System Type: \texttt{atisIndirectInfluencedSystem}

\textit{Set-theoretic properties} are those properties that are part of the meta-theory and have been abducted from set theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.

\textbf{Indirect-influenced system}, \(\text{id}\mathcal{S}, =_{df} a \text{ system with affect relation sets characterized by indirectly connected components.}

\[
\text{id}\mathcal{S} =_{df} \mathcal{S} | \exists \mathcal{A}_i(\text{id}\mathcal{E})
\]

\textbf{Indirect-influenced system} is defined as a system; such that, there exist affect relation sets that are characterized by indirectly connected components.

\textbf{M: Indirect-influenced system measure}, \(M(\text{id}\mathcal{S}), =_{df} a \text{ measure of the average of the indirectly connected component sets of the affect relation set.}

\[
M(\text{id}\mathcal{S}) =_{df} \frac{\sum_{i=1,...,n} [\sum_{j=1,...,m} |(\text{id}\mathcal{E}_{j;A(i)})| \div m] \div \log_2|\mathcal{A}_i|) \div n] \times 100
\]

The diagrams on the next pages show indirect influence in a school system:
**Indirect-Influence in a School System**

Administrators: A1 ➔ A2

Teachers: T1 ➔ T2 ➔ T3 ➔ T4

Students: S1 ➔ S2 ➔ S3 ➔ S4 ➔ S5 ➔ S6 ➔ S7 ➔ S8

**Affect Relation:** Controls Activities of

In this system, there are 6 distinct Indirect-Influenced Subsystems that Control Activities of other components with respect to Indirect-Influence. Since there are 14 components, then the total possible affect relation paths is 236,975,181,590. Therefore, \( \log_2 |\mathcal{A}| \approx 37.78594 \). There are 24 paths related to Indirect-Influence.

**Note:** Since there are numerous Indirect-Influenced Subsystems within this school system, additional figures on the next page will indicate the additional subsystems.

**Therefore:** \( M_{(10)} S \approx 11 \).
Indirect-Influence in a School System

Administrators:

Teachers:

Students:

Affect Relation: Controls Activities of