

Heuristic Teaching Technology and Its Practical Application Which in Teaching of Draftsmanship

A'zamjon Valiyev¹, Khayriddin Amirqulov² and Sevinch Abdumutalibova³

¹Asissant Professor, Tashkent State Pedagogical University
Tashkent, Uzbekistan

²Student Of Magistracy, Tashkent State Pedagogical University
Tashkent, Uzbekistan

³Student Of Bachelor, Tashkent State Pedagogical University
Tashkent, Uzbekistan



Abstract - Technology of the heuristic education and her (its) place in study drawing In given article is brought technology of the .heuristic education and its practical application on lesson of the drawing. This will give their own positive results

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It is known that draftsmanship service to pupils and students which in increasing cosmic imagination. If we use heuristic teaching technology which one of the teaching technologies at draftsmanship lessons productive, it will give the more positive result than the invariable lessons.

In this article has been given the information organizing draftsmanship lessons with the heuristic teaching technology and through increasing positive reflection of pupil and students and forming several hypotheses and as result developing their cosmic imagination and thought.

The technologic shape of the heuristic teaching among the innovation technologies founded on the question and opinion method which was created by Sukrat. It is known that at first Sukrat gave general question and after taking the answer, gave clarified question and until specifying the truth, gave the very almost.

At the heuristic teaching we cannot the results of single teaching. Because can take many kind of answers from each

pupils. At the heuristic teaching pupil assimilates the knowledge which took before, after that pupil is used it his project through progressing.

The main point of the heuristic teaching is always trying to open novelty. At the Greek language Heuristic means that looking for, finding, discovering.

The principles of the heuristic teaching is the teaching accommodate to certain pedagogic condition and it invites to solve of pupil and teachers problem which before not to be known the result. Heuristic teaching invites to develop of pupils and also teachers, because teachers should organize the condition of the truth" not to know" in teaching progress.

The pupil plans his exercises; his personal viewpoint indicates the general problem. For instance he tries to learn its geometric shape, the progress of preparing it when put the dimensions to detail and also give his opinion about the process which at treating to the detail. As a result pupils

shall organize the individual plans. Which they are learning about their specialties. Sometimes the heuristic teaching connected with creative activity. But it has three main directions:

1. Heuristic activity encompasses itself the processes which to rear the creative educational products.
2. The learning processes which organize heuristic activity is the most important process in creating
3. At heuristic activity the organizational, methodological, psychological and other process support the creative and learning activities.

The main aim of the heuristic teaching is to support pupil himself. This process is valid on the bottom.

The pupil takes a task for designing. But will take ready teaching about the task. Pupil makes several kinds of plans and hypothesis for doing the task. After that the origin of the task will be compared by the teacher and done the task will be made more exact. As a result the pupil goes over again his activity chance and his personal opinion will change. The change is shown by his knowledge ability and experience.

The heuristic teaching is building the base of open task. The elements of all of the themes which in learning is defined the task in the open shape. For instance in roller when during circulating action of the adaption should design which can save from eruption of the hole of vtulic . Or many detail in machine and mechanism was made heavy and rudely, the detail brings lower the work fruitfulness of machine at the working process, so the pupil plans to improve its.

At the heuristic teaching progress degree of ready education is not controlled, oppositely how much did the pupil comes up to with creatively is controlled.

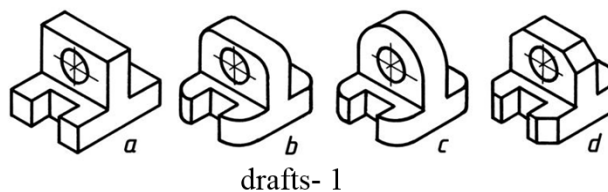
By them increasing of pupil's personal quality, his creative achievement which is learning branch and also will be checked how much has he informed from the education standards and so that he will be estimated.

The biggest problem of heuristic teaching is to show creative side of the pupil. The heuristic teaching is based on the school of the free developing, its theory is heuristic didactic .At the heuristic teaching the theory and technology is called heuristic didactic. The heuristic is theory, aim, principle of teaching and such kind of content and technology support pupil and teacher which to create designing creative of draft too. To change the shape of the detail mentally, to imagine its condition which was designed creative grows the renewed of conceiving.

On draft we may solve several kinds of problems the creative designing by inserting elements.

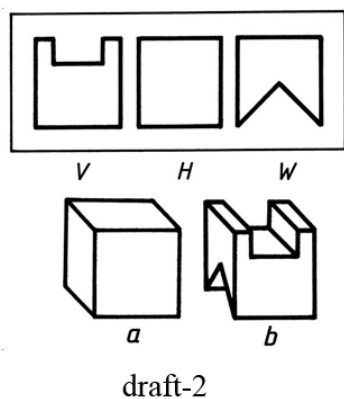
If inoccupation to be changed the contractive construction of the detail elegantly, decrease weight of it, it will be comfortable construction and its result will be productive, so it will call design. In English language "Dezing" design means that draft, drawing.

Nowadays each thing which can attract itself was made lightly, beautiful and elegant. We can say that they are suit to the demand of design .For instance draft 1, the weight of detail a was changed its geometric shape nearly with the design demand for decreasing its weight. As a result draft 1 has changed in shape a,b,c,d.



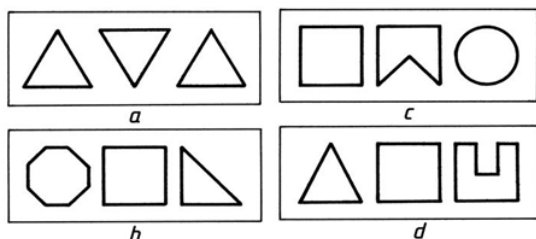
The next matter 3 holes and the clear description of the cube was given (draft 2,a) above of the first hole has a hollow as brook, on the clear description of the cube will be hollowed out as its (draft 2,b).

The second hole was described as square. The below part of the third hole was cut quadrately equally. As if this quadrately is suit the cube for w will be cut a hollow which in parallel side (draft 2,b).



Or geometric physique is cube must be design so. If the task would have given to pass the dense by holes instead of draft-2 the model H,V and W s were made of it, the pupil will imagine to pass the dense in front of the model, so after several efforts projects shall creative searching. The right answer will be make more exact which it has been result of conversation with teacher

Draft 3 at a,b,c,d s such matters were given for doing independently.



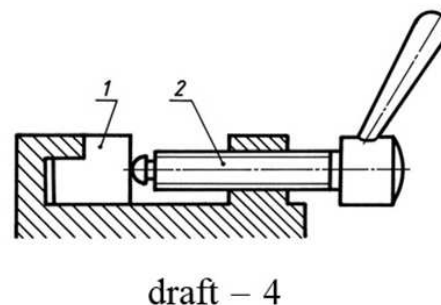
During doing the task teacher gives the questions to pupils which directing-general, then heuristic questions belonging to the theme and so the teacher helps to increase the pupils' reflexivetic and individual abilities. Such kind of coming up to each pupil shows his personal opinion the task was given with help of designing and also his first knowledge

The engineering graphic lessons of Pedagogical Universities students do several kinds of matters such as constructor problems: to give shape technician details, the technology of machines details, the method of combining detail is inversion, to do which was given the task differently as after theoretical knowledge at practical exercises will be design which was given the scheme and draft.

For instance lever (an ordingigary mechanism which can blanse big power with small power with small power) will take (draft 4).It consist of hard physique which has a support dot, it will be under of strengths which in hole to pass from the support dot.

If the strengths were situated two sides of support dot, for being at balance the total strengths and moments are equal zero, which has taken to the support dot comparatively. The shoulder of lever will be as for as big. Then its shoulder b, the movement strengths will be so little then the resistance strength. It is the low of lever. In it the strengths will be swallowed as far as, from the distance will be lost so.

Or it has a defect which spirally adaption of pressing details. For taking out of the detail, we had to after the propeller many times. We should change the construction of adaption so, as a result after the once or twice rotation of the lover, the detail can come outside. This process should be designed (draft 4)



We should make recommendation to use heuristic teaching technology for redesigning such kinds of problems.

That's why we should organize mental attack to students for understanding rules of method. We may see the creative progress of the students the result of the shape and method of teaching. The creative mint develops the pupils and teacher' cosmic imagination. Besides that to each students will be given individual tasks and their personal sense will be made. As a result the students can do independently, so we can achieve to increase intellectual and capable youth.

REFERENCES

- [1] Rahmonov I., Chizmachilik, 8, 9 – sinf, darsliklar. T. "O'qituvchi", 2010.
- [2] Ro'ziyev E., Ashirboyev A. Muhandislik grafikasini o'qitish metodikasi. T., "Fan va texnologiya", 2010.

- [3] Azizxodjayeva N. Pedagogik texnologiyalar va pedagogik mahorat. T., “Adabiyot jamg’armasi”, 2006.
- [4] Rahmonov I., Valiyev A. Chizmachilik (chizmachilik fanida konstruksiyalash asoslari). T., “Vorish-nashriyot”, 2011.
- [5] Eydels L. Zanimatelnoe cherchenie. M., “Prosveshenie”, 1982.
- [6] Bepalko B. Pedagogika i progressivniye texnologii obucheniya. M., 1995.