Abstract

Personalized Learning is one of the emerging educational trends which is developed on the core principle of student-centric pedagogy. This paper aims at identifying the significance of three Personalized Learning tools and strategies, namely: 1) E-portfolio, 2) Digital Storytelling and 3) Three Step Interview. These three tools for personalized learning are assessed keeping in context with the four major elements of Personalized Learning. A format of systematic literature review has aided the formulation of the core concept behind this paper. Findings from existing literature in the field of Personalized Learning along with certain significant findings by the researcher has been strung together to make the concepts more accessible.

Keywords: Personalized Learning, E-portfolio, Digital Storytelling, Three Step Interview, Digital Education, Modern Education

Personalized Learning is one of the emerging educational trends which is developed on the core principle of student-centric pedagogy. It focuses on the individual learning needs, and aspirations of each student. Personalized learning takes into high consideration the personal educational demands of every individual, thus, creating an enrichingly inclusive educational setup. The concept of personalized learning in education primarily focuses on how various models of teaching influence the student’s learning process (UNESCO, 2020).

Therefore, it can be easily concluded that personalized learning operates on a learner-driven model, using which pupils can engage not only intensively, but also speculatively and actively (UNESCO, 2020). By indulging in personalized learning, the learners come across challenges and overcome these challenging tasks in order to obtain desired results.

Primary objectives of Personalized learning stand on these four major elements:
A. Collaboration, mutual construction, reflection at the personal level and common ownership over learning content by both learners and teachers.
B. Content which is flexible, teaching-learning tools and environment that encourages learners towards collaboration.
C. Specific support directed towards the interests and needs of the learners.
D. Communicative communities for reflective practices.

These four pillars of make personalized learning an evidently reflective, collaborative and continuous improvement module which operates singularly aimed at the decisive ability of the learners. However, just classroom learning isn’t sufficient in the fast-paced modern world. Therefore, it is imperative to organize learning through various e-learning tools. In this discussion, we take a closer look at these relevant tools for personalized learning which are currently used in various teaching-learning scenarios. We will move towards developing a closer understanding of e-learning tools like e-portfolio, digital storytelling and three-step interview.

E-portfolio

It is commonly used among students at the higher education level to keep record of their educational development. E-portfolio helps in maintaining an evidence based record by recording details of assessments and helps the learners to garner critical thinking, which aids in them in their lifelong journey of learning (Bolliger & Shepherd, 2010). Through scientifically based investigation, (Colás-Bravo et al., 2018) it is proved that e-portfolio holds tremendous potential as a tool of evaluation, and also aids in the holistic development of learners by establishing self-awareness among them. Learners become more involved with the process of learning, and this engagement increases the abilities of the learners manifolds (Gámiz-Sánchez et al., 2016). Alajmi (2019) nicely sums it up by pointing out that by actively using e-portfolios, learners can significantly improve their existing skill-sets and knowledge, because an e-portfolio demarcates the strength and weaknesses of a learner.

Modern education system acknowledges the individuality of every single learner. And this individuality of each learner makes every learner unique in their learning styles, however, cerebral capacities like knowledge about a specific thing or entity (Sfenrianto & Suhartanto, 2011), and the way in which the learner channels his/her learning abilities vary because of various external factors like culture, availability of resources etc. The appropriate environment is provided for by e-portfolio firstly by, addressing the individual needs of the learners and secondly, by co-producing the ideal learning framework. Thereby, it can evidently be stated that e-portfolio is one of the most significant tools for personalized learning.

In the field of scientific research, e-portfolio as an application for learning serves numerous roles of:
1. Being a learning tool
2. Being the learning environment (H. Barrett & Carney, 2005)
3. Being the framework for learning
4. Being the learning strategy (Bolliger & Shepherd, 2010)
5. Being the instrument of learning assessment (H. C. Barrett & Garrett, 2009)
6. Being a feedback tool for learners as well as teachers (Händel et al., 2020)
7. Being a means of career enhancement (Bolliger & Shepherd, 2010)

Thus, we can see the all-round capacity of e-portfolio as an instrument for the manifestation of personalized learning.
Not only does an e-portfolio make the learner more self-aware and responsible for their learning (Jaros & Deakin-Crick, 2007), it also ensures the provision of an authentic system of garnering knowledge. By using e-portfolio learners become more contemplative and introspective of their learning trajectories and can very easily chart their own development. It helps them to be more actively involved in their educational growth (Goldsmith, 2007). Learners are at the liberty to set their own pace for learning and monitor their own progress (Reese & Levy, 2009).

Personalized learning as a system of education is very dynamic in nature (Nedungadi & Raman, 2012) which requires constant personal monitoring, and e-portfolio serves as the perfect aid for personalized learning by being a tool for self-evaluation and self-correction based on internalization of the learning process through introspection and self-reflection (Goldsmith, 2007; Yastibas & Yastibas, 2015).

What really makes the system of e-portfolio work as a tool for learning assessment is the mere fact that the process of filling out an e-portfolio is equivalent to interacting with a university teacher or classmate on matters of personal learning experiences and growth (Lin, 2008). In order to make e-portfolio worthwhile interactivity with peers and teachers (Raman & Nedungadi, 2012) is as important as quiet introspection. Simultaneously, e-portfolio also provides congenial setup for teachers as well to monitor learner’s achievements and progress, and accordingly edit or alter goals, the criterion for assessments, methods of teaching and content (Goldsmith, 2007).

The following terms and conditions for being an authentic tool for assessment are all fulfilled by e-portfolio:

- It addresses the individuality associated with every learner and facilitates teachers to do the same by focusing on unique and individual needs, aspirations, strength and weakness.
- Provides substantial basis for future planning based on current analysis of learner’s learning process.
- Aids the process of continuous communication among teachers, learners and peers.
- Overcomes the demerits of traditional assessment modules, hence, provides a better scope for assessment of complex information.
- Makes the process of assessment more holistic by acknowledging and valuing non-conventional themes and areas of assessment.
- Is much more holistic in nature as it covers wider spectrums of knowledge and information.
- Is attentive of feedback from subject experts other than teachers, for instance, peers and tutor-mentors.

However, it needs to be considered that the implementation of e-portfolio into the environment of learners as an active instrument of learning is dependent on the following skills of the teachers (Attwell, 2007):

1. Ability to facilitate learning
2. Active listening ability
3. Provision of continuous and comprehensive feedback
4. Scope for imparting correct intervention as and when required
5. Holistic assessment of learners.
Digital Storytelling

Storytelling is defined as the detailed description of ideas, events, personal experiences and beliefs or life-lessons in a way to entice the imagination of the listeners and capitalize the knowledge shared (Serrat, 2008). It can be also referred to as using words and narration techniques to encourage the listeners to get more indulged with the story being told. Storytelling as an instrument of learning has been in usage since the very beginning of human civilization. It has been used and is still used repetitively in various educational context. Recently, storytelling is garnering much needed footage because of its theoretical as well as practical implications.

Storytelling helps not just in content delivery for the teachers, but it also impacts learners in the following positive ways:

- It helps in vocabulary development
- Increases the comprehension abilities of the learners
- Improves the rhetorical sense of the learners
- Helps the learners to develop the ability of symbolic imagination and metaphor analysis
- Boosts the language fluency of the learners

In a research study on assessment of comprehensive abilities (Walker, 2001) one group of children were presented with stories in three different ways of narration, reading and through CD-ROMs, while the other group were taught following conventional methods. The group of children presented with storytelling attained better scores in comprehension than the other group of children. Thus, helping us reach the conclusion that storytelling is a better way to enhance the comprehension abilities among learners.

By engaging the thinking faculties, storytelling as an instrument of learning engages emotions and paves way for development of mental imagery (Green & Brock, 2000). Individuals when listen to stories, they automatically respond to it (Polichak & Gerrig, 2003), this response makes them direct or indirect participants of the narration process, which quiet evidently demonstrates the innate sense of human connection to storytelling.

Even though the existence of storytelling as an entity is as old as the human race itself, digital storytelling came into purview in the later part of 1980s, when the Centre for Digital Storytelling in California developed the very first digital storytelling program. In much recent years, the pedagogical process has upped a notch by digitalizing the entire education process, as a result of which digital storytelling as a pedagogical approach has gathered a wide scope (Miller & Rose, 2009). The recent advancements in technology doesn’t limit stories by restricting them to the boundaries of narratives either in oral or written forms, the process of digitalization of stories make storytelling enthralling and innovative. Digital storytelling makes digital stories accessible worldwide by providing learners a connection to ICT. Thus, digital storytelling doesn’t just deliver content innovatively, it also imparts the necessary modern-day skills by engaging learners through internet, web technology and multimedia. By conducting simple technological activities like searching online, internet surfing and using various multimedia tools and applications for accessing digital stories, learners become more technologically literate (Mellon, 1999).
Incorporation of digital storytelling as an active agent of personalized learning brings forth various dimensional advantages in the classroom setting, which are identifies by Gils (2005), like:

1. Introduction of variety in classroom for learning, where innovative methods are prioritized than traditional modes of learning
2. Making the process of learning more individualized, by addressing the personal learning choices and aspirations of every learner
3. Offering simpler and catchy explanations for complex topics
4. Making learning less abstract and more concrete through association with real life situations
5. Making the process of learning more enriching and engaging by eliminating the boredom of traditional learning modules.

The basic concept of digital storytelling combines the age-old art of storytelling with various modern day technical elements of digital multimedia, such as, audio, video and/or images. Every digital story in order to present topic specific information as a process amalgamates recorded audio narratives, music and video imagery, digital texts and graphics (Robin, 2008).

According to McDrury and Alterio (2001), Digital storytelling ensures a learner-centric system of education by:

- Providing better engagement of the learners
- Encouraging reflection and introspection among learners
- Incorporating a project-based strategy for enhanced learning
- Integrating internet, multimedia and technology into the traditional instruction module

The following figure helps us better understand the link between digital storytelling and various strategies used by learners:

Illustration 1: Convergence of Student-centred Learning Strategies by H. Barret (2006)

The above illustration points towards the four major student-centric learning strategies of Student Engagement, Reflection for Deep Learning, Project-Based Learning and Technology Integration. These four student-centric strategies are pertinent for Personalized Learning. Here, in this model by Barrett, Digital Storytelling is demonstrated as a regulator for these four strategies of Student Engagement, Reflection for Deep Learning, Project-Based Learning and Technology Integration. Thus, digital storytelling as a tool for personalized learning engages and motivates learners by building their
technological skills, which is much more advanced and efficient than the traditional models of reflection-based learning like journals and similar pen-paper oriented methods.

Not only in subjects like literature, language, arts and social sciences, if integrated properly, digital storytelling can encourage students to better organize their individual ideas into stories for almost all the subjects they study. Further, digital storytelling ensures other educational outcomes like creativity and innovation, community development and collaboration through peer-to-peer teaching (Green, 2004).

Regular computer users can become effective digital storytellers by simply selecting a topic of interest, studying and researching about the selected topic, preparing a befitting script and furnishing an interest story (Robin, 2008), because ‘digital storytelling is the modern expression of the ancient art of storytelling’ (H. Barrett, 2006).

**Three Steps Interview**

The Three Steps Interview as a process was first developed by the International Women’s Group of Oregon (Bodone et al., 1997). It is basically a form of participatory interview approach in which the participants take turn performing three roles in the entire process of the interview.

The Three Steps Interview model was initially developed to enhance reflective participation in interviews in the field life history research. It is designed for a small group of three to five participants, where all the participants take up rotating roles as the interviewee, the interviewer and the reflective note-taker. When there are more than three number of participants, the fourth and fifth participants are assigned the roles of co-reflective note-takers. For the three steps interview process to be worthwhile, it is imperative that each participant is assigned a role during the interview. The three roles are discussed as follows:

1. **Interviewee**: the one who is interviewed and shares his/her experiences with the entire group.
2. **Interviewer**: the one who asks questions and facilitates the process of the interview.
3. **Reflective Note-taker(s)**: the one(s) responsible for making note of everything significant during the interview process and sharing their feedback at the end of the interview.

Once one round is completed, these roles are rotated and the rotation keeps going until everyone in the group is interviewed (UNESCO, 2020).

As suggested by UNESCO, in order to be effective, Three Step Interview must follow some steps, which are:

- The number of participants must be three to five, and should be paired in groups if more than three.
- One participant act as the interviewer and interviews another participant on a certain topic.
- One or more number of participants work as the Reflective Note-takers and records the entire interview process.
- Following the Round Robin format these assigned roles are rotated among the participants.
- The noted points are discussed within the group.
- The group must agree on a time frame assigned to each participant for the interview.
The elemental concepts necessary for the successful implementation of the Three Step Interview as mentioned by UNESCO in the document ‘Personalized Learning within Teacher Education: A Framework and Guidelines’ (UNESCO, 2020) are as follows:

- Demonstration of good interviewing skills by asking significant open-ended questions.
- Presentation of formal communication skills in order to make the interview seem more significant than just idle chit-chat.
- Ability to probe into important topics of conversation by asking follow up questions.
- Maintaining good eye contact, posture and listening attentively.

The correct implementation of Three Step Interview in educational context not only enriches the sense of community among learners, but also help them to reflectively analyse what is best for them. Mobile phones make it easy for the ones in the roles of Reflective Note-takers to record the entire interview proceedings and deliver more significant details, similarly, by recording the entire process of the interview participants can look back at their delivery and delve deeper into their thoughts and responses.

Three Step Interview as a strategy for enhancement of Personalized Learning allows participants to discuss their thoughts, problems and experiences among their peers, and collectively evaluate and re-evaluate their learnings.

**Conclusion**

These three tools of E-portfolio, Digital Storytelling and Three Step Interview are strategies useful for the incorporation of Personalized Learning into the existing learning module. They provide learners with scope to associate with their individual learning experiences, develop understanding towards their personal learning aspirations, and collaborate with peers and teachers to achieve their diverse educational needs.

All these three tools present more than one out of six identified areas associated with Personalized Learning, and allow the necessary transition from traditional modes to learning to the modern learning modules. By digitalizing the traditional education setup through implementation of tools like E-portfolio, Digital Storytelling and Three Step Interview, not only we modernize the education system, but we revolutionize it by making it significantly more individualistic.

**References**


