# Management of a Set of Resources in Educational Organizations

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If the analysis process is carried out according to the parameters $S_z$ and $S_n$, it is necessary that the normalization be performed:

$$F_{zn} * F_{nz} = 1 . \quad (2)$$

**TABLE** Parameter values depending on the types of components of educational systems.

| $F_{zn}$ | Definition |
|---|---|
| 1 | Parameters $S_z$ and $S_n$ are equivalent |
| 3 | $S_z$ has a weak superiority over $S_n$ |
| 5 | $S_z$ has a significant superiority over $S_n$ |
| 7 | $S_z$ has a clear superiority superiority over $S_n$ |
| 9 | $S_z$ has a absolute superiority over $S_n$ |
| 2,4,6,8 | Compliance with interim comparative estimates |

The next step is to create a matrix of paired comparisons (Figure 1). What is it for? On its basis, the weight coefficients $\omega_p$ of the parameters $S_p, p = \overline{1,P}$ will be found. In the course of calculations, it is necessary to use the ratios given in Table 3. On their basis, it is possible to consider each of the parameters. In Table 1, we will carry out a selection of the 9 point Saaty scale.

$$\begin{array}{c} \text{Parameters} \\ S_1 \\ \dots \\ S_z \\ \dots \\ S_n \\ \dots \\ S_P \end{array} \begin{array}{c} \begin{array}{ccccccc} S_1 & \dots & S_z & \dots & S_n & \dots & S_P \end{array} \\ \begin{pmatrix} 1 & \dots & S_{1z} & \dots & S_{1n} & \dots & S_{1P} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ S_{z1} & \dots & 1 & \dots & S_{zn} & \dots & S_{zP} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ S_{n1} & \dots & S_{nz} & \dots & 1 & \dots & S_{nP} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ S_{P1} & \dots & S_{Pz} & \dots & S_{Pn} & \dots & 1 \end{pmatrix} \end{array}$$

**FIGURE 1.** Demonstration of a matrix of paired comparisons by parameters that can be taken into account during the selection

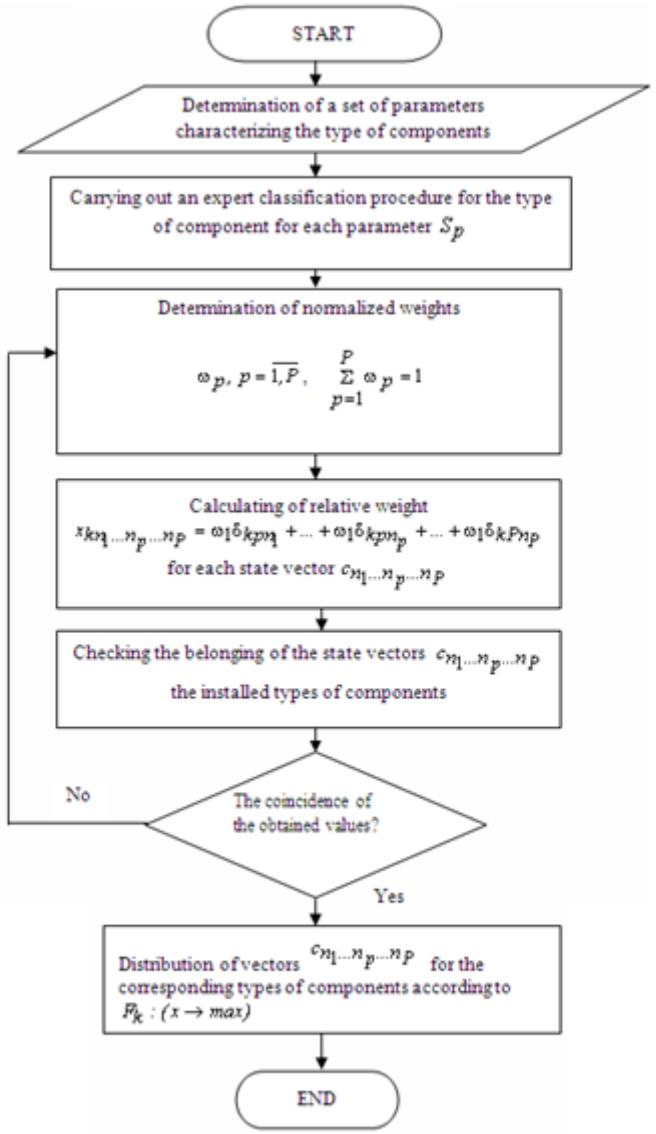


**FIGURE 2.** Block diagram of the algorithm for solving the problem of determining the type of educational component

## CONCLUSION

The paper carried out the development of a mathematical model that allows you to determine the classes of components in a educational organization on the basis of expert classification. On the base of this model, it is possible to analyze any number of parameters that can affect on the control of functioning of educational organization, taking into account their significance. The class of components can be determined using fuzzy approach. The scheme of the algorithm for solving the problem of determining the type of educational component is shown. In this case, the educational organizations can belong to different forms for each parameter.