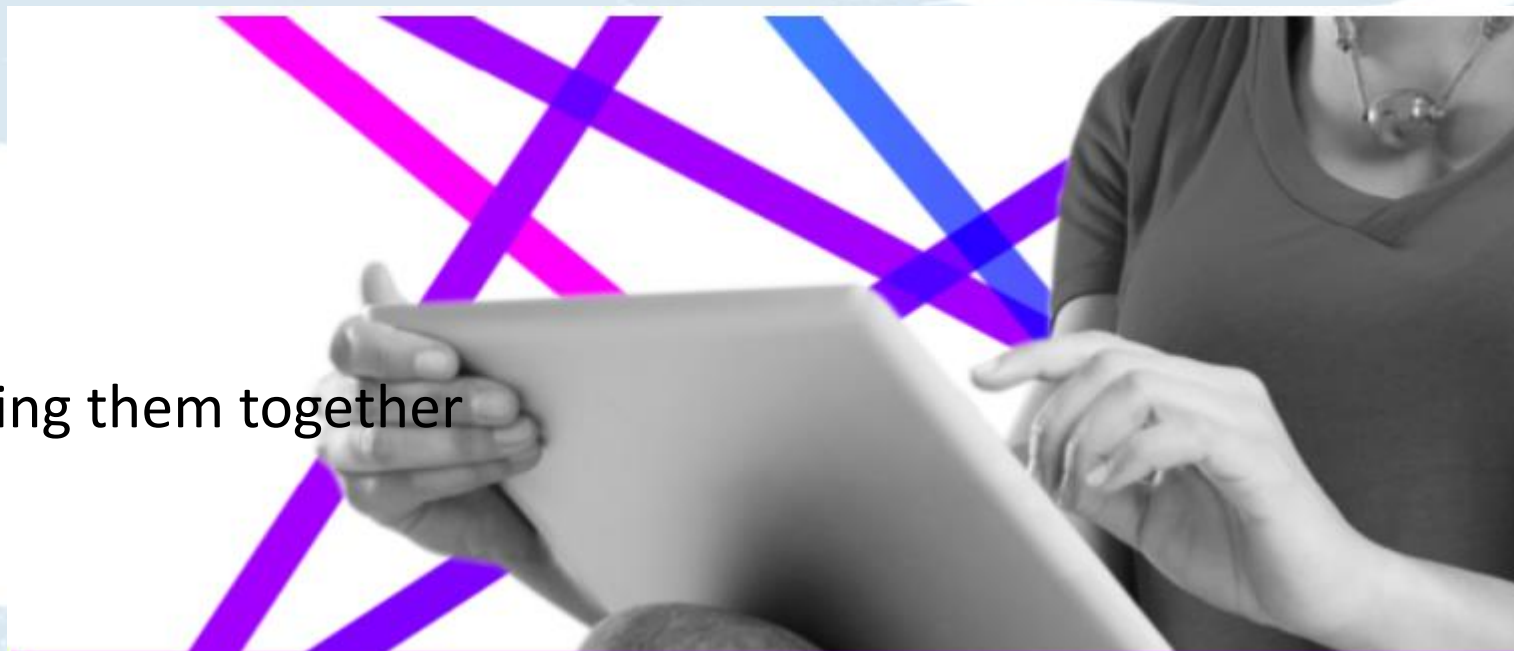
Advanced digital skills (v2)

- Digital marketing
- Social media
- User Experience (UX)
- Web Analytics
- AI





- The internet has completely changed the marketing game, bringing a level of precision and scale unknown in the pre-digital age
- Specialised digital skills are required in order to navigate this new terrain, with expert practitioners often focusing on one specific discipline
 - These include things like
 - pay-per-click advertising,
 - search engine optimisation,
 - email marketing,
 - as well as the strategy to bring them together





- Social media digital skills are crucial to the digital marketing mix, but are worth pulling out as social media has come to play such a significant role in our day-to-day as well as professional lives
 - Social media management tools,
 - performance measurement,
 - new channel research,
 - brand presence/voice,
 - influencer marketing,
 - and paid vs organic all play a part in connecting with prospective and current users.





User Experience

- Just as the actual experience of shopping in brick-and-mortar stores plays an essential role in driving sales, the experience of using a website or mobile app is key to leading users to do what the website or app owner wants them to do
- Indeed, it is even more central, as users can only use a website in predetermined ways
- Thus, we have the area of digital skills known as user experience, or UX
- This is the art of making sure that apps, websites, and other digital channels are intuitive and enjoyable to use.





- Part of what makes the digital age distinct from before is precision
- We can clearly understand the behaviour patterns of those using digital platforms
- For businesses, this also means being able to quantifiably track the successes and failures of their digital initiatives
- The digital skillset involved in collating and making sense of this data is web analytics
- Things like benchmarking, audience segmentation, and measurement all fall under the remit of web analytics.





- Artificial intelligence may still have something of a science fiction ring to it, even compared with the aforementioned digital skills
- Nonetheless, artificial intelligence is playing an increasing role in modern businesses
- Rather than the sentient robots of cinematic lore, AI is about teaching machines to do jobs, predict, and make decisions based on detailed computation of past examples





Features of Generation X, Y, Z



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Generations living today

- 1920-1939 Traditionalists,
- 1940-1959 Baby Boomers, Prophets
- 1960-1979 **Generation X, Nomads → Lecturers, Employers**
- 1980-1995 **Millenials or Generation Y, Heros**
- 1996-2007: **Generation Z → Students, Employees**
- 2007- Alpha





1960-1979 Generation X's features I.

- Parents of today's teenagers.
- Born after the reconstruction of Europe after 2nd WW,
- Their life has not been easy, since, after a period of upheaval, finding a job was a great challenge.
- To work and produce was their philosophy of life, leaving no room for idealism.
- **Individualism, ambition and an addiction to work — or being a workaholic — are the values with which they grew up.**





1960-1979 Generation X's features II.

- They became adult at the time of the regime change → the rules learned in childhood became invalid and the new one was unknown...
- They remain “digital immigrants” compared to the next generation, even though they were introduced to them at a young age.





1980-1995 Generation Y's features I.

- They are special - they cared more about them as a child,
- Protected (parental support),
- Confident and optimistic,
- They like to work in a team,
- They are ambitious, highly motivated, rational and long-term,
- High pressure - uncertain economic environment,
- Traditional, conventional values
- Digital natives, technology lunatics





1980-1995 Generation Y's features II.

- At the age of 25-30 they still live with their parents (mother hotel),
- They saw that their parents created an existence at the cost of hard work → they don't want to robot,
- Their world: you have to hurry forever, build a career, realize it,
- Shaper of consumer society → latest trends





1996-2007: Generation Z's features

- Real digital natives,
- They use technology almost sooner than they talk,
- They spend a significant part of their time online,
- Social media,
- Their learning habits have changed → they are used to a fast flow of information,
- Multitasking,
- They read little (pictograms)





1996-2007: Generation Z's features I.

- First global generation (same music, film, games, fashion),
- Smallest number,
- Most educated,
- They were born into the smallest family
- They are raised by eldest mothers,
- Longest life expectancy





1996-2007: Generation Z's features II.

- Importance of personal freedom,
- Public sharing of their social life,
- Fast rhythm life,
- They are not characterized by words and emotions,
- They are not afraid of change because they are got use to it,
- Less loyal consumers,
- They trust themselves,
- Practical approach,
- They are smart rather than wise,
- Brave and enterprising,
- They are less willing to follow the rules.

Kései (2011) In: Pál Eszter (2013) a Z generációról... áttekintő tanulmány. Pécs.

www.zgeneracio.hu/getDocument/4252





Generations Y and Z as future workers

- Internet-connected, wired generation,
- Well-developed problem-solving ability,
- Excellent technical sense,
- Practicality,
- Good attention span,
- Alienation from the environment,
- Difficult compliance,
- Insufficient conflict management skills,
- Temperament management difficulties, aggression,
- The chances of loneliness-anxiety-depression increase.



<http://www.kormanyhivatal.hu/download/2/18/60000/Y%20%C3%A9s%20Z%20gener%C3%A1ci%C3%B3%20mint%20a%20j%C3%B6v%C5%91%20munkav%C3%A1llal%C3%B3i.pdf>





Family

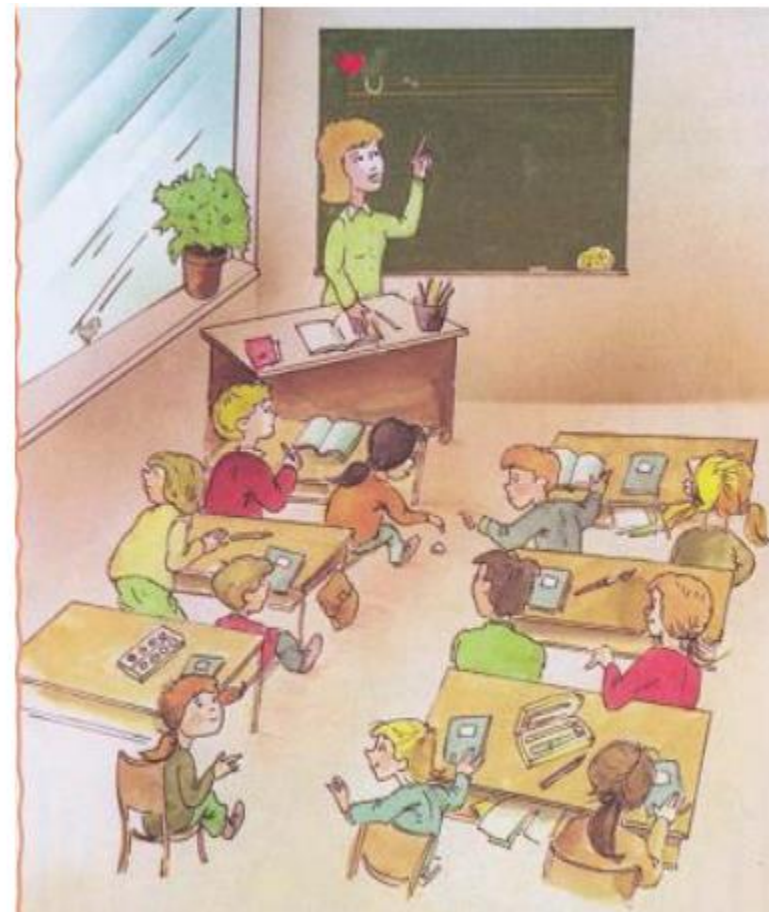


Bogár Nikoletta – Tankönyvi ábrák elemzése neveléstani szempontból (TDK dolgozat – PTE PMMK Pedagógia Tanszék, 2004) in Pais.





School



Bogár Nikoletta – Tankönyvi ábrák elemzése neveléstani szempontból
(TDK dolgozat – PTE PMMK Pedagógia Tanszék, 2004) in Pais.





Let's Play!

- Quiz: were you born in the right generation?

<https://this.deakin.edu.au/society/why-goal-kicking-in-afl-is-about-more-than-technique>





Thank You for the attention!
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