Plan Overview

A Data Management Plan created using DMPTool

Title: Integrating advanced computing in STEM education

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Integrating advanced computing in STEM education

A total of three surveys will be given to the students at separate times. The first survey will collect the basic information about students such as their first and the last name, gender, academic standing, whether or now specific classes were taken, proficiency in computer programing, preference of the programing language, knowledge of computer science skill applicable to domain specific problem, targeted application of CS skill and delivery platform and students' willingness to take credits to learn those skills. The second survey will be similar to the first survey before a team of selected students enters into hands-on exploration provided computer solution to their chosen problem. The third survey is after the student goes through hands on exploration of how students felt about their strengths and weaknesses in understanding the concept and ease of using the language. Any perosnal identifiable information beyond student name will not be collected in this survey.

The metadata such as time of survey, place of sruvey, institution surveying, name of the manager and overseeing the survey will be tagged with data.

The student name will be used only to verify potentially duplicate data, and once that is verified and entered into the database, the participating student name will be discarded. Any other information that could lead to the identification of a specific studetn will not be shared with the public. The University of Idaho's Northwest Knowledge Network's (NKN) (www.northwestknowledge.net) service will be used for storing making anonymized data publicly availabe for download.

The data will be shared among participating institutions for the purspose of the objectives of this proposal. The aggregated database and statitical analysis will be made freely available to the public using the University of Idaho's Northwest Knowledge Network's (NKN) (www.northwestknowledge.net) service. Also the relevant data will be made availabe as an appendix to the journal publicaition.

PI from each instituions will have a copy of original data collected in this project. The tabulated data without any personal information will be archieved and made availabe to public through NKN service.

The PI of this project Dev Shreshta will oversee the data managment in collaboration with PIs from collaborating instituitions.