Drypoint Printmaking: Alternative Material and Technique for Open and Distance Learning (ODL)

Noor A'yunni Muhamad*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Email: noora691@uitm.edu.my

Ishak Ramli*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Corresponding author
Email: ishak991@uitm.edu.my

Azian Tahir*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Email: azian572@uitm.edu.my

Noor Enfendi Desa*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Email: enfendi@uitm.edu.my

Nur Adibah Nadiah Mohd Aripin*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Email: nurad370@uitm.edu.my

Mohd Fawazie Arshad*
College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak
Email: fawazie@uitm.edu.my

Received Date: **6.12.2021**; Accepted Date: **25.2.2022**; Available Online: **25.3.2022**

* *These authors contributed equally to this study*

ABSTRACT

Drypoint refers to an intaglio sub-section printmaking technique (non-acid technique) of which a rough needle is used to make scratches across the plate (metal or copper plate) surfaces. Since March 2020, the education system is one of the sectors which has been affected by the pandemic and the process of teaching and learning was determined to be delivered through Open Distance Learning (ODL). Since drypoint printmaking is a part of the Fine Art education syllabus, this research aims to explore an alternative in drypoint printmaking, especially in the exploration of material and techniques without compromising the aesthetic and rules in drypoint. The method that will be used in this research is qualitative research through exploratory action research approach. This method is significant in terms of exploring other alternatives in substituting the role of equipment such as etching press and other possible materials. In this research, the comparative method from the aspect of material and technique will be used since it involves comparing circumstances, classes, cultures, or anything that are similar and yet different in comprehensible ways. The outcome from this study will produce the result of whether the alternative method and technique can achieve the same kind of quality as the common practice of the drypoint printmaking technique. Based on the findings, the researcher will develop a

formal guideline for educators and art practitioners to expand this alternative technique as an approach in achieving the best quality of drypoint printmaking artworks without having to worry about lack of experience in an art studio environment or complete equipment. In the future, there should be more exploration, especially on the alternative material and technique in Drypoint printmaking.

Keywords: *Alternative Process, Drypoint Printmaking, Fine Art Education, Open and Distance Learning, Teaching and Learning.*

INTRODUCTION

Generally, the education sector has been growing rapidly, and it evolves to adapt to continuous changes as time progresses. Education is important for an individual to always be prepared as it provides the best approach to any problem given (Idrisa et al., 2011). According to the Sinar Harian website, The World Economic Forum has recognised Malaysia as one of the best countries in the education sector as Malaysia was ranked among 141 best education countries around the world in 2018. Based on its latest report, Malaysia ranks 19th which is higher than the United Kingdom (UK) which was ranked 20th, France (26), and Japan (31) (Sualman, 2019). In the Malaysian education sector, Universiti Teknologi MARA (UiTM) is one of the best universities in Malaysia. According to Mysumber, the latest list of the best universities 2020/2021 indicated that UiTM is ranked 12th in Malaysia, 108th place in Asia, and 657-700th place in the world's university ranking (Senarai Terkini Universiti UA Terbaik Malaysia 2020-2021 Top Ranking, n.d.). Since its establishment in 1956, UiTM has embarked on the journey of providing the best education services as the Malaysian education sector undergoes rapid development. Moreover, the university has expanded its wings nationwide by establishing 12 state campuses (7 of which are autonomous), 6 campuses in Shah Alam, 11 campuses, and 21 associate colleges. With a workforce of approximately 17,770 people in a large community, the university offers more than 500 academic programs in a safe, comfortable, and conducive atmosphere (Official, n.d.). It is also the second home for more than 175,200 students. From 500 academic programs which are offered to students, the Art and Design program is one of the courses that have potential in terms of marketability. Other than creating job opportunities, the Art and Design program is also one of the big industries which play an important role as the main contributor to the Malaysian economy. The Faculty of Art and Design was established in 1967 and since then, it is represented by the Department of Fine Arts, Department of Graphic and Digital Media, Department of Ceramic Design, Department of Fashion Design, department of Photography and Creative Imaging, Department of Fine Metal Design, Department of Industrial Design, Department of Printing Design, And Department of Textile Design (Official, n.d.).

Fine Art is known as one of the art categories that emphasizes the understanding of art, the principles and elements of art and design. Through Fine Art education, students experience learning processes that include paintings, sculptures, drawings, and printmaking. The process of printmaking exists when the artist draws on metal, wood, or other material to create certain images to develop prints. This plate can be defined as the matrix, or block with the image on top of it. Then the matrix is inked, and the image is transferred onto paper or fabrics (Son, 2012) To make multiple copies out of an original image or prototype, printmaking uses a transfer technique. The different images are reproduced in an edition, with the artist signing and numbering each print unit (Lumen, n.d.). The basic style in printmaking is called Relief Print, and this technique requires the printing surfaces to be carved according to the design so that at the end of the process, only the design will be embossed out and ready to be printed (Barcodes, n.d.). The printmaking teaching and learning process in the UiTM Perak branch has focused on technique and material being used besides emphasizing the understanding of shape, space, and forms. This studio-based subject has practiced several conventional printing disciplines which are relief printing, intaglio, and silkscreen printing.

Intaglio Print, on the other hand, is the opposite of Relief Print. The design which is placed on a metal surface will be carved and the mark created by the carving process will hold the ink and be printed as it is on surfaces such as paper (Barcodes, n.d.). The history of Printmaking could be traced back to centuries ago and Intaglio is one of the earliest printmaking techniques in art-making. Different from other printmaking techniques, an intaglio print is produced when the ink is pressed on a metal matrix into the incised surface. The incised surface of the plate will be rubbed clean leaving the ink in the grooves. The plate is laid and dampened on a flat etching press table and will be imposed on top of wet paper. The wet paper allows the removal of the ink from the recesses of the cover. Pressing the metal plate with the ink incised into the surface will dampen the wet paper and extend the pressure into the paper. It results in slightly blurry lines and corners, which creates images referring to the drawing in the earlier process. Intaglio is a type of printing where the ink sits on top of the paper which yields sharp, smooth edges (Son, 2012). One of the categories in Intaglio Prints includes Non-Acid Platemaking Intaglio Print that refers to the process of printing which does not use acid to incise the engraved metal surface (Morrison, n.d.). The author added that the Intaglio Printing technique which falls under Non-Acid Platemaking includes Drypoint, Mezzotint, and Engraving.

LITERATURE REVIEW

Introduction of Drypoint in Intaglio prints

Drypoint is part of the intaglio techniques in which a rough needle is used to make scratches around the plate surface. This scratching action produces a burr (metal bits that fold back from the scratch edge). The scratch or incised metal plays an important role to hold the ink and let the image be transferred successfully on the paper. Lines from the drypoint technique can easily be recognised since drypoint will create softer and furry lines due to the clear control of engraved lines (McCallum, 2007). The line which is created by using the drypoint technique also tends to give the printed line a velvety image since the ink that has been applied to the plate is wiped off (Drypoint, n.d.).

Conventional Technique and Process

The drypoint technique is usually used to produce limited quantities of prints. This is because the production of the drypoint prints will be discontinued depending on the strength of the intaglio press before the burr (on the plate) is crushed (Drypoint, n.d.) Based on this notion, it is obvious that drypoint is not a very suitable technique in terms of producing many images, since the fragile burr wears away so quickly that only a small number of prints can be produced from the plate itself (Thompson, 2008). Historically, the Drypoint is the simplest type of intaglio where it is prepared by using a metal plate as a surface, but it can also be applied on an acrylic sheet, plastic, or plexiglass plate (Meng, 2012). In the drypoint technique, lines or tones on a metal plate will be scratched by using a sharp needle which is called ‘Scribes/Drypoint needles” and the scratches will hold the ink until the line is transferred onto paper (Art, n.d.).

In Universiti Teknologi MARA, Perak Campus, drypoint printmaking is one of the techniques which has been taught to the third-semester students of the Fine Art program. Usually, this technique is taught to students through the face-to-face method of teaching and learning. To deliver this subject, the university has provided a complete facility for printmaking equipment in the workshops and the students can use these facilities according to the syllabus needs and subjects’ schedules. In addition, students will not have any issues regarding the material and equipment in completing the drypoint project.

Problem Faced in Pandemic Covid-19 Situation: Drypoint Printmaking

Having Drypoint Printmaking in a learning environment that goes in line with technological innovations and transformations, March 2020 marked the beginning of the largest disruption in education system history as the world was gripped by the Covid 19 pandemic, which does not only affect the education sector, but it also shakes the world's economy, health sector and transforms people's way of life by forcing them to embrace the new norm. Today, in more than 190 countries on all continents, this pandemic affects about 1.6 billion students. The closing of schools and other educational institutions has affected 94 percent of the student population in the world, up to 99 percent in countries with low incomes (Nation, n.d.). Locally, Malaysian universities are not spared from the restrictions caused by the pandemic. Since the COVID-19 viruses are still active in the communities, the Malaysian government by the guidance of The Ministry of Higher Education (MoHE) has announced that academicians from higher learning institutions in both private and public education sectors will be conducting their classes online for the sake of students and educators' health and welfare.

Due to this situation, educators have been facing challenges in terms of delivering studio-based syllabi via the Open Distance Learning (ODL) method. In the printmaking subject, for the drypoint project, students have no access to the studio facility and have been unable to find most of the materials needed in this subject due to the Movement Control Order (MCO). Using this gap, in this academic writing, the researcher will develop an alternative material and process for drypoint technique so that the students will be able to produce printmaking artwork and achieve the outcome of the subject's syllabus.

RESEARCH METHODOLOGY

In this research, the research objective is to understand the basic procedure of the drypoint technique in Printmaking and to explore an alternative method that suits the environment of Open and Distance Learning (ODL). This is important so that in the future, this research will not only be treated as an important reference, but it can also enable educators to teach printmaking subjects without many obstacles even in a pandemic situation.

The method that will be used in this research is qualitative research through exploratory action research approach. Action research is one of the methods that is made for practitioners to understand the participants' interpretations on issues or problems in their practices. It also aims to include participants in the process at any stage to address a practical issue to strengthen their practice (Stringer, 2014; Merriam & Tisdell, 2016). Action research uses a solution-oriented approach to classify the problem, systematically collect data, analyze data, act based on data, review and focus on the effects of those actions and, if necessary, redefine the problem (Sousa, 2011). The efficiency of action research is assured because a researcher such as an educator, who is also the primary user of the results, decides the objective of each research project. The idea that action research allows educators to be more successful in what they care about most, their teaching, and the growth of their students, is maybe even more significant (Sagor, n.d.).

According to Merriam and Tisdell (2016), Action Research consists of four main principles. First, it should start with focusing on issues or problematic situations in practice. In this research, the researcher faces difficulties in conducting drypoint techniques in printmaking subjects under the approach of ODL. According to the existing syllabus, the drypoint technique in Printmaking is supposed to be conducted in-studio environment due to the use of machines and studio equipment. Based on this requirement, the researcher needs to find an alternative solution to ensure students can apply the drypoint technique from home.

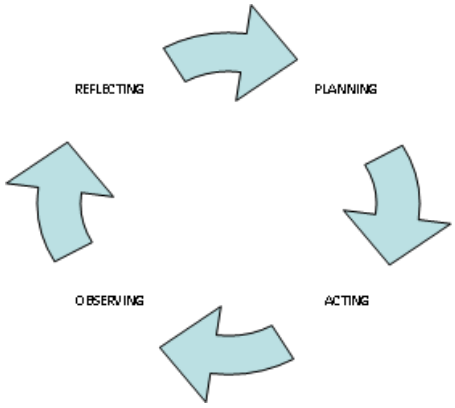


Figure 1. Action Research Circle of Process According to Kuhne and Quigley 1977

The second principle explains how the researcher and participants need to be engaged to improve the practice. Referring to Figure 1, the study should go through a cycle of processes that consists of planning, acting, observing, and reflecting (Kuhne & Quigley, 1997; Merriam & Tisdell, 2016). After identifying the issues, the researcher conducts a specific plan such as collecting the data needed for the actual process of drypoint and suggesting substitute material and alternative techniques in performing the drypoint process. Once all the data are collected, the researcher will explore the possible alternative process with the participants. The results from the suggested alternative material and technique will be observed and discussed for further action. There will be a critical discussion among the researcher and participants to reflect the whole procedure of the alternative process so that enhancements can be made for future art education's improvement.

The third principle is all about engaging the participants as co-investigators since action research is not carried out on participants but with the participants (Merriam & Tisdell, 2016). Based on this understanding, the research will be conducted with the students being co-researchers to actively participate in the development of alternative material and processes in drypoint printmaking.

The fourth principle explains how the one who oversees the research, be it an insider or an outsider to the group studies, must be considered in every action research study (Herr & Anderson, 2015; Merriam & Tisdell, 2016). In short, the action research should be conducted with students focusing on their subject to improve educators' aspects of teaching (Merriam & Tisdell, 2016). In this research, every step in developing an alternative method in drypoint printmaking will be developed while considering the students' environment of study and their ability to participate in this research.

Lastly, in the fifth principle, Merriam and Tisdell (2016) emphasized that collecting and analyzing multiple forms of data should be done by the researcher and co-investigator by using a systematic way as the research process evolves (Merriam & Tisdell, 2016). Therefore, this alternative approach will be tested first by the researcher and co-investigator before it can be treated as a confirmed alternative method since this research will focus on alternative techniques and the potential material as a substitute in a Drypoint print. This alternative method should not only be user-friendly, but it must be easy to be prepared and handled throughout the process of printing.

Conventional and Alternative Materials of Drypoint Printmaking

As mentioned earlier, this research will explore the alternative material and process of the drypoint printmaking technique. This is important since the conventional practices of drypoint prints involve big scale

studio equipment which creates an inconvenient situation for art practitioners to produce artworks. In the conventional method, the pressure of the printing press squeezes the remaining ink, and the image is transferred to the paper – this involves immense pressure through etching the printing press which cannot be applied by hand (Illustrators, n.d.). Hence, this action research study will suggest an alternative material and technique of drypoint prints as an alternative to a conventional process which produces the same result. Below are the lists of potential alternative materials which have the same characteristic or functionality as the conventional material in the drypoint printmaking technique.

Table 1,2,3, and 4. The List of Conventional and Suggested Alternative equipment for Drypoint Printmaking process.

Plate for Drypoint

Figure 2. Copperplate and Zinc plate for conventional Drypoint printmaking technique
(Source: Researcher)

Figure 6. Off-set Ink (Slow-dry) is used in the conventional process of a Drypoint print.
(Source: Researcher)

Needle for Drypoint

Figure 4. Scribe or Drypoint Needle for conventional Drypoint printmaking technique
(Source: Researcher)

Figure 5. Alternative Needle
(Source: Researcher)

Ink for Drypoint

Figure 6. Off-set Ink (Slow-dry) is used in the conventional process of a Drypoint print.
(Source: Researcher

Figure 7. Oil Paint as Alternative Ink
(Source: Researcher)

Figure 8. Shoe Polish as Alternative Ink
(Source: Researcher)

Printing Process

Figure 9. Etching Press Machine used in the conventional process of a Drypoint print.
(Source: Researcher)

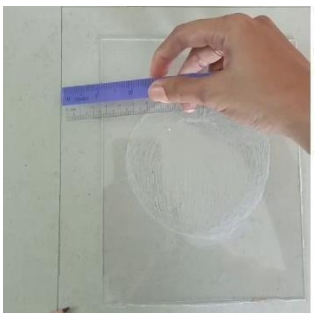
Figure 10. Wooden Spoon.
(Source: Researcher)

Drypoint Printmaking: An Alternative Printing Process for Home-Based Learning.

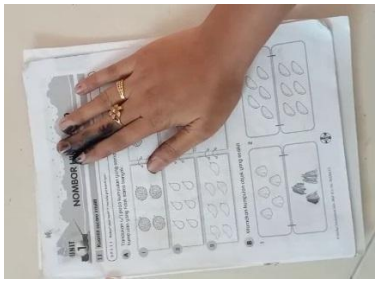
After listing potential materials as the alternative in performing drypoint printmaking, both the researcher and the co-investigator developed the process of drypoint printmaking following the guideline used in conventional printmaking and documented the result accordingly.

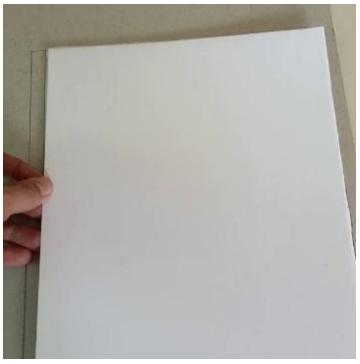
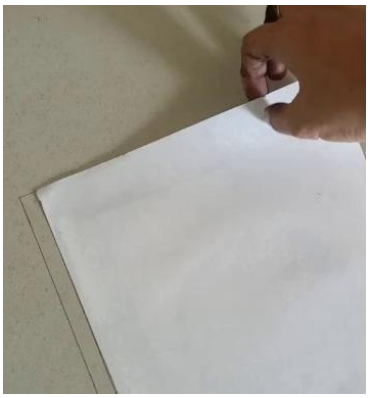
Table 5. Steps in performing Alternative Drypoint in Printmaking which has been conducted by the researcher during Movement Control Order (MCO) 2020.

Step	Description	Images
Step 1	Produce a drawing of any single object.	 **Figure 11**

Step 2	Place Plexiglass on top of the drawing.	 **Figure 12**
Step 3	Trace the drawing onto plexiglass by using needlepoint.	 **Figure 13**
Step 4	Make sure the lines are traced accordingly.	 **Figure 14**
Step 5	Make a registration board using used cardboard.	 **Figure 15**

Step 6	Insert ink on the plate's surface.	 **Figure 16**
Step 7	Wipe the ink using newspaper or wasted paper.	 **Figure 17**
Step 8	Wipe until the surface is clean.	 **Figure 18**
Step 9	Placed the plexiglass plate on the registration board.	 **Figure 19**

Step 10	Take a drawing paper and soak it for a while in the water	 **Figure 20**
Step 11	Overlap it with newspaper or wasted paper to keep it damp.	 **Figure 21**  **Figure 22**
Step 12	Take the damp drawing paper and place it on the plexiglass surface	 **Figure 23**

		 **Figure 24**
Step 13	Rub the drawing paper with a spoon.	 **Figure 25**
Step 14	After the drawing paper's surface has been rubbed evenly, pull the paper slowly.	 **Figure 26**

Step 15	The results of Drypoint prints. This process will be repeated until the form of subject matter is completed. Once the form of subject matter has been perfected, the artist will proceed to the edition process of prints.	 **Figure 27**

FINDINGS

Based on the suggested material and technique, it shows that the perfection of the printing results depends on several factors. Below is the list of advantages and disadvantages in performing alternative drypoint printmaking techniques.

Table 6. Analysis on Alternative material in Drypoint Printmaking

Alternative Material	Advantages	Disadvantages
Drypoint Tools (Needle)	● Very Delicate Line ● Easy to develop subject matter's form	● Create more burr on plexiglass surface than usual
Plexiglas Acrylic Sheet	● User-friendly ● Easy to get. ● Low cost	● Easily break if there is a strong pressure
Shoe Polish Oil Paint	● Easy to handle. ● Easy to get. ● Low cost	● Comes in a limited amount of ink. ● Not suitable in massive printing quantity
Wooden spoon	● Easy to handle. ● Easy to get. ● Low cost	● Not suitable for massive printing quantity

Table 7. Analysis on Alternative process in Drypoint Printmaking

Alternative Process	Advantages	Disadvantages
Drawing onto plexiglass by using needlepoint.	● Image from actual drawing is transferred easily.	● Too much burr develops too much dust
Rub the drawing paper with a spoon as a substitute for using an etching press machine.	● Easy to handle. ● The development of form can be monitored from time to time.	● Uneven form/image transfer since the quality of form depends on the pressure of the wooden spoon (Refer to figure 6.1).

Figure 28. The sample of uneven form/image transferred was on paper. This Test Proof of Alternative Drypoint Printmaking was produced by Universiti Teknologi MARA, Perak branch student, Nurul Ain Shuhada Binti Mohamad as one of the co-investigators in this research
(*Source: Copyright permitted by the student*)

Based on the analysis conducted, findings from this research found that this alternative process in drypoint printmaking surely could contribute to the development of subject matter's form just like the conventional method. There are a lot of flaws in this alternative process that should be taken into consideration seriously by the researcher and co-investigator. After these alternative processes were practiced several times by the researcher and co-investigator, some improvements were made especially in terms of controlling the pressure of printing by using a wooden spoon.

Figure 29. The improvement of Alternative Drypoint Printmaking produced by Universiti Teknologi MARA, Perak branch student, Nur Sarah Syafiqa Binti Abu Bakar for FET 264 Printmaking Media and Technique-Form subject (Copyright permitted by the student).
(*Source: Copyright permitted by the student*

Figure 30. The improvement of Alternative Drypoint Printmaking produced by Universiti Teknologi MARA, Perak branch student, Nurul Ain Shuhada binti Mohamad Raffi for FET 264 Printmaking Media
(*Source: Copyright permitted by the student*)

Based on the evidence given, it is obvious that even though this alternative process was conducted without the actual studio/workshop environment, the understanding of drypoint printmaking could be attained along with such facility lack. This alternative process needs to be improved from time to time to sustain the printmaking education during this pandemic Coronavirus Disease (COVID19).

To verify this alternative method as part of the drypoint printmaking process, the result of drypoint printmaking from this alternative method was presented in the Marks Validation meeting session Mac-July 2020 and has been accepted by the committee of Printmaking subject, Fine Arts Department, Faculty of Art and Design, Universiti Teknologi MARA, Perak Campus. It has been verified that this alternative material and technique in performing drypoint printmaking is indeed able to produce the same result as the conventional technique. However, there is still room for improvement referring to the minor technical issues that need to be resolved and the need for materials exploration as well.

CONCLUSION

Referring to the objectives of this study, which are first, to understand the basic procedure of drypoint technique in printmaking and second, to explore an alternative method which suits the execution of Open and Distance Learning (ODL) there are some parts of the conventional process that can be replaced in terms of developing the formalistic aspect through drypoint technique. It may have flaws that need to be improved from time to time, especially on the choices of alternative materials. Overall, this research proves that there is a big potential in transforming this alternative method into a different perspective of the printmaking education module. Hence, this study will be proposed to be registered under the Intellectual Property Corporation of Malaysia (MyIPO) since it is part of the intellectual property in teaching and learning which will permanently be referred to in the education sector.
Due to the current challenging situation, most of the studio subjects need to be explored so that they are relevant to the students even though they are not able to be in a conducted studio or workshop. This research will be a stepping stone to inspire other Fine Art subjects in terms of material, technique, and process exploration

In conclusion, the most important thing in developing this alternative process for drypoint printmaking is to understand the definition of Intaglio Print and the characteristic of the drypoint printmaking technique under Intaglio Print. If the researcher and students can understand the roots of conventional drypoint technique and process, half of the battle is won in terms of handling the material and at the same time, developing an alternative process in artform development.

ACKNOWLEDGMENTS

The authors would like to acknowledge the College of Creative Arts, Universiti Teknologi MARA, Cawangan Perak, Malaysia for providing support in completing this study.

REFERENCES

Art, U. M. O, (n.d).Glossary of Printmaking Terms.
https://zam.umaine.edu/wp-content/uploads/sites/96/2013/09/Printmaking-Glossary.pdf.

Barcodes, (n.d.). Printmaking Basics.
https://www.barcodesinc.com/articles/fine-art-techniques-printmaking-basics.htm.

Drypoint, (n.d.). Drypoint. https://www.tate.org.uk/art/art-terms/d/drypoint.

Idrisa, F., Hassana, Z., Ya'acob, Aziah, A., Gillb, S. K., & Mohd, N. A. (2011). The role of education in shaping youth's national identity. Procedia - Social and Behavioral Sciences, 59 (1), 443.

Illustrators, A, (n.d.). A beginner's guide to drypoint.
https://www.artistsandillustrators.co.uk/how-to/drawing/228/a-beginners-guide-to-drypoint (n,d)

Lumen, (n.d.), Printmaking.
https://courses.lumenlearning.com/atd-sac-artappreciation/chapter/oer-1-22/ (n.d)

McCallum, S, (2007). Printmaking Survival Guide – Intaglio – Drypoint.
http://static1.squarespace.com/static/52c874d5e4b03b30610b2ded/t/5696d6594bf118aff8f217bd/1452725855871/Printmaking+Survival+Guide_Intaglio_Drypoint.pdf (n.d)

Meng, K, (2012), Intaglio/Drypoint Printing with Grafix Monoprint Plates.
https://www.grafixarts.com/wp-content/uploads/2015/07/15_gfx_lesson_intaglio_0217final.pdf

Merriam, S.B, Tisdell, E.J. (2016). *Qualitative Research, A Guide to Design and Implementation*. San Francisco: Jossey-Bass, John Wiley & Sons, Inc

Morrison, H, (n.d.), Intaglio-Nonacid Platemaking. VCU School of The Arts.
http://www.hollymorrison.com/html/platemaking/nonAcidPlatemaking.html (n.d)

Mysumber, (n.d), Senarai terkini universiti UA terbaik Malaysia 2020-2021 top ranking.
https://www.mysumber.com/universiti.html (n.d)

Nation, U,(n.d.). Policy Brief: Education during COVID-19 and beyond. https://www.un.org/development/desa/dspd/wpcontent/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf (n.d)

Official, U, (n.d.). Soalan Lazim UiTM. https://www.uitm.edu.my/index.php/ms/soalan-lazim (n.d)

Sagor, R, (n.d.). Guiding School Improvement with Action Research. http://www.ascd.org/publications/books/100047/chapters/What-Is-Action-Research¢.aspx (n.d)

Son, P, (2012). Printmaking through the Ages. https://umfa.utah.edu/sites/default/files/2017-10/Printmaking-through-the-Ages.pdf (2012)

Sousa, D, (2011). Using Action Research. https://howthebrainlearns.wordpress.com/2011/10/31/using-action-research/ (2011)

Strunk, W., Jr., & White, E. B. (1979). *The elements of style*. (3rd ed.). New York: Macmillan.

Sualman, I, (2019). Kualiti pendidikan Malaysia antara terbaik di dunia.https://www.sinarharian.com.my/article/9910/KOLUMNIS/Pendidikan (2019)

Thompson, W, (2008). The Printed Image in the West: Drypoint. https://www.metmuseum.org/toah/hd/drpt/hd_drpt.htm (2008)