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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Business Management & Administration |
| **Course Name** | Business Information Management I |
| **Lesson/Unit Title** | Demonstrating and Interpreting Data Mining Findings |
| **TEKS Student Expectations** | **130.136. (c) Knowledge and Skills**  (10) The student uses commands to retrieve data and create reports from databases.  (C) The student is expected to demonstrate basic data mining techniques, and  (D) The student is expected to interpret data mining findings. |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | The student is able to:   1. Demonstrate basic data mining techniques. 2. Interpret data mining findings. |
| **Rationale** | The main purpose of this lesson is to help students demonstrate basic data mining techniques (manually and electronically) and then interpret their data mining findings |
| **Duration of Lesson** | 250 minutes |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | **Data Mining**  **Data Set**  **Computer Decision Support System**  **Business Intelligence**  **Artificial Intelligence**  **Machine Learning**  **Anomaly Detection**  **Clustering**  **Classification**  **Regression**  **Summarization** |
| **Materials/Specialized Equipment Needed** | Instructional Aids  • Data Gathering Tool (spreadsheet)  • Instructor Computer/Projection Unit  • Online Websites listed in the References Section |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) |  |
| **Direct Instruction \*** | The main purpose of this lesson is to help students demonstrate basic data mining techniques (manually and electronically) and then interpret their data mining findings.  **Say:**Now that we have basic data mining techniques (manually and electronically), we are going to interpret the data mining findings.  Student, we are going to gather some information using both manual and electronic methods, and then we will take time to analyze this gathered data into useful information to help us draw conclusions based on the gathered data.  **Say:**Once this lesson is completed, you will have been given the opportunity to learn firsthand what it means to mine data.  I. Assignment Introduction and Explanation  II. Introduction (Say)  • Instructions and Rubric provided  III. Data Gathering/Input  IV. Data Analysis  V.  Data Reporting  V.  Review and Evaluation  VI. Extensions  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  *NONE* |
| **Guided Practice \*** | Data Gathering/Input Students will use the data gathering tool provided with this lesson to gather and record information on their classmates.  Analyses Once students have gathered their data, they will then come up with three original conclusions that will either provide reasons to say “yes” or say “no” to offering an online spirit store for the district.  Review/Assessment Data Mining Project‐ Specifics are given in the document.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** | Review the lesson’s purpose and evaluate its effectiveness. |
| **Summative / End of Lesson Assessment \*** | Informal Assessment   * Data Gathering/Input * Analyses * Charts * Recommendation Formal Assessment   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  It is important that lessons accommodate the needs of every learner. These lessons may be modified to accommodate your students with learning differences by referring to the files found on the Special Populations page of this website. |
| **References/Resources/**  **Teacher Preparation** | Preparation  • Review and familiarize yourself with the terminology, all website links, and any resource materials required.  • Have materials and websites ready prior to the start of the lesson. |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) |  |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | Future Business Leaders of America  Business Professionals of America |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)